



ByteXpress - Team 9 ByteXecom E-commerce System

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ITERATION - 9

System Documentation - This iteration has the collated system documentation of the final versions of all system design documentation of the ByteXpress Ecommerce system.

The meticulously compiled documents consist of the updated requirements lists, complexity matrix, logical and technical narratives, technical primitive, UML activity, sequence and state diagrams as well as the test cases and screen designs for all the use cases.



Client Information - Jannes Janse van Rensburg is the co-owner of Natuurlik. He is currently working as a Business Area Manager for DSV - Global Transport and Logistsics.



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1. Iteration Introduction

For this iteration the ByteXpress team have compiled a document that illustrates the collated system documentation of the final versions of all system design documentation for the ByteXpress E-commerce system.



2. Logical Use Case Narratives

Introduction

In this section, the ByteXpress team compiled a comprehensive list of the logical flow of their use cases through the logical narratives. These narratives include all of the business processes carried out by the system.



2.1. User Management Subsystem

Table 1- 1.1 Login

USER MANAGEMENT SUBSYSTEM			
AUTHORS (s): Nomusa	Vumisa	DATE: 20/08	8/2022
VERSION: 1.0	LAST REVIEW DATE: 20/08/2022		EW DATE: 20/08/2022
USE CASE NAME:	Login	•	USE CASE TYPE
USE CASE ID:	1.1		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requiremer	nts List	System Design:
PRIMARY BUSINESS ACTOR	• User		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	• None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes an event where the user wants to login to the system. The user enters their login details which the system validates. The use case concludes once validation is successful, and the user has been granted access to the system.		
PRE-CONDITION:	The user must be registered on the system		
TRIGGER:	The use case is called when the user wants to login		
TYPICAL COURSE	Actor Action Step 1 : The user wants login	to Step to en the f table	EmailAddress Password
	Step 3: The user enters details	-	4: The system captures and ates the details



	[ALT]	[ALT]
		Step 5: The system retrieves the user role details using the following attributes in the UserRole table
		Role_Id
		and generates an authentication cookie
		Step 6: The system grants the user access
ALTERNATE COURSES:	ALT Step 3A: The user forgot their password • Invoke use case 1.5 Forgot Password ALT Step 3B: The user does not have an account on the system • Invoke use case 1.6 Register Customer ALT Step 4: The details entered are not in the correct format or the required fields are empty	
CONCLUSION:	Return to Step 3 This use case concludes when the user is logged in	
POST-CONDITION:	The user will have access to specific sections of the system based on their user role	
BUSINESS RULES	None	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The user cannot login without an internet connection All users access the system using the same login page All uses have access to this function 	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	



Table 2- 1.2 Logout

USER MANAGEMENT SUBSYSTEM				
AUTHORS (s): Nomusa	Vumisa	DATE: 20/08/2022		
VERSION: 1.0		LAST F	REVIEW DATE: 20/08/2022	
USE CASE NAME:	Logout		USE CASE TYPE	
USE CASE ID:	1.2		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	User			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes an event where the user wants to logout of the system. The user requests to logout and the system responds by logging them out and returns them to the login page.			
PRE-CONDITION:	The user must be logged on the system			
TRIGGER:	The use case is called v	vhen the	user wants to logout	
TYPICAL COURSE	Actor Action System Response			
	Step 1: The user wants logout	10	Step 2 : The system removes the authentication cookie and logs the user out of the system	
			Step 3: The system returns the user to the home page	
ALTERNATE COURSES:	None			
CONCLUSION:	This use case concludes when the user is logged out of the system			
POST-CONDITION:	The user can only access areas of the system that do not require them to be logged in			
BUSINESS RULES	None			



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IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The user cannot logout without an internet connection The user should be able to logout from any page All uses have access to this function
ASSUMPTIONS:	None
OPEN ISSUES:	None



Table 3- 1.3 View Profile Details

USER MANAGEMENT SUBSYSTEM				
AUTHORS (s): Nomusa	Vumisa	DATE: 20/08/2022		
VERSION: 1.0			N DATE: 20/08/2022	
USE CASE NAME:	View Profile Details		USE CASE TYP	E
USE CASE ID:	1.3		Business Requirement	s: 🗆
PRIORITY:	High		System Analysis:	\boxtimes
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	• User			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	• None			
DESCRIPTION:	This use case describes an event where the user wants to view their profile on the system. The user requests to view their details and the system responds by retrieving the details and displaying them on the screen			
PRE-CONDITION:	The user must be logged on the system			
TRIGGER:	The use case is called v	vhen the user w	ants to view their details	
TYPICAL COURSE	Actor Action Step 1: The user wants view their details	to Step : follow From • •	2: The system retrieves the ing details: the User table. FirstName Surname EmailAddress PhoneNumber StreetAddress the Suburb Table SuburbName	Э



		From the City Table	
		CityName	
		From the Province Table	
		ProvinceName	
		From the Country Table	
		CountryName	
		Step 3: The system displays the user details	
ALTERNATE COURSES:	None		
CONCLUSION:	This use case concludes when the user details are displayed		
POST-CONDITION:	The user details are displayed		
BUSINESS RULES	None		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The user cannot view their details without an internet connection All uses have access to this function 		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



Table 4-1.4 Reset Password

USER MANAGEMENT SUBSYSTEM AUTHORS (s): Kyle van Eeden DATE: 07/04/2022 **VERSION: 1.0** LAST REVIEW DATE: 07/04/2022 **USE CASE NAME:** Reset Password USE CASE TYPE USE CASE ID: 1.4 Business Requirements: **PRIORITY:** High System Analysis: X SOURCE: ByteXpress Requirements List System Design: **PRIMARY BUSINESS** User • ACTOR **PRIMARY SYSTEM** None • ACTOR **OTHER** None • PARTICIPATING ACTORS: **OTHER INTERESTED** • None **STAKEHOLDERS: DESCRIPTION:** This use case describes the process where a registered system user wishes to update the password of their account. The use case is initiated once the user selects the option to reset their password. The system will request the user to provide their current password, the new password to be used along with the reconfirmation of the new password. The system will validate the captured details to ensure that it adheres to the minimum password complexity criteria and that the confirmation password matches the new password specified. The use case concludes once the updated password is hashed and saved to the system for the specific user account and the user is notified that the password has been successfully reset. **PRE-CONDITION:** The user must already have an account registered on the system. • The user must be logged onto the system. • TRIGGER: The use case is triggered once the user requests to update their current password which is associated with their account. **TYPICAL COURSE** Actor Action System Response OF EVENTS: **Step 1**: The user requests to Step 2: The system prompts the user to reset their password. enter their current password, the new password as well as reconfirmation of the new password to be used. Step 3: The user provides the Step 4: The system captures and requested details and selects validates the information provided



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	the option to update their	against the current password stored in	
	password.	the User entity.	
	[ALT]	[ALT]	
		Step 5: The system updates the user's	
		password by hashing the new password	
		provided and storing the hashed	
		password details in the User entity.	
		Step 6 : The system displays a message	
		on the interface to confirm that the	
		user's password has been updated	
		successfully.	
ALTERNATE	ALT Step 3: The user cancels the state of th	ne 'Reset Password' operation:	
COURSES:	The use case is terminat	ted	
		leu	
	ALT Step 4 a: The system fails	to validate the information provided	
	against the details in the User ta	able because of an incorrect current	
	password provided:		
	Deturn to Stop 2		
	 Return to Step 3. ALT Step 4 b: Validation fails since the new password does not meet the 		
	minimum requirements:		
	• The system displays a validation error message to inform the user		
	of what the minimum password requirements are.		
	Return to Step 3.		
	ALT Step 4 c: Validation fails since the new password provided does not		
	match the reconfirm new password entered:		
	The system displays a validation error message to inform the user		
		nust match the confirm password exactly	
	Return to Step 3.		
CONCLUSION:	This use case concludes when	the system informs the user that their	
	password has been successfully reset/updated.		
DOCT CONDITION			
POST-CONDITION:	• The user account's password is updated in the User entity.		
BUSINESS RULES	A user can only update the password of the account which they		
	are the owner of.		
	The updated password provided must be at least six characters		
	long, and must contain at least one uppercase and lower case		
	character, a digit, and a non-alphanumeric character for the		
	password to be successfully updated.		
	 The user must reconfirm the updated password which they have provided 		
	provided.All passwords stored in the database are to be encrypted by using		
	 All passwords stored in the hashing algorithms for set 		



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IMPLEMENTATION CONSTRAINTS AND SPECIFICATIONS	 The system is offline or the user does not have an internet connection, and the user is unable to reset the password of their Natuurlik account.
ASSUMPTIONS:	None
OPEN ISSUES:	None



Table 5- 1.5 Forgot Password

USER MANAGEMENT SUBSYSTEM				
AUTHORS (s): Nomusa	Vumisa	DATE: 20/08/2022		
VERSION: 1.0 LAST		LAST	T REVIEW DATE: 20/08/2022	
USE CASE NAME:	Forgot Password		USE CASE TYPE	
USE CASE ID:	1.5		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requirement	nts List	System Design:	
PRIMARY BUSINESS ACTOR	User			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes an event where the user forgets their password. The use case begins when the user requests to set a new password on the system, as they forgot their current one. The system responds by requesting the user to enter the email address to which the reset password link will be sent. Once the link has been received and accessed, the user will be able to change their password. The use case concludes when the user logins in with their new password and accesses the system.			
PRE-CONDITION:	The user must be regist	ered on	the system	
TRIGGER:	The use case is called w	when the	e user forgets their password	
TYPICAL COURSE	passwordto enter the email address used upon registrationStep 3: The user enters theirStep 4: The system validation		 Step 2: The system requests the user to enter the email address that they used upon registration Step 4: The system validates the email address from the User table using the following attribute: 	



		[ALT]	
		Step 5: The system sends a reset password token to the user by email	
	Step 6 : The user receives the email and accesses the link provided	Step 7: The system requests the new details from the user	
	Step 8: The user enters their new password and confirms it by entering the password	Step 9: The system captures and validates the entered details	
	again	[ALT]	
		Step 10: The system saves the details provided in the User table with the following attribute:	
		Password	
		Step 11: The system informs the user that their password has been reset successfully	
ALTERNATE COURSES:	ALT Step 4A : The details entered are not in the correct format or the required field is empty		
	The system displays an error messageReturn to Step 3		
	 ALT Step 4B: The email address does not exist in the system The system displays an error message Return to Step 3 		
	ALT Step 9A: The details entered are not in the correct format or the required fields are empty		
	The system displays anReturn to Step 8	error message	
		rd and confirmed password do not match	
	The system displays an error messageReturn to Step 8		
CONCLUSION:	This use case concludes when the user's password has been updated successfully		
POST-CONDITION:	The user can login to the system using their new password		
BUSINESS RULES	 The password must be at least 6 characters and max of 100 The password must have at least one digit The password should contain at least one uppercase letter 		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 Passwords must have at least one non alphanumeric character. The user cannot change their password without an internet connection The password must be hashed 		
	All uses have access to this function		



ASSUMPTIONS:	The user has access to their email account		
OPEN ISSUES:	None		



Table 6- 1.6 Register Customer

USER MANAGEMENT SUBSYSTEM				
AUTHORS (s): Nomusa	Vumisa	DATE: 20/08/2022		
VERSION: 1.0		LAST R	EVIEW DATE: 20/08/2022	
USE CASE NAME:	Register Customer		USE CASE TYPE	
USE CASE ID:	1.6		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Customer			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the event where the customer wishes to register on the system. The customer enters their details, and the system responds by validating the details. Once successful the details are saved on the system and an email confirmation is sent to the user. The use case ends once the user confirms their email and is directed to the login page.			
PRE-CONDITION:	The customer must not exist on the system			
TRIGGER:	The use case is called w	when the c	ustomer wants to register	
TYPICAL COURSE	Actor Action System Response Step 1: The customer wishes Step 2: The system requests the			
	to register on the system	n c	 From the User table. FirstName Surname EmailAddress PhoneNumber StreetAddress 	



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		From the Suburb Table
		SuburbName
		From the City Table
		 CityName
		From the Province Table
		ProvinceName
		From the Country Table
		CountryName
	Step 3: The customer enters their details	Step 4 : The system captures and validates the details
	[ALT]	[ALT]
		Step 5 : The system saves the customer details into the following tables with the following attributes
		From the User table.
		 ID FirstName Surname EmailAddress PhoneNumber StreetAddress SuburbId
		Step 6: The system sends an email confirmation link to the user
	Step 7 : The user receives the email and accesses the link provided	Step 8: The system captures the link and updates the following attribute in the User table:
		EmailConfirmed
		Step 10: The system informs the user that their email address has been confirmed successfully
ALTERNATE COURSES:	ALT Step 3: The user has an ac Invoke use case 1.1 Login	count on the system



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	ALT Step 4: The details entered are not in the correct format or the required fields are empty		
	 The system displays a validation error message Return to step 3 		
CONCLUSION:	This use case concludes when the customer has successfully registered on the system		
POST-CONDITION:	The customer is added to the user table and now has access to the system		
BUSINESS RULES	None		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The customer cannot register without an internet connection Only the customers should use this function 		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		

Table 7- 1.7 Update Profile Details

USER MANAGEMENT SUBSYSTEM				
AUTHORS (s): Nomusa	Vumisa	DATE: 20/08/2022		
VERSION: 1.0		LAST	REVIEW DATE: 20/08/2022	
USE CASE NAME:	Update Profile Details		USE CASE TYPE	
USE CASE ID:	1.7		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	• User			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the event where a user wishes to edit their profile details. The system will retrieve the user information stored on the system which can be edited. The user then edits their details accordingly. The use case ends when the users' details has been successfully updated on the system.			
PRE-CONDITION:	The user must be logge	d in		
TRIGGER:	This use case is called	when the	e user wishes to edit their details	
TYPICAL COURSE	Actor ActionSystem ResponseStep 1: The user wishes to edit their detailsStep 2: The system invokes use case 1.3 View Profile DetailsStep 3: The user edits their detailsStep 4: The system captures and validates the details		Step 2: The system invokes use case 1.3 View Profile Details	
			[ALT] Step 5: The system saves the changes made to the User table with the following attributes:	
			From the User table.	



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	FirstName		
	Surname		
	PhoneNumber		
	StreetAddress		
	Suburb ID		
	Step 6: The system displays a		
	successful update message		
ALTERNATE	ALT Step 4: The details entered are not in the correct format or the		
COURSES:	required fields are empty		
	 The system displays a validation error message 		
	Return to step 3		
CONCLUSION:	This use case concludes when the user details have successfully been		
	updated on the system		
POST-CONDITION:	The user details are updated in the User table and displayed on the		
	screen		
BUSINESS RULES	None		
	The contemport of the left their details with out the first state of the state of t		
IMPLEMENTATION CONTRAINTS AND	 The customer cannot update their details without an internet connection 		
SPECIFICATIONS	 All users have access to this function 		
	All users have access to this function		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



Table 8-1.8 Update Email Address

USER MANAGEMENT SUBSYSTEM			
AUTHORS (s): Nomusa	Vumisa	DATE: 13/05/2022	
VERSION: 1.0		LAST REVIEW DATE: 13/05/2022	
USE CASE NAME:	Update Email Address		USE CASE TYPE
USE CASE ID:	1.8		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requiremen	nts List	System Design:
PRIMARY BUSINESS ACTOR	• User		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	• None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes the event where a user wishes to edit their email address. The system will retrieve the user information stored on the system. The user then edits their email address. The system will then send an email address verification email to the user. The use case ends when the user's email address has been successfully updated on the system and the user has been directed to the successful verification page.		
PRE-CONDITION:	The user must be logged in		
TRIGGER:	This use case is called when the user wishes to update their email address.		
TYPICAL COURSE	Actor Action System Response		
	Step 1: The user wishes to update their email address.Step 2: The system retrieves the user's email address from the User table with the following attribute		
	Step 3: The user edits t email address	heir	Email Step 4: The system captures and validates the email address [ALT]

		Step 5: The system reads from the	
		User table to ensure that the record	
		being updated does not match any	
		existing records using the following	
		attribute	
		Email	
		[ALT]	
		Step 6: The system sends an account	
		verification email to the user	
	Step 7: The user receives the	Step 8: The system saves the changes	
	email and accesses the link	made to the User table with the	
	provided	following attributes:	
		Email	
		Step 9: The system displays a	
		successful update message	
ALTERNATE	ALT Step 44. The email address	s entered is not in the correct format or	
COURSES:	ALT Step 4A: The email address entered is not in the correct format or the required field is empty		
	The system displays a validation error message		
	Return to step 3		
	ALT Step 4B: The user attempts to save their details but has not made any changes to their email		
	any changes to their email		
	 The system displays a validation error message 		
	Return to step 3		
	ALT Step 5: The email already exists		
	The use case is terminat	ted	
CONCLUSION:		the user's email address has been	
	successfully updated on the system		
POST-CONDITION:	•	ated in the user table and displayed on	
	the screen		
BUSINESS RULES	None		
IMPLEMENTATION			
CONTRAINTS AND	 The user cannot update their email address without an internet connection 		
SPECIFICATIONS	 All users have access to this function 		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



2.2. Administrative Subsystem

AUTHORS (s): Kyle van		DATE: 10/05/2022	
VERSION: 1.1		LASI REVI	EW DATE: 30/08/2022
USE CASE NAME:	Register User		USE CASE TYPE
USE CASE ID:	2.1		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requiremer	its List	System Design:
PRIMARY BUSINESS ACTOR	Administrator (PS)	SA)	•
PRIMARY SYSTEM ACTOR	User (PBA)		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION: PRE-CONDITION:	This use case describes the process in which the administrator wishes to register a new user account on the system with a particular pre-defined user role assigned which controls what actions the user account is allowed to perform on the system. The use case begins when the administrator requests to add a new user to the system, captures the required information on the user to be registered including the User Role, First Name, Surname, Phone Number, Email Address, Street Address, Country, Province, City and Suburb. Once the new user account details have been successfully added to the system, the system will send an account confirmation email to the registered user's email address. The use case concludes once the system displays a confirmation message which confirms that the user account has been registered successfully.		
TRIGGER:	The administrator wishes to register a new user account on the system,		
TYPICAL COURSE	Actor Action System Response		

Table 9– 2.1 Register User



OF EVENTS:	Step 1: The administrator	Step 2: The system displays the
	wishes to add a new user account to the system and selects the option to view all current users on the system.	following details of all existing users that are defined on the system:
		First NameSurnamePhone Number
		Email Address
	Step 3: The administrator	Step 4: The system prompts the
	selects the option to register a new user account on the system.	administrator to capture the following required details to register a new user account:
		User RoleFirst NameSurname
		Phone NumberEmail
		Street Address
		CountryProvince
		CitySuburb
		A list of selectable countries, provinces, cities, suburbs and user roles are retrieved from the database to capture the required form details. The following details are retrieved from the below listed entities:
		From the UserRole entity:
		RoleName
		From the Country entity:
		CounryName
		From the Province entity:
		ProvinceName

	 From the City entity: CityName From the Suburb entity: SuburbName
Step 5: The administrator captures the required details and selects the option to proceed with creating the user account. [ALT]	Step 6: The system validates the correctness and completeness of the provided details using the requirements configured for the User table. [ALT]
	Step 7: The system validates that there is not already an existing user account in the User table with the Email provided in Step 5. [ALT]
	Step 8: The system creates the following new user account details in the User entity:
	 User ID First Name Surname Email Phone Number Street Address Country Province City Suburb Email Confirmed (Set to "False" upon creating the account) Password (Hashed)
	The system creates the following details in the UserRole table to associate the necessary permissions based on the selected role for the user account: • User ID



		Role ID	
		Step 9: The system retrieves the	
		following details from the User entity:	
		EmailAddress	
		The system then generates and sends an account verification email to registered user's email address.	
		Step 10: The system displays an alert notification which informs the administrator that the user account has been registered on the system successfully.	
	Step 11 : The newly registered user accesses their email address used for account registration and selects the option to confirm their account.	 Step 12: The system updates the user's account to a confirmed state in the User table using the following attribute: Email Confirmed (Updated to "True" 	
		Step 13: The system displays a	
ALTERNATE COURSES:	 ALT Step 5: The administrator no longer wishes to add a new user account and clicks the option provided for cancelling the operation: The use case is terminated. ALT Step 6 a: The system fails to validate the required fields which have not been provided with any information: Display detailed messages pointing out the required fields that raised the validation errors. Return to Step 5. ALT Step 6 b: The system fails to validate the correctness and/or format of input provided in any of the fields on the screen: Display a relevant validation error message for all the fields with incorrect input. Return to Step 5. 		
	criteria:The system displays a v	ovided does not meet the minimum alidation error message to inform the ssword provided did not meet the	
	Return to Step 5.		



	 ALT Step 6 d: The confirm password field's value does not match the password provided: The system displays a validation error message which informs the administrator that the password and confirm password fields must have an exact match. Return to Step 5. ALT Step 7: The system matches the email captured with an already existing user account in the User table. The system will inform the administrator that a user with that Email Address has already been registered on the system. The use case is terminated. 	
CONCLUSION:	This use case concludes when the newly registered user account is verified via email and the system informs the user that their account has been successfully confirmed.	
POST-CONDITION:	 A new account's details is created and stored in the User entity. The details of the new account along its specified role is stored in the UserRole entity. The user is able to log into their account after verifying their email address. 	
BUSINESS RULES	 Only the administrator(s) should be able to see an option to specify a user role when registering a new user on the system. Email addresses are to be used as a user's username and to uniquely identify users on the system. The user to be registered must not already have an existing account on the system. All passwords stored in the database should be hashed for security reasons. 	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The email address need be unique for each registered account on the system. A default password is to be used when registering a new user account on the system. 	
ASSUMPTIONS:	 The registered user will make use of the 'Update Password' functionality to change their password once their account has been confirmed/verified. 	
OPEN ISSUES:	None	

Table 10 -2.2 Search User

ADMINISTRATIVE SUBSYSTEM				
AUTHORS (s): Kyle van Eeden		DATE: 10/05/2022		
VERSION: 1.1	LAST REVI		REVIEW DATE: 30/08/2022	
USE CASE NAME:	Search User		USE CASE TYPE	
USE CASE ID:	2.2		Business Requirements:	
PRIORITY:	Medium		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which the administrator searches for an existing user account on the system. The use case begins with the administrator entering the search criteria details on which they wish to perform the search. The system will retrieve and display user accounts which have matched the search criteria specified and the use case concludes with the system displaying the search results in a table.			
PRE-CONDITION:	The administrator must be logged onto the system.			
TRIGGER:	This use case is called when the administrator wishes to search for a specific user account on the system.			
TYPICAL COURSE	Actor Action		System Response	
OF EVENTS:	Step 1 : The administrate wishes to search for an existing user defined on system and clicks the	or the	 Step 2: The system displays the following details for all existing user accounts defined on the system and which is retrieved from the User entity: First Name Surname Phone Number Email Address 	



	Step 3: The administrator enters the search parameter in the provided search bar field.Step 4: The system searches the following attributes in the User entity for which the associated values match the search parameter provided:• First Name • Surname • Email Address • Phone Number			
	Step 5: The system displays the search result(s) on the user interface. [ALT]			
ALTERNATE COURSES:	 ALT Step 5: The search query entered does not match any existing details on user accounts from the User table: The system indicates that no user accounts' details have matched the search query provided. The use case is terminated. 			
CONCLUSION:	This use case concludes when the search results are displayed on the user interface.			
POST-CONDITION:	All the results that matched the search query specified is retrieved from the User entity and displayed on the interface.			
BUSINESS RULES	 The system should clearly indicate on the user interface when no search results were found. The system administrator should be allowed to search for a user by their first name, surname, email address and phone number. 			
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 Sorting, paging and search functionality is required on the 'Users' page. The administrator will not be able to base the search on a specific single attribute. 			
ASSUMPTIONS:	None			
OPEN ISSUES:	None			



Table 11 - 2.3 Update User Details

ADMINISTRATIVE SUBSYSTEM				
AUTHORS (s): Kyle van	Eeden	DATE: 10/05/2022		
VERSION: 1.1		LAST REVIEW DATE: 30/08/2022		
USE CASE NAME:	Update User Details		USE CASE TYPE	
USE CASE ID:	2.3		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the event in which the administrator wishes to update an existing user account's details on the system. The use case begins when the administrator views the current details of a particular user account and updates the details of the user account. The use case concludes when the system confirms that the update has been made successfully and the user's details in the User table has been updated successfully.			
PRE-CONDITION:	 The administrator must be logged onto the system. The user account which is to be updated must exist on the system. 			
TRIGGER:	The use case is triggered when the administrator updates the existing user account's details.			
TYPICAL COURSE	Actor Action System Response		tem Response	
OF EVENTS:	Step 1: The administrator wishes to update an existing user account's details on the system.Step 2: The system invokes Use Case 2.2 "Search User".[ALT]			
	Step 3: The administrat selects the update optio the relevant user accound displayed on the user interface.	n for foll	ep 4: The system displays the owing details retrieved for the user count selected and which is retrieved m the User entity:	



	Step 5: The administrator provides the updated details and selects the option to update the details of the user account. [ALT]	 First Name Surname Email Address Phone Number Street Address Country Province City Suburb Is Active Step 6: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT]	
		Step 7 : The system prompts the administrator to confirm the update of the user account's details.	
	Step 8 : The administrator confirms that they wish to proceed with the update.	Step 9: The system saves the updated details in the User table.	
	[ALT]		
		Step 10: The system displays an update successful message on the screen to confirm that the user account's details is updated and saved successfully.	
ALTERNATE COURSES:	 ALT Step 2: The user account to be updated by the administrator is displayed on the first page of the 'Users' screen and no search is needed to be performed: Proceed to Step 3 		
	ALT Step 5: The administrator no longer wishes to update the details of the user and clicks the option to cancel the update operation:		
	 Redirect administrator to the 'Users' screen The use case is terminated 		
	ALT Step 6 a: The system fails to validate the information provided due to required fields that have not been provided with a value.		
	 The system displays validation error messages for the fields that were left blank. Return to Step 5. 		



	 ALT Step 6 b: The system detects input validation errors for the details which has been captured: The system displays validation error messages for the fields that contained incorrect information. Return to Step 5. ALT Step 8: The administrator does not wish to proceed with the update: The administrator selects the option to cancel the update operation. Return to Step 5. 	
CONCLUSION:	This use case concludes when the system displays a message that confirms the user's details has been updated successfully.	
POST-CONDITION:	 The user's account details are updated and saved in the User entity. 	
BUSINESS RULES	 Only the administrator should be allowed to update the details of another existing user's account. The administrator should not be allowed to update the password of another user's account defined on the system. A registered user's role cannot be changed from the moment it has been defined on the system. The administrator should be allowed to change the email address associated with a user's account. 	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The administrator will not be allowed to change the role assigned to a particular user. The administrator will not be allowed to view or change the password of a particular user's account. 	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	



Table 12 - 2.4 Delete User

ADMINISTRATIVE SUBSYSTEM				
AUTHORS (s): Kyle van Eeden		DATE: 10/05/2022		
VERSION: 1.1		LAST REVIEW DATE: 30/05/2022		
USE CASE NAME:	Delete User		USE CASE TYPE	
USE CASE ID:	2.4		Business Requirements:	
PRIORITY:	Medium		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	• None			
DESCRIPTION:	This use case narrative describes the event in which the administrator wishes to delete a user account from the system. Once the administrator has searched for the specific user account to be deleted, the administrator then will then view all the details of the user account in read-only format. The administrator then requests to remove the user account, and the system prompts confirmation of the user account removal, after which the administrator will confirm the removal and the user is removed from the User table if the user account has not been associated with an order on the system. This use case concludes once the system confirms that the user has been successfully removed by displaying a confirmation message on the user interface.			
PRE-CONDITION:	 The administrator must be logged into the system. The user account to be deleted must currently exist on the system. The user to be removed must not have placed an order on the system. 			
TRIGGER:	This use case is called when the administrator wishes to delete an existing user account from the system.			
TYPICAL COURSE	Actor Action System Response			
OF EVENTS:	Step 1 : The administrate wishes to delete a speci user from the system.	or Step	2: The system invokes Use Case Search User".	
	Step 3: The administrator selects the option to delete a specific user from the system.	Step 4: The system displays the 'Delete User' screen with the following details retrieved for the specific user from the User entity: • First Name		
-----------------------	--	--	--	
		 Surname Email Address Phone Number Street Address Country Province City Suburb User Role 		
	Step 5: The administrator selects the option to remove the user account from the system.	Step 6: The system validates whether the account requested for removal is associated with an order by retrieving all orders from the Order entity.		
		[ALT]		
		Step 7: The system prompts the administrator to confirm the removal of the user account.		
	Step 8: The administrator confirms that they wish to proceed with deletion of the user account from the system. [ALT]	Step 9: The system removes all of the details related to the selected user account from the User table.		
		Step 10: The system informs the administrator of the successful deletion of the user account by displaying a notification on the user interface.		
ALTERNATE COURSES:		b be updated by the administrator is e ' Users ' screen and no search is needed		
	Proceed to Step 3			
	ALT Step 6: The system detects that the user account requested for deletion is associated with an order in the Order entity.			
		error message to the administrator to r account cannot be deleted.		



	 Use case is terminated.
	ALT Step 8: The administrator selects the option not to proceed with deletion.
	The use case is terminated.
CONCLUSION:	This use case concludes when the administrator is notified of the successful removal of the user account.
POST-CONDITION:	 The system deletes all of the details related to the selected user account from the User entity.
BUSINESS RULES	 Only the administrator can delete a user from the system. A user that has placed an order on the system cannot be deleted.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The administrator will not be allowed to change any of the user account's details displayed when the particular account has been requested for removal.
ASSUMPTIONS:	None
OPEN ISSUES:	None

2.3. Reseller Subsystem

	RESELLER SUBSYS	STEM	
AUTHORS (s): Nomusa	Vumisa DATE	: 19/07/2	2022
VERSION: 1.1	LAST	REVIEV	V DATE: 19/07/2022
USE CASE NAME:	Send Payment Reminder		USE CASE TYPE
USE CASE ID:	3.1		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requirements List		System Design:
PRIMARY BUSINESS ACTOR	• Time		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	Reseller		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	The use case begins when a reseller order payment is still outstanding. and the order has reached the notification threshold. The system then sends an email reminder to the reseller at half the due date and on the due date.		
PRE-CONDITION:	The payment status must be "Pa	ayment	Outstanding"
TRIGGER:	This use case is called when the	e payme	nt status is outstanding and the
	payment threshold has been rea	ached.	
TYPICAL COURSE	Actor Action	System	Posponso
			Response
	Step 1: The payment threshold has been reached	attribu status	The system reads the following tes to verify that the payment is "Payment Outstanding" and if e due date threshold has been ed
		From t	he Order table PaymentStatus OrderDate
			he PaymentReminder table Value
		[ALT]	
		payme	: The system generates a Int reminder email using the Ing attributes:
		From t	he User table

Table 13 - 3.1 Send Payment Reminder



	Email Email FirstName From the Order table OrderId OrderTotal OrderDate PaymentStatus From the PaymentReminder table Value Step 4: The system sends a payment reminder to the reseller
ALTERNATE COURSES:	 ALT Step 2 – The full due date threshold has been reached Proceed to step 3
CONCLUSION:	This use case concludes when the reminder has been sent to the reseller
POST-CONDITION:	The reseller is informed of their outstanding payment using attributes retrieved from the User and Order tables
BUSINESS RULES	None
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	Only the reseller should be notified.Reminders must be sent via email.
ASSUMPTIONS:	None
OPEN ISSUES:	None

Table 14 - 3.2 Capture Proof of Payment

RESELLER SUBSYSTEM				
AUTHORS (s): Aphiwe S		ATE: 07/20/2022		
VERSION: 1.0	LAS		V DATE: 07/20/2022	
USE CASE NAME:	Capture Proof of payment		USE CASE TYPE	
USE CASE ID:	3.2		Business Requirements:	
PRIORITY:	High		System Analysis:	X
SOURCE:	ByteXpress Requirements List		System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which the administrator wishes to capture a resellers proof of payment on the system. For resellers with orders that have an order status of "processing" and payment status "payment outstanding", the reseller can capture the resellers proof of payment on the system once the reseller has paid thus updating the order status of the order to "paid"			
PRE-CONDITION:	 The administrator must be logged in. The payment status of the order must be "payment outstanding" 			a "
TRIGGER:	This use case is triggered when the administrator wishes to capture a reseller's proof of payment on the system.			
TYPICAL COURSE				
	Actor Action Step 1 : The administrator wishes to capture a payment on the system.	Step 2 admin reselle	Response 2: The system requires the istrator to confirm whether the er's payment was recieved and d proof of payment	
	Step 3: The administrator confirms that the payment was received and uploads proof of payment [ALT]Step 4: The system prompts the administrator to confirm the Payment Capture.Step 5: The administrator confirms the Payment capture [ALT]Step 6: The system then updates the Order Status attribute in the Order entity to "paid ".			
		-	The system displays a succe uge to the administrator	555
ALTERNATE COURSES:	ALT Step 3: The administrator or sales assistant does not wish to capture proof of payment anymore Terminate use case. 			
	ALT Step 5: The administrator does not confirm the Payment Capture		;	

	Return to Step 3.
CONCLUSION:	The system displays a notification confirming the proof of payment was captured successfully
POST-CONDITION:	The reseller's order status is updated to paid
BUSINESS RULES	 Only resellers can make payments after placing an order Only the administrator can capture a proof of payment
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None
ASSUMPTIONS:	The administrator has a stable internet connection.
OPEN ISSUES:	None

2.4. Product Subsystem

PRODUCT SUBSYSTEM				
AUTHORS (s): Thenjiwe Ntsonda		DATE: 06/04/2022		
VERSION: 1.0		LAST REVIEW DATE: 06/04/2022		
USE CASE NAME:	Add Product		USE CASE TYPE	
USE CASE ID:	4.1		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	 Customers and Resellers – The newly added product is displayed on the customer and reseller catalogue with different prices as required. 			
DESCRIPTION:	This use case describes the process in which the administrator wishes to add a new product to the system to be viewed and ordered by customers and resellers. The use case begins when the administrator adds the new product as an option for customers and resellers to choose from. The administrator will add all of the pertinent information regarding the product and save it to the business database.			
PRE-CONDITION:	 The administrator must be logged onto the system. A product category or brand relevant to the product added needs to exist before the product is created. 			
TRIGGER:	The use case is triggered when the administrator wants to add a new product that customers and resellers can order.			
TYPICAL COURSE	Actor Action	Syst	em Response	

Table 15- 4.1 Add Product



OF EVENTS:	Step 1 : The administrator wants to add a new product	Step 2 : The system requests the new product details which have the following attributes:
		From the Product table: Name Description Image CustomerPrice ResellerPrice QuantityOnHand ThresholdValue DisplayProduct
		From the ProductCategory table:Name
		From the ProductBrand table: Name
	Step 3 : The administrator inputs the details. [ALT]	Step 4: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT]
		Step 5: The system reads from the Product table to ensure that the record being added does not match any existing records using the following attributes:
		 Name Description Image CustomerPrice ResellerPrice QuantityOnHand ThresholdValue DisplayProduct ProductCategoryName ProductBrandName
		[ALT]



	Step 6: The system saves the new product details which have the following attributes:		
	 ProductId Name Description Image CustomerPrice ResellerPrice QuantityOnHand ThresholdValue DisplayProduct ProductCategoryName ProductBrandName 		
	Step 7: The system displays a success message on the screen to confirm the addition of the new product.		
	 ALT Step 3: The administrator does not want to add a Product anymore The use case is terminated 		
ALTERNATE COURSES:	ALT Step 4: The system fails to validate the information provided because of missing fields or incorrectly entered information.		
	Return to Step 3. ALT Step 6: The product already exists on the system		
	 The system displays a validation error message The use case is terminated 		
CONCLUSION:	This use case concludes when a new product is added.		
POST-CONDITION:	 The product details are added to the database. The product details are displayed on the system for selection by customers and resellers. 		
BUSINESS RULES	 Only the administrator can add a new product. Resellers and customers will see different prices of the added product. 		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



Table 16- 4.2 Search Product

PRODUCT SUBSYSTEM				
AUTHORS (s): Thenjiwe	Ntsonda	DATE: 06/0	4/2022	
VERSION: 1.0		LAST REVIEW DATE: 06/04/2022		
USE CASE NAME:	Search Product		USE CASE TYPE	
USE CASE ID:	4.2		Business Requirements:	
PRIORITY:	Medium		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator		•	
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which the administrator searches for products on the system. The system responds by displaying the information relating to the search query.			
PRE-CONDITION:	The administrator must be logged onto the system.			
TRIGGER:	This use case is called we product on the system.	when the adm	ninistrator wants to search for a	
TYPICAL COURSE	Actor Action	Svst	em Response	
OF EVENTS:	Step 1: The administrate wants to search for a pro	or		
	Step 2: The administrate enters the search param	neter. follo	p 3: The system searches the owing attributes in the Product entity a match:	
		04-	 Name Description Product Category Product Brand 	
			p 4: The system displays the search ults. [ALT]	



ALTERNATE COURSES:	[ALT] Step 4: The search query entered does not match any existing instances of products in the system database.	
	Return to Step 3 or terminate use case	
CONCLUSION:	This use case concludes when the information is displayed on the system.	
POST-CONDITION:	The Product entity was searched for and an entry that corresponds to the search query or parameter entered.	
BUSINESS RULES	None	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	

Table 17- 4.3 Update Product

PRODUCT SUBSYSTEM			
AUTHORS (s): Thenjiwe	Ntsonda	DATE:	06/04/2022
VERSION: 1.0		LAST F	REVIEW DATE: 06/04/2022
USE CASE NAME:	Update Product		USE CASE TYPE
USE CASE ID:	4.3		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requiremer	nts List	System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	 Customers and Resellers – The newly updated product is displayed on the customer and reseller catalogue with different prices as required. 		
DESCRIPTION:	This use case describes the process in which the administrator wishes to update a product to the system to be viewed and ordered by customers and resellers. The use case begins when the administrator updates the product as an option for customers and resellers to choose from. The administrator will update all of the pertinent information regarding the product and save it to the business database.		
PRE-CONDITION:	 The administrator must be logged onto the system. A product category or brand relevant to the product needs to exist before the product is updated. 		
TRIGGER:	The use is triggered when the administrator updates the product as an option for customers and resellers to choose from.		
TYPICAL COURSE	Actor Action System Response		
OF EVENTS:	Step 1 : The administrate wishes to update an exist product's details.		Step 2: The system invokes Use Case 4.2 Search Product.



 [Other On The set of the state
	Step 3: The system retrieves the
	desired product details from the
	following tables:
	From the Product table:
	Name
	Description
	Image
	CustomerPrice
	ResellerPrice
	QuantityOnHand
	ThresholdValue
	DisplayProduct
	From the ProductCategory table:
	• Name
	From the ProductBrand table:
	Name
Step 4: The administrator	Step 5: The system captures and
inputs the details required.	validates the information provided by
[ALT]	ensuring the format is adhered to and
	no required text fields are left empty.
	[ALT]
	Step 6: The system prompts the
	administrator to confirm the update of a
	product with the details provided.
Step 7: The administrator	Step 8: The system reads from the
confirms the information	Product table to ensure that the record
provided. [ALT]	being updated does not match any
	existing records using the following
	attributes:
	Name
	Description
	 Image
	CustomerPrice
	ResellerPrice
	QuantityOnHand
	ThresholdValue



	 DisplayProduct ProductCategoryName 	
	 ProductBrandName 	
	[ALT]	
	Step 9: The system saves the updated product details which have the following attributes:	
	 Name Description Image CustomerPrice ResellerPrice QuantityOnHand ThresholdValue DisplayProduct ProductCategoryName ProductBrandName 	
	success message on the screen to confirm the update of a product.	
ALTERNATE COURSES:	 ALT Step 4: The administrator does not want to add a Product anymore The use case is terminated 	
	ALT Step 5: The system fails to validate the information provided because of missing fields or incorrectly entered information.	
	Return to Step 4	
	ALT Step 7: The administrator does not confirm the updating of the product details:	
	Return to Step 4 or terminate the use case	
	ALT Step 8: The product already exists on the system	
	The system displays a validation error messageThe use case is terminated	
CONCLUSION:	This use case concludes when a product is updated.	
POST-CONDITION:	 The product details are updated to the database. The new product details are displayed on the system for selection by customers and resellers. 	
BUSINESS RULES	 Only the administrator can update a product. 	

IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None
ASSUMPTIONS:	None
OPEN ISSUES:	None



Table 18- 4.4 Delete Product

PRODUCT SUBSYSTEM			
AUTHORS (s): Thenjiwe	Ntsonda	DATE: 06/	04/2022
VERSION: 1.0		LAST REV	'IEW DATE: 06/04/2022
USE CASE NAME:	Delete Product		USE CASE TYPE
USE CASE ID:	4.4		Business Requirements:
PRIORITY:	Medium		System Analysis:
SOURCE:	ByteXpress Requiremer	nts List	System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case narrative describes the process in which the administrator wishes to delete a product from the system. The administrator will search for the required product selected for deletion. The administrator will then confirm the deletion of the product and the use case concludes when the system notifies the administrator of a successful deletion.		
PRE-CONDITION:	The administrator must be logged onto the system.		
TRIGGER:	This use case is called when the administrator wishes to delete a product.		
TYPICAL COURSE	Actor Action	Svs	tem Response
OF EVENTS:	Step 1 : The administrate wishes to delete a produ	or St	ep 2: The system invokes Use Case Search Product.
	Step 3: The administrate selects the delete option	n [ALT] ad	ep 4: The system prompts the ministrator to confirm the deletion of product.
	Step 5: The administrate confirms the deletion of product from the system	the Or [ALT] be as	ep 6: The system reads from the der table to ensure that the record ng deleted does not have an sociation with orders using the owing attribute:
			ProductId



	[ALT]	
	Step 7: The system removed all the details related to the product from the database from the following table: • Name • Description • Image • CustomerPrice • ResellerPrice • QuantityOnHand • ThresholdValue • DisplayProduct • ProductBrandName Step 8: The system informs the	
	administrator of the successful deletion of the product	
ALTERNATE COURSES:	ALT Step 3: The administrator does not want to delete the product anymore. • Terminate use case. ALT Step 5: The administrator does not confirm the deletion of the product. • Return to Step 4 ALT Step 6: The product cannot be deleted as it has an association with the Order table • The system displays an error message • The use case is terminated	
CONCLUSION:	This use case concludes when the product is deleted from the system	
POST-CONDITION:	 The system deletes all of the details related to the selected product from the product entity. 	
BUSINESS RULES	 Only the administrator can delete a product. 	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	



Table 19- 4.5 Add Product category

PRODUCT CATEGORY SUBSYSTEM			
AUTHORS (s): Thenjiwe	Ntsonda	DATE:	06/04/2022
VERSION: 1.0		LAST F	REVIEW DATE: 06/04/2022
USE CASE NAME:	Add Product category		USE CASE TYPE
USE CASE ID:	4.5		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requirement	nts List	System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes the process in which the administrator wishes to add a new product category to the system to be linked to products. The use case begins when the administrator adds the new product category to the system. The administrator will add all of the pertinent information regarding the product category and save it to the database.		
PRE-CONDITION:	The administrator must be logged onto the system.		
TRIGGER:	The use case is triggered when the administrator wants to add a new product category.		
TYPICAL COURSE	Actor Action		System Response
OF EVENTS:	Step 1 : The administrat wants to add a new pro- category	duct	 Step 2: The system requests the new product category details which have the following attributes: From the ProductCategory table: Name
	Step 3: The administrat inputs the details. [ALT]		Step 4: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT]



		Step 5: The system reads from the
		ProductCategory table to ensure that the record being added does not match
		any existing records using the following
		attribute:
		Name
		[ALT]
		Step 6: The system saves the new
		product category details which have the following attributes:
		ProductCategoryIdName
		Step 7: The system displays a success
		message on the screen to confirm the addition of the new product category.
	ALT Stop 2: The administrator	does not want to add a product category
	anymore	abes not want to add a product category
	The use case is terminat	ed
ALTERNATE		validate the information provided
COURSES:	because of missing fields or inco	Drrectly entered information.
	Return to Step 3. ALT Step 5: The product category	ory already exists on the system
	 The system displays a value The use case is terminat 	•
CONCLUSION:	This use case concludes when a	a new product category is added.
POST-CONDITION:	The product category de	tails are added to the database.
BUSINESS RULES	Only the administrator can add a new product category.	
IMPLEMENTATION	None	
CONTRAINTS AND SPECIFICATIONS		
	Non-	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	



Table 20- 4.6 Search Product Category

PRODUCT CATEGORY SUBSYSTEM			
AUTHORS (s): Thenjiwe	Ntsonda	DATE: 0	6/04/2022
VERSION: 1.0		LAST RE	EVIEW DATE: 06/04/2022
USE CASE NAME:	Search Product Categor	у	USE CASE TYPE
USE CASE ID:	4.6		Business Requirements:
PRIORITY:	Medium		System Analysis:
SOURCE:	ByteXpress Requiremer	nts List	System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes the process in which the administrator searches for product categories on the system. The system responds by displaying the information relating to the search query.		
PRE-CONDITION:	The administrator must be logged onto the system.		
TRIGGER:	This use case is called when the administrator wants to search for a product category on the system.		
TYPICAL COURSE	Actor Action	S	ystem Response
OF EVENTS:	Step 1 : The administrate wants to search for a proceeding of the search for a proceeding of	or oduct	ystem nesponse
	Step 2: The administrate enters the search param	neter. fo	Step 3: The system searches the ollowing attributes in the ProductCategory entity for a match:
			Name
			Step 4 : The system displays the search esults. [ALT]

ALTERNATE COURSES:	[ALT] Step 4: The search query entered does not match any existing instances of product categories in the system database.
	Return to Step 3 or terminate use case
CONCLUSION:	This use case concludes when the information is displayed on the system.
POST-CONDITION:	The ProductCategory entity was searched for and an entry that corresponds to the search query or parameter entered.
BUSINESS RULES	None
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None
ASSUMPTIONS:	None
OPEN ISSUES:	None



Table 21- 4.7 Update Product category

PRODUCT CATEGORY SUBSYSTEM				
AUTHORS (s): Thenjiwe	Ntsonda	DATE:	06/04/2022	
VERSION: 1.0 LAS		LAST F	AST REVIEW DATE: 06/04/2022	
USE CASE NAME:	Update Product categor	У	USE CASE TYPE	
USE CASE ID:	4.7		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator		•	
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None	• None		
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which the administrator wishes to update a product category to the system. The use case begins when the administrator updates the product category details. The administrator will update all of the pertinent information regarding the product category and save it.			
PRE-CONDITION:	 The administrator must be logged onto the system. A product category or brand relevant to the product category needs to exist before the product category is updated. 			
TRIGGER:	The use is triggered when the administrator updates the product category as an option for customers and resellers to choose from.			
TYPICAL COURSE	Actor Action		System Response	
OF EVENTS:	Step 1 : The administrate wishes to update an exis product category's detai	sting	Step 2: The system invokes Use Case 4.6 Search Product Category.	
			Step 3 : The system retrieves the desired product category details from the following tables:	
			From the ProductCategory table:	
			Name	



		1
	Step 4 : The administrator inputs the details required. [ALT]	Step 5: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT]
		Step 6 : The system prompts the administrator to confirm the update of a product category with the details provided.
	Step 7 : The administrator confirms the information provided. [ALT]	Step 8: The system reads from the ProductCategory table to ensure that the record being updated does not match any existing records using the following attributes:
		Name
		[ALT]
		Step 9: The system saves the updated product category details which have the following attributes:
		• Name
		Step 10: The system displays a success message on the screen to confirm the update of a product category.
ALTERNATE COURSES:	-	does not want to add a Product category
	anymoreThe use case is terminat	ied
	ALT Step 5: The system fails to because of missing fields or inco	validate the information provided orrectly entered information.
	Return to Step 4	



	 ALT Step 7: The administrator does not confirm the updating of the product category details: Return to Step 4 or terminate the use case 	
	 ALT Step 8: The product category already exists on the system The system displays a validation error message The use case is terminated 	
CONCLUSION:	This use case concludes when a product category is updated.	
POST-CONDITION:	• The product category details are updated to the database.	
BUSINESS RULES	Only the administrator can update a product category.	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	

Table 22- 4.8 Delete Product Category

PRODUCT CATEGORY SUBSYSTEM			
AUTHORS (s): Thenjiwe	Ntsonda	DATE: 06/04/	2022
VERSION: 1.0	LAST REVIEW		W DATE: 06/04/2022
USE CASE NAME:	Delete Product Categor	y	USE CASE TYPE
USE CASE ID:	4.8		Business Requirements:
PRIORITY:	Medium		System Analysis:
SOURCE:	ByteXpress Requiremer	nts List	System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case narrative describes the process in which the administrator wishes to delete a product category from the system. The administrator will search for the required product category selected for deletion. The administrator will then confirm the deletion of the product category and the use case concludes when the system notifies the administrator of a successful deletion.		
PRE-CONDITION:	The administrator must be logged onto the system.		
TRIGGER:	This use case is called when the administrator wishes to delete a product category.		
TYPICAL COURSE	Actor Action System Response		n Response
OF EVENTS:	Step 1: The administrativishes to delete a producategory.	or Step	2: The system invokes Use Case earch Product category.
		desire	3: The system retrieves the ed product category details from llowing tables:
		From	the ProductCategory table:
		•	Name



	Step 4: The administrator selects the delete option [ALT]	Step 5: The system prompts the administrator to confirm the deletion of the product category.	
	Step 6: The administrator confirms the deletion of the product category from the system [ALT]	Step 7: The system reads from the Product table to ensure that the record being deleted does not have an association with products using the following attribute:	
		ProductCategoryId	
		[ALT]	
		Step 8: The system removed all the details related to the product category from the database from the following table:	
		• Name	
		Step 9: The system informs the administrator of the successful deletion of the product category	
ALTERNATE COURSES:	ALT Step 4: The administrator does not want to delete the product category anymore.		
	Terminate use case.		
	ALT Step 6: The administrator does not confirm the deletion of the product category.		
	Return to Step 4		
	ALT Step 7: The product category cannot be deleted as it has an association with the Product table		
	 The system displays an error message The use case is terminated 		
CONCLUSION:	This use case concludes when the product category is deleted from the system		
POST-CONDITION:	 The system deletes all of the details related to the selected product category from the ProductCategory table. 		
BUSINESS RULES		an delete a product category.	

IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None
ASSUMPTIONS:	None
OPEN ISSUES:	None



Table 23- 4.9 Add Product Brand

PRODUCT BRAND SUBSYSTEM			
AUTHORS (s): Thenjiwe	Ntsonda	DATE: (06/04/2022
VERSION: 1.0		LAST REVIEW DATE: 06/04/2022	
USE CASE NAME:	Add Product Brand		USE CASE TYPE
USE CASE ID:	4.9		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requiremer	nts List	System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes the process in which the administrator wishes to add a new product brand to the system to be linked to products. The use case begins when the administrator adds the new product brand to the system. The administrator will add all of the pertinent information regarding the product brand and save it to the database.		
PRE-CONDITION:	The administrator must be logged onto the system.		
TRIGGER:	The use case is triggere product brand.	ed when th	ne administrator wants to add a new
TYPICAL COURSE	Actor Action		System Response
OF EVENTS:	Step 1 : The administrate wants to add a new prod brand	or duct	Step 2 : The system requests the new product brand details which have the following attributes: From the ProductBrand table:
	Step 3: The administrate inputs the details. [ALT]		Name Step 4: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT]



		Step 5: The system reads from the ProductBrand table to ensure that the record being added does not match any	
		existing records using the following attribute:	
		• Name	
		[ALT]	
		Step 6: The system saves the new product brand details which have the following attributes:	
		 ProductBrandId Name	
		Step 7: The system displays a success message on the screen to confirm the addition of the new product brand.	
	ALT Step 3: The administrator does not want to add a product brand anymore		
ALTERNATE	• The use case is terminated		
COURSES:	ALT Step 4: The system fails to validate the information provided because of missing fields or incorrectly entered information.		
	Return to Step 3.		
	ALT Step 5: The product brand	already exists on the system	
	 The system displays a value The use case is terminat 		
CONCLUSION:	This use case concludes when a new product brand is added.		
POST-CONDITION:	The product brand details are added to the database.		
BUSINESS RULES	Only the administrator can add a new product brand.		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		

Table 24- 4.10 Search Product brand

PRODUCT BRAND SUBSYSTEM				
AUTHORS (s): Thenjiwe	Ntsonda	DATE: 0	06/04/2022	
VERSION: 1.0	1.0 LAST		REVIEW DATE: 06/04/2022	
USE CASE NAME:	Search Product brand	•	USE CASE TYPE	
USE CASE ID:	4.10		Business Requirements:	
PRIORITY:	Medium		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which the administrator searches for product brands on the system. The system responds by displaying the information relating to the search query.			
PRE-CONDITION:	The administrator must be logged onto the system.			
TRIGGER:	This use case is called when the administrator wants to search for a product brand on the system.		administrator wants to search for a	
TYPICAL COURSE	Actor Action System Response		System Response	
OF EVENTS:	Step 1 : The administrate wants to search for a probrand.	or oduct		
	Step 2: The administrate enters the search param	neter. 1	Step 3: The system searches the following attributes in the ProductBrand entity for a match:	
			Name	
			Step 4 : The system displays the search results. [ALT]	

ALTERNATE COURSES:	[ALT] Step 4: The search query entered does not match any existing instances of product brands in the system database.	
	Return to Step 3 or terminate use case	
CONCLUSION:	This use case concludes when the information is displayed on the system.	
POST-CONDITION:	The ProductBrand entity was searched for and an entry that corresponds to the search query or parameter entered.	
BUSINESS RULES	None	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	



Table 25- 4.11 Update Product brand

PRODUCT BRAND SUBSYSTEM				
AUTHORS (s): Thenjiwe	Ntsonda	DATE:	06/04/2022	
VERSION: 1.0		LAST R	LAST REVIEW DATE: 06/04/2022	
USE CASE NAME:	Update Product brand		USE CASE TYPE	
USE CASE ID:	4.11		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which the administrator wishes to update a product brand to the system. The use case begins when the administrator updates the product brand details. The administrator will update all of the pertinent information regarding the product brand and save it.			
PRE-CONDITION:	 The administrator must be logged onto the system. A product brand or brand relevant to the product brand needs to exist before the product brand is updated. 			
TRIGGER:	The use is triggered when the administrator updates the product brand as an option for customers and resellers to choose from.			
TYPICAL COURSE	Actor Action		System Response	
OF EVENTS:	Step 1 : The administrate wishes to update an exist product brand details.		Step 2: The system invokes Use Case 4.10 Search Product brand.	
			Step 3 : The system retrieves the desired product brand details from the following tables:	
			From the ProductBrand table:	
			Name	



		1	
	Step 4 : The administrator inputs the details required. [ALT]	Step 5: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT]	
		Step 6 : The system prompts the administrator to confirm the update of a product brand with the details provided.	
	Step 7 : The administrator confirms the information provided. [ALT]	Step 8: The system reads from the ProductBrand table to ensure that the record being updated does not match any existing records using the following attributes:	
		Name	
		[ALT]	
		Step 9: The system saves the updated product brand details which have the following attributes:	
		Name	
		Step 10: The system displays a success message on the screen to confirm the update of a product brand.	
ALTERNATE	-	does not want to add a Product brand	
COURSES:	 The use case is terminated 		
	ALT Step 5: The system fails to validate the information provided because of missing fields or incorrectly entered information.		
	Return to Step 4		



	 ALT Step 7: The administrator does not confirm the updating of the product brand details: Return to Step 4 or terminate the use case 	
	 ALT Step 8: The product brand already exists on the system The system displays a validation error message The use case is terminated 	
CONCLUSION:	This use case concludes when a product brand is updated.	
POST-CONDITION:	The product brand details are updated to the database.	
BUSINESS RULES	 Only the administrator can update a product brand. 	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	

Table 26- 4.12 Delete Product brand

PRODUCT BRAND SUBSYSTEM				
AUTHORS (s): Thenjiwe	Ntsonda	DATE: 06/04/2022		
VERSION: 1.0	LAST REVIEW		V DATE: 06/04/2022	
USE CASE NAME:	Delete Product brand		USE CASE TYPE	
USE CASE ID:	4.12		Business Requirements:	
PRIORITY:	Medium		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case narrative describes the process in which the administrator wishes to delete a product brand from the system. The administrator will search for the required product brand selected for deletion. The administrator will then confirm the deletion of the product brand and the use case concludes when the system notifies the administrator of a successful deletion.			
PRE-CONDITION:	The administrator must be logged onto the system.			
TRIGGER:	This use case is called when the administrator wishes to delete a product brand.			
TYPICAL COURSE	Actor Action	Svste	n Response	
OF EVENTS:	Step 1: The administrate wishes to delete a produ brand.	or Step	2: The system invokes Use Case Search Product brand.	
		desir	3: The system retrieves the ed product brand details from the <i>v</i> ing tables:	
		From	the ProductBrand table:	
		•	Name	



	Step 4: The administrator selects the delete option [ALT]	Step 5: The system prompts the administrator to confirm the deletion of the product brand.	
	Step 6: The administrator confirms the deletion of the product brand from the system [ALT]	Step 7: The system reads from the Product table to ensure that the record being deleted does not have an association with products using the following attribute:	
		ProductBrandId	
		[ALT]	
		Step 8: The system removed all the details related to the product brand from the database from the following table:	
		Name	
		Step 9: The system informs the administrator of the successful deletion of the product brand	
ALTERNATE COURSES:	ALT Step 4: The administrator does not want to delete the product brand anymore.		
	Terminate use case.		
	ALT Step 6: The administrator does not confirm the deletion of the product brand.		
	Return to Step 4 ALT Step 7: The product brand cannot be deleted as it has an association with the Product table		
	 The system displays an The use case is terminat 	ed	
CONCLUSION:	This use case concludes when the product brand is deleted from the system		
POST-CONDITION:	 The system deletes all of the details related to the selected product brand from the ProductBrand table. 		
BUSINESS RULES	Only the administrator can delete a product brand.		


IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None
ASSUMPTIONS:	None
OPEN ISSUES:	None



Table 27- 4.13 Add Return Reason

PRODUCT SUBSYSTEM				
AUTHORS (s): Ofhani M	ungani	DATE: 06/04/2022		
VERSION: 3.0		LAST REVIEW DATE: 21/08/2022		
USE CASE NAME:	Add Return Reason		USE CASE TYPE	
USE CASE ID:	4.13		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	 Customers and Resellers – The newly added return reason is displayed to the customer and reseller when they log to return a product. 			
DESCRIPTION:	This use case describes the process where the administrator wishes to add a new return reason onto the system. The use case begins with the administrator wishing to add a return reason. The administrator will capture a return reason and save it on the ReturnReason entity. The use case concludes when the system alerts the administrator with "Return reason successfully added" message.			
PRE-CONDITION:	The administrator must be logged onto the system.			
TRIGGER:	The wishes to add a new Return Reason onto the system.			
TYPICAL COURSE	Actor Action	Sys	tem Response	
OF EVENTS:	Step 1: The administrate wishes to add a new retrine reason.	urn ret	ep 2: The system requests the new urn reason details which have the owing attribute:	
		Fro	om the ReturnReason table:	
			ReturnReasonName	



	Step 3: The administrator inputs the details. [ALT]	Step 4: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT]	
	Step 5 : The administrator selects the option to add a new return reason onto the system.	Step 6 : T The system reads from the ReturnReason table to ensure that the record being added does not match any existing records using the following attribute:	
		 ReturnReasonName [ALT] 	
		Step 7 : The system saves the new return reason details which have the following attributes:	
		 Id ReturnReasonName 	
		Step 8 : The system displays a success message on the screen to confirm the addition of a new return reason.	
ALTERNATE COURSES:	ALT Step 3 : The administrator wishes not to procced to add a new return reason.		
	Terminate Use Case ALT Step 4: The system fails to validate the information provided		
	 because of missing fields or inc Return to Step 3 	orrectly entered information	
	Return to Step 3		
	ALT Step 6: The return reason's name already exists on the system.		
	Terminate Use Case		
CONCLUSION:	A new instance of return reason has been successfully added to the system database.		
POST-CONDITION:	The system now has a new return reason for customers and resellers to choose from when logging a product return.		
BUSINESS RULES	Only the administrator can add a new Return Reason to the system.		

IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None
ASSUMPTIONS:	None
OPEN ISSUES:	None

Table 28- 4.14 Search Return Reason

PRODUCT SUBSYSTEM				
AUTHORS (s): Ofhani M	ungani	DATE: 0	06/04/2022	
VERSION: 3.0		LAST RI	EVIEW DATE: 21/08/2022	
USE CASE NAME:	Search Return Reason		USE CASE TY	PE
USE CASE ID:	4.14		Business Requiremer	nts: 🗆
PRIORITY:	High		System Analysis:	\boxtimes
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process where the administrator would like to search for a return reason onto the system. The use case begins with the administrator wishing to search for a return reason. The system will prompt the administrator to enter a return reason the administrator wishes to search for. The system will search through the ReturnReason entity to find the instance value in the ReturnReasonName attribute which match the return reason name provided by the administrator. The use case concludes when the system displays the results of the search query.			
PRE-CONDITION:		or must be	e logged into the system.	
TRIGGER:	The wishes to search fo	r a Return	n Reason onto the system.	
TYPICAL COURSE	Actor Action		System Response	
OF EVENTS:	Step 1: The administrate requests to search for a reason onto the system. Step 2: The administrate inputs the search param	or return or s neter. f	Step 3: The system searches the following attributes in the ReturnReason entity for a mate ReturnReason ReturnReasonName	



		Step 4 : The system displays the results to the administrator.	
		[ALT]	
ALTERNATE COURSES:	[ALT] Step 4: The search query instances of Return Reason in the search query instances of Return Reason in the search query the search query instances of Return Reason in the search query the search query instances of Return Reason in the search query instanc	entered does not match any existing he system database.	
	Terminate use case		
CONCLUSION:	This use case concludes when a query is displayed on the screer	a list of matching results from the search n.	
POST-CONDITION:	The Administrator can see the return reason matched from the search query.		
BUSINESS RULES	Only the administrator can search for a return reason to the system		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		
	•		

Table 29- 4.15 Update Return Reason

PRODUCT SUBSYSTEM				
AUTHORS (s): Ofhani M	ungani	DATE: 0	06/04/2022	
VERSION: 3.0		LAST REVIEW DATE: 21/08/2022		
USE CASE NAME:	Update Return Reason		USE CASE TYPE	
USE CASE ID:	4.15		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator		•	
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	 Customers and Resellers – The newly updated return reason is displayed to customers and resellers when they want to log a product return. 			
DESCRIPTION:	This use case describes the process where the administrator would like to update the return reason onto the system. The use case begins with the administrator requesting to update a return reason. The administrator will select an option to search for a return reason and the system will invoke use case 4.14 Search ReturnReason to retrieve the return reason. The administrator will select and edit the return reason and save it onto the system database on the ReturnReason entity. The use case concludes when the system displays a return reason successfully updated message to the administrator.			
PRE-CONDITION:	The administrator must be logged onto the system.			
TRIGGER:	The use is triggered when the administrator wishes to update a Return Reason.			
TYPICAL COURSE	Actor Action System Response			
OF EVENTS:	Step 1: The administrator requests to update a return reason on the systemStep 2: The system invokes use 4.2 "Search Return Reason".			
	Step 3: The administrat selects the desired retur reason.	m o	Step 4 : The system retrieves the desired return reason details from the following tables:	



		From the ReturnReason table:	
		ReturnReasonName .	
	Step 5 : The administrator inputs the details required. [ALT]	Step 6: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT]	
		Step 7 : The system prompts the administrator to confirm the update of a return reason with the details provided	
	Step 8 : The administrator confirms the information provided. [ALT]	Step 9: The system reads from the ReturnReason table to ensure that the record being updated does not match any existing records using the following attribute:	
		 ReturnReasonName [ALT] 	
		Step 10: The system saves the updated return reason details which have the following attribute:	
		ReturnReasonName .	
		Step 11: The system displays a success message on the screen to confirm the update of a return reason.	
ALTERNATE COURSES:	ALT Step 5: The administrato of a return reason.	r wishes not to procced to update a name	
	Terminate Use Case		
	ALT Step 6: The system fails to validate the information provided because of missing fields or incorrectly entered information.		
	Return to Step 5		



	 ALT Step 8: The administrator does not confirm the updating of the return reason's details: Return to Step 5 or terminate the use case ALT Step 9: The entered return reason's name already exists on the system.
	Terminate Use Case
CONCLUSION:	An instance of return reason has been successfully updated to the system database.
POST-CONDITION:	 The system now has an updated return reason for customers and resellers to choose from when they log a product return on the system.
BUSINESS RULES	Only the administrator can update a return reason to the system
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None
ASSUMPTIONS:	None
OPEN ISSUES:	None

Table 30- 4.16 Delete Return Reason

PRODUCT SUBSYSTEM			
AUTHORS (s): Ofhani M	ungani	DATE: 06/	04/2022
VERSION: 3.0		LAST REV	'IEW DATE: 21/08/2022
USE CASE NAME:	Delete Return Reason		USE CASE TYPE
USE CASE ID:	4.16		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requiremer	nts List	System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	• None		
DESCRIPTION:	This use case narrative describes the process in which the administrator wishes to delete a return reason from the system. The administrator will search for the required return reason selected for deletion. The administrator will then confirm the deletion of the return reason and the use case concludes when the system notifies the administrator of a successful deletion		
PRE-CONDITION:	The administrator must be logged onto the system.		
TRIGGER:	This use case is called when the administrator wishes to delete a Return Reason.		
TYPICAL COURSE	Actor Action	Svs	tem Response
OF EVENTS:	Step 1 : The administrate wishes to delete a Return Reason.	or Ste	ep 2: The system invokes Use Case "Search Return Reason".
	Step 3: The administration selects the desired return reason	m rea	ep 4: The system retrieves the return ason information from the database h the following attributes:
		Fro	om the Country entity
			CountryName



		1	
	Step 5: The administrator selects the delete option	Step 6: The system prompts the administrator to confirm the deletion of the selected return reason.	
		[ALT]	
	Step 7: The administrator confirms the deletion of the return reason from the system [ALT]	Step 8: The system removed all the details related to the Return Reason from the database [ALT]	
		Step 9: The system informs the administrator of the successful deletion of the return reason	
ALTERNATE COURSES:	 [ALT] Step 5: The administrator reason. Terminate use case 	r wishes not to procced to delete a return	
	I erminate use case [ALT] Step 7: The administrator does not confirm the deletion of the return reason.		
	Return to step 5		
	ALT Step 8: The return reason cannot be deleted as it has an association with the ProductReturn table		
	The system displays anTerminate usecase	enor message	
CONCLUSION:	This use case concludes when the administrator is notified of the successful deletion of a return reason.		
POST-CONDITION:	 The system deletes all of the details related to the selected return reason from the ReturnReason entity. 		
BUSINESS RULES	Only the administrator can delete a return reason.		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



Table 31- 4.17 Browse Product Catalogue

PRODUCT SUBSYSTEM				
AUTHORS (s): Thenjiwe	Ntsonda	DATE:	06/04/2022	
VERSION: 1.0	1: 1.0 LAST		REVIEW DATE: 06/04/2022	
USE CASE NAME:	Browse Product Catalog	lue	USE CASE TYPE	
USE CASE ID:	4.17		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremen	nts List	System Design:	
PRIMARY BUSINESS ACTOR	• User			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which the users of the system, namely customers and resellers, want to browse the product catalogue existing on the system. The users will navigate to the product catalogue on the system and the products available will be displayed.			
PRE-CONDITION:	Resellers must be logged onto the system.			
TRIGGER:	The use case is triggere the product catalogue.	d when t	the users of the system want to browse	
TYPICAL COURSE	Actor Action		System Response	
OF EVENTS:	Step 1: The user wants browse the product cata		Step 2 : The system retrieves the product information available from the following tables:	
			From the Product table:	
			 Name Description Image CustomerPrice 	

		From the BroductCategory table		
		From the ProductCategory table		
		Name		
		From the ProductBrand table:		
		Name		
		[ALT]		
	Stop 2. The upper entern their	Stop 4: The output retrieved the		
	Step 3: The user enters their required search parameter into	Step 4: The system retrieves the products matching the entered search		
	the search box. [ALT]	query and displays it to the user.		
ALTERNATE COURSES:	ALT Step 2: The user is logged	in as a reseller.		
COURSES.		reseller prices from the Product entity		
	Go to Step 3			
	ALT Stop 3. The user filters the	product catalogue using the product		
	ALT Step 3: The user filters the product catalogue using the product categories in the system.			
	 The system filters the product catalogue using the selected 			
	product category			
	AI T Step 4A. The entered sear	ch query does not match any records in		
	the table.			
	 Display no records found message 			
	-1 - 7	5		
CONCLUSION:	This use case concludes when t	he product catalogue with the relevant		
	prices is displayed according to	Ŭ		
POST-CONDITION:	The product catalogue is displayed on the system.			
BUSINESS RULES	The reseller prices are or	nly displayed to users logged in as		
	resellers.			
IMPLEMENTATION	None			
CONTRAINTS AND SPECIFICATIONS				
ASSUMPTIONS:	None			
OPEN ISSUES:	None			

Table 32 - 4.18 Configure Product Inventory Item(s)

AUTHORS (s): Kyle van Eeden DATE: 06/07/2022 VERSION: 1.0 LAST REVIEW DATE: 06/07/2022 USE CASE NAME: Configure Product Inventory Item(s) USE CASE TYPE USE CASE ID: 4.18 Business Requirements: Business Requirements: System Analysis: SOURCE: ByteXpress Requirements List System Design: Primary Prima	PRODUCT SUBSYSTEM				
USE CASE NAME: Configure Product Inventory Item(s) USE CASE TYPE USE CASE ID: 4.18 Business Requirements: Sustem Analysis: System Analysis: System Analysis: System Ceiling PRIORITY: High System Analysis: System Design: Image: System Design:	AUTHORS (s): Kyle van	Eeden	DATE: 06	/07/2022	
USE CASE ID: 4.18 Business Requirements: Business Requirements: System Analysis: SystemAnalysis: Syst	VERSION: 1.0		LAST REVIEW DATE: 06/07/2022		
PRIORITY: High System Analysis: S SOURCE: ByteXpress Requirements List System Design: □ PRIMARY BUSINESS ACTOR • Inventory Manager or Administrator □ PRIMARY SYSTEM ACTOR • None • □ OTHER PARTICIPATING ACTORS: • None □ □ OTHER INTERESTED STAKEHOLDERS: • None □ □ DESCRIPTION: The use case begins when the inventory manager or administrator wishes to specify the components a specific product is composed of and their respective quantities of each inventory item. The system will prompt the administrator or inventory manager to search for and then select the inventory items used for the production of the finished product and specify the quantities required for each inventory item. The use case concludes when the inventory items list has been updated and saved for the specific product. PRE-CONDITION: The product to be configured for production must exist on the system. The inventory items used to produce the final product must already be defined on the system. TRIGGER: This use case is called when the system administrator or inventory manager wishes to configure an already existing product for production. TYPICAL COURSE Actor Action System Response Step 1: The system retrieves the following attributes from the Product entity for each existing product and aisplays the following details:	USE CASE NAME:	Configure Product Inven	tory Item(s)	USE CASE TYPE	
SOURCE: ByteXpress Requirements List System Design: □ PRIMARY BUSINESS ACTOR • Inventory Manager or Administrator □ PRIMARY SYSTEM ACTOR • None • □ OTHER PARTICIPATING ACTORS: • None □ □ OTHER PARTICIPATING ACTORS: • None □ □ OTHER PARTICIPATING ACTORS: • None □ □ OTHER INTERESTED STAKEHOLDERS: • None □ □ DESCRIPTION: The use case begins when the inventory manager or administrator wishes to specify the components a specific product is composed of and their respective quantities of each inventory item. The system will prompt the administrator or inventory manager to search for and then select the inventory items used for the production of the finished product and specify the quantities required for each inventory item. The use case concludes when the inventory items list has been updated and saved for the specific product. PRE-CONDITION: The product to be configured for producton must exist on the system. The inventory items used to produce the final product must already be defined on the system. TRIGGER: This use case is called when the system administrator or inventory manager wishes to configure an existing product on the system for production System Response Step 1: The system administrator or inventory manager wishes to configure an existing product on the system for production <	USE CASE ID:	4.18		Business Requirements:	
PRIMARY BUSINESS ACTOR • Inventory Manager or Administrator PRIMARY SYSTEM ACTOR • None OTHER PARTICIPATING ACTORS: • None OTHER INTERESTED STAKEHOLDERS: • None DESCRIPTION: The use case begins when the inventory manager or administrator wishes to specify the components a specific product is composed of and their respective quantities of each inventory item. The system will prompt the administrator or inventory manager to search for and then select the inventory items used for the production of the finished product and specify the quantities required for each inventory item. The use case concludes when the inventory items list has been updated and saved for the specific product. PRE-CONDITION: The product to be configured for production must exist on the system. The inventory items used to produce the final product must already be defined on the system. TRIGGER: This use case is called when the system administrator or inventory manager wishes to configure an existing product on the system for production the system for production Step 1: The system administrator or inventory manager wishes to configure an existing product on the system for production Step 2: The system retrieves the following attributes from the Product entity for each existing product and displays the following details:	PRIORITY:	High		System Analysis:	
ACTOR PRIMARY SYSTEM ACTOR • None OTHER PARTICIPATING ACTORS: • None OTHER INTERESTED STAKEHOLDERS: • None DESCRIPTION: The use case begins when the inventory manager or administrator wishes to specify the components a specific product is composed of and their respective quantities of each inventory item. The system will prompt the administrator or inventory manager to search for and then select the inventory items used for the production of the finished product and specify the quantities required for each inventory item. The use case concludes when the inventory items list has been updated and saved for the specific product. PRE-CONDITION: The product to be configured for production must exist on the system. The inventory items used to produce the final product must already be defined on the system. TRIGGER: This use case is called when the system administrator or inventory manager wishes to configure an already existing product for production. TYPICAL COURSE Actor Action System Response Step 1: The system administrator or inventory manager wishes to configure an existing product on the system for production Step 2: The system retrieves the following attributes from the Product entity for each existing product and displays the following details:	SOURCE:	ByteXpress Requiremen	its List	System Design:	
ACTOR • None OTHER PARTICIPATING ACTORS: • None OTHER INTERESTED STAKEHOLDERS: • None DESCRIPTION: The use case begins when the inventory manager or administrator wishes to specify the components a specific product is composed of and their respective quantities of each inventory item. The system will prompt the administrator or inventory manager to search for and then select the inventory items used for the production of the finished product and specify the quantities required for each inventory item. The use case concludes when the inventory items list has been updated and saved for the specific product. PRE-CONDITION: The product to be configured for production must exist on the system. The inventory items used to produce the final product must already be defined on the system. TRIGGER: This use case is called when the system administrator or inventory manager wishes to configure an already existing product for production. TYPICAL COURSE Actor Action System Response Step 1: The system administrator or inventory manager wishes to configure an existing product on the system for production Step 2: The system retrieves the following attributes from the Product entity for each existing product and displays the following details:		 Inventory Manag 	er or Admir	istrator	
PARTICIPATING ACTORS: . None OTHER INTERESTED STAKEHOLDERS: . None DESCRIPTION: The use case begins when the inventory manager or administrator wishes to specify the components a specific product is composed of and their respective quantities of each inventory item. The system will prompt the administrator or inventory manager to search for and then select the inventory items used for the production of the finished product and specify the quantities required for each inventory item. The use case concludes when the inventory items list has been updated and saved for the specific product. PRE-CONDITION: The product to be configured for production must exist on the system. The inventory items used to produce the final product must already be defined on the system. TRIGGER: This use case is called when the system administrator or inventory manager wishes to configure an already existing product for production. TYPICAL COURSE Actor Action System Response Step 1: The system administrator or inventory manager wishes to configure an existing product on the system for production Step 2: The system retrieves the following attributes from the Product entity for each existing product and displays the following details:		None			
STAKEHOLDERS:DESCRIPTION:The use case begins when the inventory manager or administrator wishes to specify the components a specific product is composed of and their respective quantities of each inventory item. The system will prompt the administrator or inventory manager to search for and then select the inventory items used for the production of the finished product and specify the quantities required for each inventory item. The use case concludes when the inventory items list has been updated and saved for the specific product.PRE-CONDITION:The product to be configured for production must exist on the system. The inventory items used to produce the final product must already be defined on the system.TRIGGER:This use case is called when the system administrator or inventory manager wishes to configure an already existing product for production.TYPICAL COURSEActor ActionSystem ResponseStep 1: The system administrator or inventory manager wishes to configure an existing product on the system for production	PARTICIPATING	None			
wishes to specify the components a specific product is composed of and their respective quantities of each inventory item. The system will prompt the administrator or inventory manager to search for and then select the inventory items used for the production of the finished product and specify the quantities required for each inventory item. The use case concludes when the inventory items list has been updated and saved for the specific product.PRE-CONDITION:The product to be configured for production must exist on the system. The inventory items used to produce the final product must already be defined on the system.TRIGGER:This use case is called when the system administrator or inventory manager wishes to configure an already existing product for production.TYPICAL COURSEActor ActionSystem ResponseStep 1: The system administrator or inventory manager wishes to configure an existing product on the system for productionStep 2: The system retrieves the following attributes from the Product entity for each existing product and displays the following details:		None			
TRIGGER:This use case is called when the system administrator or inventory manager wishes to configure an already existing product for production.TYPICAL COURSEActor ActionSystem ResponseStep 1: The system administrator or inventory manager wishes to configure an existing product on the system for product on the system for productionStep 2: The system retrieves the following attributes from the Product entity for each existing product and displays the following details:	DESCRIPTION:	wishes to specify the components a specific product is composed of and their respective quantities of each inventory item. The system will prompt the administrator or inventory manager to search for and then select the inventory items used for the production of the finished product and specify the quantities required for each inventory item. The use case concludes when the inventory items list has been updated and saved for			
manager wishes to configure an already existing product for production.TYPICAL COURSEActor ActionSystem ResponseActor ActionSystem ResponseStep 1: The system administrator or inventory manager wishes to configure an existing product on the system for productionStep 2: The system retrieves the following attributes from the Product entity for each existing product and displays the following details:	PRE-CONDITION:	The inventory items used to produce the final product must already be			
Actor ActionSystem ResponseStep 1: The system administrator or inventory manager wishes to configure an existing product on the system for productionStep 2: The system retrieves the following attributes from the Product entity for each existing product and displays the following details:	TRIGGER:		•	•	
ProductName	TYPICAL COURSE	Step 1: The system administrator or inventory manager wishes to configure an existing product on the system for production activities.Step 2: The system retrieves following attributes from the entity for each existing product displays the following details		ep 2: The system retrieves the lowing attributes from the Product atity for each existing product and splays the following details:	



	QuantityOnHand
Step 3: The system administrator or inventory manager selects the option to configure a specific product.	Step 3: The system retrieves the following details for the selected product:
	From the Product entity:
	ProductNameQuantityOnHand
	Details retrieved from the ProductInventory entity:
	InventoryItemNameInventoryItemQuantity
Step 4: The system administrator or inventory manager enters the search parameter for the inventory item they wish to select.	Step 5: The system invokes Use Case 8.2 'Search Inventory Item'
[ALT]	
Step 6: The administrator or inventory manager selects the option to add the inventory item to the list of inventory items for the specific product.	Step 7: The system adds the selected inventory item to the product's list of inventory items.
[ALT]	
Step 8: The administrator or inventory manager specifies the quantity for each inventory item within the list of selected inventory items.	Step 9: The system saves the updated list of inventory items and their respective quantities to the ProductInventory entity using the following attributes:
[ALT]	
	InventoryId InventoryQuantity
	Step 10: The system displays a confirmation message to indicate the update was successful.

ALTERNATE COURSES:	ALT Step 4: The administrator or inventory manager selects the option to cancel the product configuration operation:
	Return to step 2 ALT Step 6: The administrator or inventory manager selects the option to cancel the product configuration operation:
	Return to step 2 ALT Step 8: The administrator or inventory manager selects the option to
	cancel the product configuration operation:
CONCLUSION:	Return to step 2 This use case concludes when the system displays an alert confirming the product's inventory items has been successfully updated.
POST-CONDITION:	The product's assigned inventory items and respective quantities is saved in the ProductInventory entity.
BUSINESS RULES	 Only the system administrator and inventory manager roles should be allowed to configure a product's required inventory items for production.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The quantity required of each inventory item in the product's list must be at least greater than 0 at all times.
ASSUMPTIONS:	None
OPEN ISSUES:	None

2.5. Order Subsystem

	ORDER SU	JBSYST	EM	
AUTHORS (s): Ofhani M	ungani	DATE:	06/24/2022	
VERSION: 1.1		LAST REVIEW DATE: 07/29/2022		
USE CASE NAME:	Add Item(s) to Cart		USE CASE TYPE	
USE CASE ID:	5.1		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Customer or Res	seller	•	
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	None	None		
DESCRIPTION:	This use case begins when a customer or reseller selects a product to be added to their cart and enters the quantity. They will then verify that the user making the request is logged into their registered account. Once the system has verified that the user is logged in, the requested quantity of the product will be added to the user's cart. The use case concludes with the system displaying an alert that confirms the product has been successfully added to the customer/reseller's cart.			
PRE-CONDITION:	 At least one product must be defined in order to add it to a user's cart. The customer or reseller must have internet access in order to perform this use case. A user should have a registered account to be able to add items to their cart. 			
TRIGGER:	This use case is called when a customer or reseller wishes to add a specific product to their cart.			
TYPICAL COURSE	Actor Action		System Response	
	Actor ActorSystem ResponseStep 1: The user navigates to the Products Screen on the navigation list top navi-barStep 2: The system retrieves the following details for all products from the Product entity:			

Table 33 - 5.1 Add Item(s) to Cart



Product Name Product Pictur Customer Pric The system t Screen with Control Name
Customer Pric The system t Screen with Control Name
The system t Screen with Control Name
Screen with Control Name
Products
Products View Product
Product image
Search bar
Categories
showing "" o "" of "" ntries
Product list



Step 3: The reseller or	Step 4: The system retrieves the			
customer click View Product	following details for the specific pro-			
button.	requested fr	om the	e respe	ctive entities:
			C (
	From the Pr	oauct	entity:	
	Details to be	read		ites in the
	Dra du at Nam	_	table	
	Product Nam			ctName
	Product Pictu			ctPictureUrl
	Customer Pri Reseller Price			merPrice/ erPrice
	From the Pr	oduct	Catego	ory entity:
	Details to be	read		tes in the
	Product Cate	gory	table Produ	ctCategoryNa
	Name		me	
	From the Pr Details to be			es in the
	Product Bran Name	d		tBrandNam
	Control Name	Conti Type		Notes
	Product image	imag		This control used to display Product images
	Count	Nume updo		This control will be used to enter the count of products
	Back	butto	n	This control will be used to navigate back to the Product Screen
	Add to Cart	butto	n	This control will be used to add products into a cart



	Name	Label	This control will be used to display the product's name
	Description	Label	This control will be used to display the product's description
	Brand	Label	This control will be used to display the product's brand
	Category	Label	This control will be used to display the product's category
	Price	Label	This control will be used to display the product's price
	Related Products	Heading	Sub section heading
	Product list	table	This control will be used to display all the products that exist on the system
	[ALT]	1	
Step 5: The user enters the quantity they wish to add and selects the option to add the product to their cart. [ALT]	Step 6: The customer or account. [ALT]		fies that the gged into an
		e added to c	fies that the cart does not le requested
	From the Pr	oduct entity	:
	Details to be Quantity on H	table	utes in the tityonHand



			[ALT]	
			Step 8: The system account details of reseller from the U	
			Details to be read UserId	Attributes in the table UserId
			Step 9: The system and the requested customer or reselle creating the follow UserCart entity us query:	er user's cart by ing details in the
			Details to be read Cart Id User Id Product Name Product Quantity	Attributes in the table CartId UserId Product Name ProductQuantity
			[ALT]	
			notification that inf reseller that their c	em displays an alert forms the customer or cart has been updated splaying the count of art icon.
ALTERNATE COURSES:	ALT Step 2: The user marrole assigned:	aking th	l ne request is logged	l in has a Reseller
	Product entity: Details to be read	Attribute	es in the table	r all products from the
	Product Name Product Picture Url Reseller Price	Product Product Reselle	PictureUrl	
	Continue to Step			



	ALT Step 4: The product is out of stock				
		lisplay product out of ne Add to Cart buttor	stock message under a product		
	Control Name	Control Name	Notes		
	Out of stock	Label	This control is used to display the product out of stock message		
	The use case	concludes.			
	ALT Step 5: The cus to their cart:	stomer or reseller no	longer wishes to add a product		
		ogue interface.	ne option to navigate to the		
		er requesting to add	products to their cart is not		
	 The system prompts the unauthenticated user to log into an existing account or register a new account. Use case concludes. 				
	ALT Step 9: The user requesting to add the product to their cart already has the specific product added to their cart:				
	 The system updates the quantity of the already existing product in the cart by increasing the current value with the quantity requested. 				
	 The system saves the updated quantity of the product in the UserCart entity. Proceed to Step 10. 				
CONCLUSION:	The system displays an alert notification that informs the customer or reseller that their cart has been updated successfully.				
POST-CONDITION:	The customer or reseller's cart is updated successfully as the system either adds new cart details to the UserCart entity or the quantity of the product is incremented by 1 if the user already had the item added to their cart.				
BUSINESS RULES	 Customers and resellers should be allowed to add a product along with the desired quantity to their cart. The prices displayed in Natuurlik's catalogue should display the customer price for all users that are not resellers while reseller prices are displayed to resellers. A product added to a user's cart should be persisted for at least 7 days. 				

IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The cart total should be updated the moment that a customer or reseller adds a new product to their cart. A user's cart items should be persisted in the database for at least 7 days from the time it is added.
ASSUMPTIONS:	 The customer or reseller is unaware of any products currently in their cart when performing this use case.
OPEN ISSUES:	None

Table 34 - 5.2 Update Cart

ORDER SUBSYSTEM				
AUTHORS (s): Nomusa	Vumisa	DATE:	06/21/2022	
VERSION: 1.1	LAST REVIEW DATE: 06/22/2022		REVIEW DATE: 06/22/2022	
USE CASE NAME:	Update Cart		USE CASE TYPE	
USE CASE ID:	5.2		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requirement	ts List	System Design:	
PRIMARY BUSINESS ACTOR	Customer or Rese	eller		
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case begins when a customer or reseller wishes to update the products and their respective quantities in their cart. The customer or reseller will either increment or decrement the current quantity of any product in their cart. The use case concludes when the system displays the updated quantities for each product in the user's cart.			
PRE-CONDITION:	 The customer or i The cart must not 		must be logged in oty	
TRIGGER:	The customer or reseller	wishes	to update their cart.	
TYPICAL COURSE	cart. Step 3: The customer or reseller increments the	Step 2: Extends from Use Cas View Cart. Step 2: Extends from Use Cas View Cart. Step 2: Extends from Use Cas View Cart. Step 4: The system verifies that enough stock on hand to fulfil the using the following attribute in the Product table T		
			QuantityOnHand	



	[ALT]		
	Step 5: The system saves the updated quantity of the product in the Cart entity using the following attribute:		
	Quantity		
	[ALT]		
	Step 6: The system reads the updated product quantity and recalculates the cart total based on the updated quantity of each product in the user's cart.		
	Step 7: The system displays the updated product quantity's and cart total		
ALTERNATE	ALT Step 3: The customer or reseller decrements the quantity of a		
COURSES:	specific product in their cart		
	Proceed to Step 4.		
	ALT Step 4: The customer or reseller's increments to a value more than		
	what is currently in stock		
	 The system displays an error message 		
	Terminate use case		
	ALT Step 5: The customer or reseller's decrements the quantity of a specific product to the value of 0		
	 The system removes the product from the user's cart 		
	Terminate use case		
CONCLUSION:	The system displays the updated product quantity's and cart total.		
POST-CONDITION:	The cart item's quantity is updated in the Cart entity.		
BUSINESS RULES	 Different product prices are displayed for users with the reseller role. 		
IMPLEMENTATION	The cart total should be updated the moment that a customer or		
CONTRAINTS AND	reseller changes the quantity of a product in their cart.		
SPECIFICATIONS	 A user's cart items should be persisted in the database for at least 14 days from the time it is added. 		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		

Table 35 - 5.3 Remove Item(s) from Cart

ORDER SUBSYSTEM			
AUTHORS (s): Thenjiwe Ntsonda		DATE: 06/23/2022	
VERSION: 1.0		REVIEW DATE: 06/23/2022	
USE CASE NAME:	Remove Item(s) from Cart	USE CASE TYPE	
USE CASE ID:	5.3	Business Requirements:	
PRIORITY:	High	System Analysis:	
SOURCE:	ByteXpress Requirements List	System Design:	
PRIMARY BUSINESS	Customer or Reseller		
ACTOR			
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case begins when a customer or reseller wishes to remove an item which is currently displayed in their shopping cart. The customer or reseller will be able to select the option to remove a specific product from their cart. The use case concludes with an alert message that confirms the product/cart item has been removed successfully.		
PRE-CONDITION:	 The customer or reseller should have a registered account to be able to remove a product from their cart. At least one product should already be added to the customer or reseller's cart in order for it to be requested for removal. 		
TRIGGER:	This use case is called when a specific product from their cart	customer or reseller wishes to remove	
TYPICAL COURSE	Actor Action	System Response	
	Step 1 : The customer or reseller wishes to remove a specific cart item within their current cart.	Step 2: Extends Use Case 5.4 View Cart.	
	Step 3: The customer or reseller selects the option to remove a specific product from their cart.	Step 4: The system removes the requested product from the user's cart and saves the updated cart details which are stored in the Cart entity with the following attributes: Id ProductID Count CartItemPrice UserID	
		Step 6: The system reads the new details in the Cart entity and recalculates the cart total and displays the updated CartItemPrice and count on the user interface.Step 7: The system decreases and displays the cart count and confirms	



ALTERNATE COURSES:	that the product has been removed successfully. None		
CONCLUSION:	The system displays an alert which confirms that the product has been removed from the cart successfully.		
POST-CONDITION:	The cart item requested for removal is deleted from the Cart entity.		
BUSINESS RULES	 Customers and resellers should be allowed to remove a product from their cart at any time that it exists within the cart. Different product prices are to be displayed for users with the reseller role only. A product which has been added to a user's cart should be persisted for at least 7 days from creation. 		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None		
ASSUMPTIONS:	• The customer and reseller have a stable internet connection.		
OPEN ISSUES:	None		



Table 36 - 5.4 View Cart

ORDER SUBSYSTEM			
AUTHOR(s): APHIWE SHOZI			
VERSION: 1.1	LAST REVIEW DATE: 29/02/2022		
USE CASE NAME:	View Cart	USE CASE TYPE	
USE CASE ID:	5.4	Business Requirements:	
PRIORITY:	High	System Analysis:	
SOURCE:	ByteXpress Requirements List	System Design:	
PRIMARY BUSINESS ACTOR	Customer or Reseller		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	The use case describes the event in which a customer or reseller wishes to view the contents of their cart. The customer/reseller requests to view their cart, the system in turn responds by reading the cart contents from the appropriate entities and finally displaying the cart contents as well as the corresponding prices and the cart total.		
PRE-CONDITION:	 The customer/reseller must have an account registered on the system The customer/reseller needs to be logged in 		
TRIGGER:	When a customer/reseller wishes content of their cart.		
TYPICAL COURSE	Actor Action	System Response	
	Step 1: The customer/reseller wishes to view the contents of their cart.	Step 2: The systems retrieves the corresponding cart using the Cart_ID in the CART table and retrieve the following information: Products Quantity Cart total The system will retrieve the items in the cart using the Product_ID (foreign key) referencing the PRODUCT table and retrieve the following information: Name Description Image Price The system will then retrieve the VAT percentage from the VAT table and calculate the VAT of the cart	



	[ALT]		
	Step 3: The system will then perform the following calculations: • VAT exclusive cart total: The sum total of all the products in the cart • VAT amount: The sum total of all VAT applicable items ((Product Price *quantity) * Vat Percentage) Sum of the product items in the cart • The overall Cart Total: VAT exclusive Cart Total + VAT • The system will then display this information .		
ALTERNATE COURSES:	Alt Step 2 The customer/reseller's cart is empty. The system will notify the user.		
	Terminate use case.		
CONCLUSION:	The contents of the cart are displayed to the customer/reseller		
POST-CONDITION:	The items within the cart are displayed correctly		
BUSINESS RULES	 15% VAT is charged on applicable items 		
IMPLEMENTATION	None		
CONSTRAINTS AND			
SPECIFICATIONS	News		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		

Table 37- 5.5 Checkout Cart

ORDER SUBSYSTEM			
AUTHORS (s): Kyle van Eeden		DATE: 07/02/2022	
VERSION: 1.1		LAST REVIEW	V DATE: 29/02/2022
USE CASE NAME:	Checkout Cart		USE CASE TYPE
USE CASE ID:	5.5		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requiremer	nts List	System Design:
PRIMARY BUSINESS ACTOR	Customer or Res	seller	
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	• None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case begins when a customer or reseller wishes to check out their current cart. The system displays a form that is populated with the following details retrieved for the user requesting to proceed to checkout: First Name, Surname, Phone Number, Street Address, Country, Province, City and Suburb . The system also displays the cart summary details which includes all products within the cart along with their respective quantities and prices. A cart total value is displayed which is calculated using the prices of all added products and adding the calculated VAT inclusive amount applicable to the cart. The customer or reseller will fill out all the required delivery details and select a courier service to be used. For customers checking out, the use case concludes once the system invokes use case 5.6 'Make Payment'. For resellers checking out, the system will create and save the reseller order details in the Order and OrderLine entities, and the use case concludes once the reseller is informed that their order has been successfully placed.		
PRE-CONDITION:	 The customer or reseller should have a registered account on the system. The customer or reseller must be logged into their account. 		
TRIGGER:	This use case is called when a customer or reseller wishes to check out their current cart captured on the system.		
TYPICAL COURSE	Actor Action	System	n Response



Step 1 : The customer or reseller wishes to check out their current cart.	Step 2: The system retrieves the following user account details from the User entity:
[ALT]	 FirstName Surname PhoneNumber StreetAddress CountryID (FK) ProvinceID (FK) CityID (FK) SuburbID (FK) The below user address details are read from the following entities:
	From the Country entity: CountryName From the Province entity: ProvinceName
	From the City entity: • CityName From the Suburb entity:
	 SuburbName The system also retrieves the following details for the identified user who made the request to check out from the Cart entity: ProductID Count
	The names of all products within the user's cart is retrieved from the Product entity: ProductName

	The following details are retrieved from the Courier entity for all couriers:
	CourierNameCourierFee
	The VAT percentage to be applied to the cart subtotal is retrieved from the VAT entity:
	VatValue
	Step 3: The system calculates the cart subtotal by adding up the prices for all products within the cart multiplied by their respective quantities specified.
	The applicable VAT amount is calculated by multiplying the retrieved VATValue value with the current cart subtotal.
	The cart's grand total is calculated by adding the calculated VAT inclusive amount to the cart's subtotal.
	Step 4: The system displays the details retrieved for the user as well as the calculated cart totals.
	The customer or reseller is prompted to select a delivery method to be used.
Step 5: The customer or reseller selects the delivery method they wish to use for their potential order.	Step 6: The system captures the selected delivery method and adds the price associated with the selected method to the cart's calculated sub-total amount.
	The system will also recalculate the order's total by adding the updated cart sub-total amount to the VAT amount.



		I	
	Step 7 : The customer or reseller enters their desired		
	delivery details and selects a		
	courier service to be used.		
	Step 8: The customer or	Step 9: The system validates that all	
	reseller selects the option to	the captured details for the potential	
	proceed to make a payment	order to be placed is correct according	
	for their potential order.	to the validation requirements in the Order entity.	
	[ALT]		
		[ALT]	
		Step 10: The user requesting to check	
		out their cart is identified by the system as a customer user and the system	
		checks whether there are still sufficient	
		products on hand to fulfil the order by	
		reading the following details from the Product entity for each product added	
		to the customer's cart:	
		QuantityOnHand	
		The system then invokes Use Case 5.6 "Make Payment" to allow the customer	
		to make the required payment.	
		[ALT]	
ALTERNATE COURSES:	Alt Step 1: The customer or reseller no longer wishes to check out their current cart and selects the option provided to cancel the operation.		
	The use case concludes		
	-	seller no longer wishes to perform a	
	checkout on their current cart and selects the option provided to cancel the operation.		
	The use case concludes		
		details is incomplete and the system	
	displays the required validation details:		
	Return to Step 7		
	Alt Step 10 a: There are no long the quantity of each product add	ger sufficient products available based on led to the customer's cart:	
	 The system displays a message to inform the customer that the order cannot be placed due to insufficient quantities of products 		
	being available.		
	The use case concludes		



CONCLUSION:	 Alt Step 10 b: The user requesting to check out their cart is registered as a Reseller: The system will create the reseller's captured order details in the Order and OrderLine entities. The order to be created will have an order status of 'Pending' and a payment status of "Payment Outstanding". The use case concludes. 	
POST-CONDITION:	The user's cart details are retrieved from the Cart entity and the cart summary totals are calculated and displayed on the user interface.	
BUSINESS RULES	 Customers and resellers should be allowed to specify a different address to be used for delivery from what is currently stored according to the logged in user's profile details. VAT is to be applied and calculated for each user's cart based on the current VAT rate stored on the system. Customers are required to make a payment before the order can be placed on the system. Resellers are not required to make a payment in order to place an order on the system. 	
IMPLEMENTATION CONSTRAINTS AND SPECIFICATIONS	 The customer or reseller has no internet access and cannot check out their current cart as a result. The system is offline and the customer or reseller is not able to check out their current cart. Customers should be restricted from checking out their cart if the quantities of all products are not available as per what is stored on the system. 	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	





Table 38 - 5.6 Make Payment

ORDER SUBSYSTEM			
AUTHORS (s): Thenjiwe			
VERSION: 1.0		REVIEW DATE: 24/07/2022	
USE CASE NAME:	Make Payment	USE CASE TYPE	
USE CASE ID:	5.6	Business Requirements:	
PRIORITY:	High	System Analysis:	
SOURCE:	ByteXpress Requirements List	System Design:	
PRIMARY BUSINESS ACTOR	Customer		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case begins when the customer wishes to proceed with the payment of an order which includes products that have been added to the user's cart. The system will redirect the user to the Stripe payment gateway, in which the payment will be processed. Once the payment is successful, the order details will be created, the user cart will be cleared, and an order confirmation email will be sent to the customer.		
PRE-CONDITION:	 The customer must be lo The Checkout Cart screet 	gged in. en has already been loaded.	
TRIGGER:	This use case is called when the customer wishes to proceed with the payment of an order which includes products that have been added to the user's cart.		
TYPICAL COURSE	Actor Action	System Response	
	Step 1 : The customer selects the option to proceed with the payment of the items added to their cart.	Step 2: The system redirects the customer to the Stripe payment gateway in which the payment will be made.	
		Step 3: The system receives a successful payment message from Stripe and saves the following attributes to the Order table:• OrderId• FirstName• Surname• PhoneNumber• StreetAddress• OrderDate• OrderTotal• ParcelTrackingNumber• Disptatched Date	


	And to the OrderLine table with the following attributes: • OrderLineld • OrderId • OrderId • ProductId • Price • Count Step 4: The system clears the user's cart details which are stored in the UserCart table with the following attributes: • CartId • ProductId • ProductId • CartId • ProductId • Count • CartId • ProductId • Step 5: The system retrieves the OrderId from the Order table and displays a success message to the customer Step 6: The system retrieves the customer's email and generates an order confirmation email Step 7: The system sends the		
ALTERNATE	 generated email to the customer. None 		
COURSES:			
CONCLUSION:	The system displays an alert which confirms that the order has been placed successfully.		
POST-CONDITION:	The order details are saved to the Order table and the OrderLine table. A confirmation order email is sent to the customer.		
BUSINESS RULES	 Only customers have access to this usecase The order details are only saved after payment has been received successfully. 		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None		
ASSUMPTIONS:	The customer has a stable internet connection.		
OPEN ISSUES:	None		



Table 39 - 5.7 View Orders Overview

	ORDER SUBSYSTEM				
AUTHORS (s): Nomusa	Vumisa DATE	E: 11/07/2022			
VERSION: 1.0	LAST	REVIEW DATE: 11/07/2022			
USE CASE NAME:	View Orders Overview	USE CASE TYPE			
USE CASE ID:	5.7	Business Requirements:			
PRIORITY:	High	System Analysis: 🛛 🖾			
SOURCE:	ByteXpress Requirements List	System Design:			
PRIMARY BUSINESS ACTOR	Administrator/Sales Assistant				
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	None				
OTHER INTERESTED STAKEHOLDERS:	None				
DESCRIPTION:	assistant wants to view an orde when the administrator request responds by retrieving the deta details are displayed on the scr				
PRE-CONDITION:	The administrator or sales assi	stant must be logged on the system			
TRIGGER:	The use case is called when th view an order	e administrator or sales assistant wants to			
TYPICAL COURSE	Actor Action	System Response			
	Step 1 : The administrator or sales assistant wants to view an order on the system	Step 2: The system invokes Use Case 5.8 Search Orders			
	Step 3: The administrator or sales assistant selects the order they wish to view	Step 4: The system displays the selected order details using the following attributes:			
		From the User table.			
		 FirstName Surname PhoneNumber StreetAddress OrderDate OrderStatus OrderTotal 			



	 ParcelTrackingNumber DispatchedDate From the Suburb Table SuburbName PostalCode From the City Table CityName From the Province Table ProvinceName From the Country Table CountryName From the Courier Table CourierName From the Product table Name From the OrderLine table OrderItemPrice OrderItemCount 		
ALTERNATE COURSES:	None		
CONCLUSION:	This use case concludes when the selected order's details are displayed		
POST-CONDITION:	The User, Order, Suburb, City, Province, Country, Courier, Product and Order line Tables were read		
BUSINESS RULES	None		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	The administrator or sales assistant cannot view an order without an internet connection		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		

Table 40 - 5.8 Search Order



	ORDER SUBSYS	ГЕМ
AUTHORS (s): Nomusa	Vumisa DATE	: 07/11/2022
VERSION: 1.0	LAST	REVIEW DATE: 07/11/2022
USE CASE INVENTORYITEMNAM E:	Search Order	USE CASE TYPE
USE CASE ID:	5.8	Business Requirements:
PRIORITY:	Medium	System Analysis:
SOURCE:	ByteXpress Requirements List	System Design:
PRIMARY BUSINESS ACTOR	Administrator/Sales Ass	istant
PRIMARY SYSTEM ACTOR	None	
OTHER PARTICIPATING ACTORS:	None	
OTHER INTERESTED STAKEHOLDERS:	None	
DESCRIPTION:		ocess where the administrator or sales on the system. The system responds by the search query.
PRE-CONDITION:	 The administrator or sal system. 	es assistant must be logged onto the
TRIGGER:	This use case is called when th search for an order on the syste	e administrator or sales assistant wants to em.
TYPICAL COURSE	Actor Action	System Response
OF EVENTS:	Step 1 : The administrator or sales assistant want to search for an order	
	Step 2 : The administrator or sales assistant enter the search parameter	Step 3: The system searches for a match using the following attributes:
	sales assistant enter the	match using the following attributes: From the User table.
	sales assistant enter the	match using the following attributes:
	sales assistant enter the	match using the following attributes: From the User table. • EmailAddress From the Order table • OrderId • FirstName • Surname • PhoneNumber • OrderDate
	sales assistant enter the	 match using the following attributes: From the User table. EmailAddress From the Order table OrderId FirstName Surname PhoneNumber
	sales assistant enter the	 match using the following attributes: From the User table. EmailAddress From the Order table OrderId FirstName Surname PhoneNumber OrderDate OrderStatus



	Return to Step 2 or terminate the use case
CONCLUSION:	This use case concludes when the desired order details are displayed on the system.
POST-CONDITION:	The Order and User entity was searched for and an entry that corresponds to the search query or parameter entered.
BUSINESS RULES	None
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None
ASSUMPTIONS:	None
OPEN ISSUES:	None



INVENTORY MANAGEMENT SUBSYSTEM AUTHORS (s): Ofhani Mungani DATE: 06/06/2022 LAST REVIEW DATE: 20/07/2022 VERSION: 1.0 **USE CASE** Query Order **USE CASE TYPE INVENTORYITEMNAM** E: | **USE CASE ID:** 5.9 Business Requirements: **PRIORITY:** High System Analysis: \mathbf{X} SOURCE: **ByteXpress Requirements List** System Design: **PRIMARY BUSINESS** Customer ACTOR Reseller ٠ **PRIMARY SYSTEM** None ACTOR **OTHER** None • PARTICIPATING ACTORS: **OTHER INTERESTED** None • **STAKEHOLDERS: DESCRIPTION:** This use case describes the process in which the customer/reseller wishes to query their order. The use case begins when the customer/reseller request to submit an order query, the system then retrieve the query reasons from the **Query Reason** entity. The use case concludes when the customer/reseller submits a query for an order and the system saves it to the business database. PRE-CONDITION: The customer/reseller must be logged onto the system. • TRIGGER: The use case is triggered when the customer/reseller wants to query an order on the system. TYPICAL COURSE Actor Action System Response **OF EVENTS:** Step 1: The customer/reseller Step 2: The system invokes use case wants to query their placed 5.16 View Placed Order order. Step 3: The customer/reseller Step 4: The system displays the selects the order they wish to appropriate query reason details: query. From the QueryReason entity: Name Step 5: The customer/reseller Step 6: The system captures and inputs the required details. validates the information provided by ALT] ensuring the format is adhered to and no required text fields are left empty. [ALT] Step 7: The system saves the query reason associated with the order and customer/reseller on the database with the following attributes

Table 41 -5.9 Query Order



ALTERNATE COURSES:	From the OrderQuery entity • Description From the Query Reason entity: • Name From the Order entity: • Id Step 8: The system displays a success message on the screen to confirm the submission of the order query. ALT Step 5: The customer/reseller doesn't want to query their order: • Return to step 2 • Terminate use case ALT Step 6: The system fails to validate the information provided because of missing fields or incorrectly entered information. • Return to Step 5.		
CONCLUSION:	This use case concludes when an order query is submitted.		
POST-CONDITION:	The customer/reseller's order query is added to the database.		
BUSINESS RULES	 Only the customer/reseller can query an order. 		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



Table 42 - 5.10 Review Order

	INVENTORY MANAGEMENT SUBSYSTEM			
AUTHORS (s): Ofhani M	ungani D <i>i</i>	DATE: 06/06/2022		
VERSION: 1.0	L	ST REVIE	V DATE: 20/07/2022	
USE CASE	Review Order		USE CASE TYPE	
INVENTORYITEMNAM E:				
USE CASE ID:	5.10		Business Requirements:	
PRIORITY:	High		System Analysis:	\boxtimes
SOURCE:	ByteXpress Requirements I	ist	System Design:	
PRIMARY BUSINESS	Customer			
ACTOR	Reseller			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING	None			
ACTORS:				
OTHER INTERESTED	None			
STAKEHOLDERS:				
DESCRIPTION:			which the customer/reseller	
	wishes to review their order		order review, the system the	n
	retrieve the reviews from th			
			e use case concludes when	the
	customer/reseller submits a	review for a	an order and the system save	es it
	to the business database.			
PRE-CONDITION:			ogged onto the system.	
TRIGGER:	The use case is triggered when the customer/reseller wants to review an			won
	order on the system.			wan
TYPICAL COURSE	order on the system. Actor Action	Syste		
TYPICAL COURSE OF EVENTS:	Actor Action Step 1: The customer/resel	er	m Response Step 2: The system invoke	s use
	Actor Action Step 1: The customer/resel wants to review their placed	er	m Response	s use
	Actor Action Step 1: The customer/resel	er	m Response Step 2: The system invoke	s use
	Actor Action Step 1: The customer/resel wants to review their placed	er	m Response Step 2: The system invoke	s use
	Actor Action Step 1: The customer/resel wants to review their placed order.	er	m Response Step 2: The system invoke case 5.16 View Placed Or	s use
	Actor Action Step 1: The customer/resel wants to review their placed order. Step 3: The customer/resel	er Step	m Response Step 2: The system invoke case 5.16 View Placed Or 4: The system displays the	s use
	Actor Action Step 1: The customer/resel wants to review their placed order. Step 3: The customer/resel selects the order they wish	er Step	m Response Step 2: The system invoke case 5.16 View Placed Or	s use
	Actor Action Step 1: The customer/resel wants to review their placed order. Step 3: The customer/resel	er Step to appro	m Response Step 2: The system invoke case 5.16 View Placed Or 4: The system displays the priate review reason details:	s use
	Actor Action Step 1: The customer/resel wants to review their placed order. Step 3: The customer/resel selects the order they wish	er Step to appro	m Response Step 2: The system invoke case 5.16 View Placed Or 4: The system displays the	s use
	Actor Action Step 1: The customer/resel wants to review their placed order. Step 3: The customer/resel selects the order they wish review. Step 5: The customer/resel	er Step appro From er Step	m Response Step 2: The system invoke case 5.16 View Placed Or 4: The system displays the priate review reason details: the Review Reason entity: Name 5: The system captures and	s use der
	Actor Action Step 1: The customer/resel wants to review their placed order. Step 3: The customer/resel selects the order they wish review. Step 5: The customer/resel inputs the required details	er Step appro From • • •	 m Response Step 2: The system invoke case 5.16 View Placed Or 4: The system displays the priate review reason details: the Review Reason entity: Name 5: The system captures and tes the information provided 	s use der
	Actor Action Step 1: The customer/resel wants to review their placed order. Step 3: The customer/resel selects the order they wish review. Step 5: The customer/resel	er Step appro From er Step valida ensuri	 m Response Step 2: The system invoke case 5.16 View Placed Or 4: The system displays the oriate review reason details: the Review Reason entity: Name 5: The system captures and tes the information provided ng the format is adhered to a 	s use der by
	Actor Action Step 1: The customer/resel wants to review their placed order. Step 3: The customer/resel selects the order they wish review. Step 5: The customer/resel inputs the required details	er ber to From er Step valida ensur no rec	 m Response Step 2: The system invoke case 5.16 View Placed Or 4: The system displays the priate review reason details: the Review Reason entity: Name 5: The system captures and tes the information provided 	s use der by
	Actor Action Step 1: The customer/resel wants to review their placed order. Step 3: The customer/resel selects the order they wish review. Step 5: The customer/resel inputs the required details	er Step appro From er Step valida ensuri	 m Response Step 2: The system invoke case 5.16 View Placed Or 4: The system displays the oriate review reason details: the Review Reason entity: Name 5: The system captures and tes the information provided ng the format is adhered to a 	s use der by
	Actor Action Step 1: The customer/resel wants to review their placed order. Step 3: The customer/resel selects the order they wish review. Step 5: The customer/resel inputs the required details	er Step 4 to Step 4 to From er Step 6 valida ensuri no rec [ALT]	m Response Step 2: The system invoke case 5.16 View Placed Or 4: The system displays the oriate review reason details: the Review Reason entity: Name 5: The system captures and tes the information provided ng the format is adhered to a quired text fields are left emp 7: The system saves the queet	s use der by and ty.
	Actor Action Step 1: The customer/resel wants to review their placed order. Step 3: The customer/resel selects the order they wish review. Step 5: The customer/resel inputs the required details	er ber to Er Er Er Er Step valida ensur no rec [ALT] Step reaso	m Response Step 2: The system invoke case 5.16 View Placed Or 4: The system displays the priate review reason details: the Review Reason entity: Name 5: The system captures and tes the information provided ng the format is adhered to a puired text fields are left emp 7: The system saves the que n associated with the order a	s use der by and ty.
	Actor Action Step 1: The customer/resel wants to review their placed order. Step 3: The customer/resel selects the order they wish review. Step 5: The customer/resel inputs the required details	er er so From From • er Step (valida ensur no rec [ALT] Step (reason custor	m Response Step 2: The system invoke case 5.16 View Placed Or 4: The system displays the oriate review reason details: the Review Reason entity: Name 5: The system captures and tes the information provided ng the format is adhered to a quired text fields are left emp 7: The system saves the queet	s use der by and ty.



ALTERNATE COURSES:	From the ReviewOrder entity • Description From the Review Reason entity: • Name From the Order entity: • Id • Product Step 8: The system displays a success message on the screen to confirm the submission of the order review. ALT Step 5: The customer/reseller doesn't want to review their order: • Return to step 2 • Terminate use case
	 ALT Step 6: The system fails to validate the information provided because of missing fields or incorrectly entered information. Return to Step 5.
CONCLUSION:	 This use case concludes when an order review is submitted.
POST-CONDITION:	The customer/reseller's order review is added to the database.
BUSINESS RULES	Only the customer/reseller can review an order.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None
ASSUMPTIONS:	None
OPEN ISSUES:	None



	COURIER SUBSYSTEM			
AUTHORS (s): Thenjiwe		: 12/05/2022		
VERSION: 1.0		REVIEW DATE: 12/05/2022		
USE CASE NAME:	Create Courier	USE CASE TYPE		
USE CASE ID:	5.11	Business Requirements:		
PRIORITY:	Medium	System Analysis:		
SOURCE:	ByteXpress Requirements List	System Design:		
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which the administrator wishes to add a new courier to the system. The use case begins when the administrator adds the new courier on the system. The administrator will add all of the pertinent information regarding the courier and save it to the business database.			
PRE-CONDITION:	The administrator must b	be logged onto the system.		
	The use case is triggered when the administrator wants to add a new			
TRIGGER:		the administrator wants to add a new		
TRIGGER:	The use case is triggered when courier to the system.			
	courier to the system.	the administrator wants to add a new System Response Step 2: The system requires the admin to add information about the courier in the Courier entity such as: • CourierName • CourierFee • EstimatedDeliveryTime		
TYPICAL COURSE	courier to the system. Actor Action Step 1: The administrator wants to add a new courier to	System Response Step 2: The system requires the admin to add information about the courier in the Courier entity such as: Courier Pame CourierFee EstimatedDeliveryTime Step 4: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT]		
TYPICAL COURSE	courier to the system. Actor Action Step 1: The administrator wants to add a new courier to the system. Step 3: The administrator	System Response Step 2: The system requires the admin to add information about the courier in the Courier entity such as: CourierName CourierFee EstimatedDeliveryTime Step 4: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT] Step 5: The system reads from the Courier entity to ensure that the record being added does not match any existing records. [ALT]		
TYPICAL COURSE	courier to the system. Actor Action Step 1: The administrator wants to add a new courier to the system. Step 3: The administrator	System Response Step 2: The system requires the admin to add information about the courier in the Courier entity such as: Courier Name CourierFee EstimatedDeliveryTime Step 4: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT] Step 5: The system reads from the Courier entity to ensure that the record being added does not match any		

Table 43 - 5.11 Create Courier



•



	Step 7: The system displays a successful creation message. ALT Step 4: The system fails to validate the information provided because of missing fields or incorrectly entered information. • Return to Step 3.
	 ALT Step 5: The courier being added matches an existing record on the system The system restricts the addition of the courier to prevent duplicate values and displays a modal dialog. The use case is terminated.
CONCLUSION:	This use case concludes when a new courier is added.
POST-CONDITION:	 The courier details are added to the database.
BUSINESS RULES	 Only the administrator can add a new courier.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None
ASSUMPTIONS:	None
OPEN ISSUES:	None

Table 44 - 5.12 Search courier

COURIER SUBSYSTEM					
AUTHORS (s): Thenjiwe Ntsonda DATE: 12/05/2022					
VERSION: 1.0		T REVIEW DATE: 12/05/2022			
USE CASE NAME:	Search Courier	USE CASE TYPE			
USE CASE ID:	5.12	Business Requirements:			
PRIORITY:	Medium	System Analysis:			
SOURCE:	ByteXpress Requirements Lis				
PRIMARY BUSINESS ACTOR	Administrator				
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	None				
OTHER INTERESTED STAKEHOLDERS:	None				
DESCRIPTION:	This use case describes the process in which the administrator searches for couriers on the system. The system responds by displaying the information relating to the search query.				
PRE-CONDITION:		st be logged onto the system.			
TRIGGER:	This use case is called when courier on the system.	the administrator wants to search for a			
TYPICAL COURSE	Actor Action	System Response			
OF EVENTS:	Step 1: The administrator				
	wants to search for a courier.				
	Step 2 : The administrator	Step 3: The system searches and			
	inputs the search parameter.	retrieves the following attributes in the Courier entity for a match:			
		CourierName			
		CourierFee			
		EstimatedDeliveryTime			
		Step 4: The system displays the search results information. [ALT]			
ALTERNATE		ery entered does not match any existing			
COURSES:	instances of couriers in the sy	vstem database.			
	Return to Step 3				
CONCLUSION:		n the information is displayed on the			
POST-CONDITION:	system.	hed for and an entry that corresponds to the			
	search query or parameter er				
BUSINESS RULES	None				
IMPLEMENTATION	None				
CONTRAINTS AND					
SPECIFICATIONS					
ASSUMPTIONS:	None				
OPEN ISSUES:	None				



Table 45 - 5.13 Update Courier

COURIER SUBSYSTEM					
AUTHORS (s): Thenjiwe		DATE: 12/05/			
VERSION: 1.0		LAST REVIE	N DATE: 12/05/2022		
USE CASE NAME:	Update Courier		USE CASE TYPE		
USE CASE ID:	5.13		Business Requirements:		
PRIORITY:	High			\boxtimes	
SOURCE:	ByteXpress Requiremen	ts List	System Design:		
PRIMARY BUSINESS ACTOR	Administrator				
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	None				
OTHER INTERESTED STAKEHOLDERS:	None				
DESCRIPTION:	This use case describes the process in which the administrator wishes to update a courier on the system. The use case begins when the administrator updates all of the pertinent information regarding the courier and save it to the system.				
PRE-CONDITION:	The administrator	r must be logge	ed onto the system.		
TRIGGER:	The use is triggered whe	n the administ	rator wishes to update the cou	urier.	
TYPICAL COURSE	Actor Action	Syste	m Response		
OF EVENTS:	Step 1 : The administrate wants to update a courie existing on the system.		2: The system invokes Use C Search Courier"	ase	
	Step 3: The administrate selects the desired Court	ier. to upo	Step 4: The system requires the admin to update more information about the courier in the Courier entity such as: CourierName CourierFee EstimatedDeliveryTime		
	Step 5: The administrato inputs the details require	d. valida ensur no rec [ALT]		nd y.	
		Couri being existir	7: The system reads from the er entity to ensure that the re added does not match any ng records. [ALT]	ecord	
		its info	B: The system updates and sa prmation to the Courier entity ne following attributes CourierName CourierFee		
		•	EstimatedDeliveryTime		

ALTERNATE COURSES:	Step 9: The system displays a successfully updated message. ALT Step 6: The system fails to validate the information provided because of missing fields or incorrectly entered information. • Return to Step 4.		
	 ALT Step 7: The courier being updated matches an existing record on the system The system restricts the update of the courier to prevent duplicate values and displays a modal dialog. The use case is terminated. 		
CONCLUSION:	This use case concludes when a courier is updated.		
POST-CONDITION:	 The courier details are updated to the database. 		
BUSINESS RULES	 Only the administrator can update a courier. 		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		

Table 46 - 5.14 Delete Courier

USE CASE NAME: Delete Courier USE CASE ID: 5.14 PRIORITY: Medium SOURCE: ByteXpress Requirements List PRIMARY BUSINESS ACTOR • Administrator PRIMARY SYSTEM ACTOR • None OTHER PARTICIPATING ACTORS: • None OTHER INTERESTED STAKEHOLDERS: • None DESCRIPTION: This use case narrative describes the pr wishes to delete a courier from the syste for the required courier selected for dele confirm the deletion of the courier and th system notifies the administrator of a suc PRE-CONDITION: • The administrator must be logged TRIGGER: This use case is called when the administ TYPICAL COURSE OF EVENTS: OF EVENTS: Step 1: The administrator wishes to delete a courier. Step 2 5.12 "S Step 3: The administrator selects the desired Courier. Step 4 selecte Courier • • • • Step 5: The administrator confirms the deletion of the courier from the system. [ALT] Step 6 details and the	COURIER SUBSYSTEM				
VERSION: 1.0 LAST REVIEW USE CASE NAME: Delete Courier USE CASE ID: 5.14 PRIORITY: Medium SOURCE: ByteXpress Requirements List PRIMARY BUSINESS • Administrator ACTOR • None PRIMARY SYSTEM • None ACTOR • None OTHER • None OTHER INTERESTED • None STAKEHOLDERS: • None DESCRIPTION: This use case narrative describes the pr wishes to delete a courier from the system for the required courier selected for dele confirm the deletion of the courier and the system notifies the administrator of a surfigeer: This use case is called when the administrator of a surfigeer: TYPICAL COURSE OF EVENTS: OF EVENTS: Step 1: The administrator selects Step 3: The administrator selects wishes to delete a courier. Step 3: The administrator selected Gordie Step 5: The administrator selected Courier Getails OF EVENTS:	2022				
USE CASE NAME: Delete Courier USE CASE ID: 5.14 PRIORITY: Medium SOURCE: ByteXpress Requirements List PRIMARY BUSINESS ACTOR • Administrator PRIMARY SYSTEM ACTOR • None OTHER PARTICIPATING ACTORS: • None OTHER INTERESTED STAKEHOLDERS: • None DESCRIPTION: This use case narrative describes the pr wishes to delete a courier from the syste for the required courier selected for dele confirm the deletion of the courier and th system notifies the administrator of a suc PRE-CONDITION: • The administrator must be logged TRIGGER: This use case is called when the administ TYPICAL COURSE OF EVENTS: OF EVENTS: Step 1: The administrator wishes to delete a courier. Step 2 5.12 "C Step 3: The administrator selects the desired Courier. Step 5: The administrator confirms the deletion of the courier from the system. [ALT] The sy to confire	W DATE: 12/05/2022				
PRIORITY: Medium SOURCE: ByteXpress Requirements List PRIMARY BUSINESS ACTOR Administrator PRIMARY SYSTEM ACTOR None ACTOR None OTHER PARTICIPATING ACTORS: None OTHER INTERESTED STAKEHOLDERS: None DESCRIPTION: This use case narrative describes the pr wishes to delete a courier from the syster for the required courier selected for dele confirm the deletion of the courier and th system notifies the administrator of a sur- system notifies the administrator of a sur- system notifies the administrator of a sur- system Step 1: The administrator Systep 2: Step 1: The administrator wishes to delete a courier. OF EVENTS: Step 3: The administrator selects the desired Courier. Step 4 selecte Courier attribut Step 5: The administrator confirms the deletion of the courier from the system. [ALT] Step 6 details and the	USE CASE TYPE				
SOURCE: ByteXpress Requirements List PRIMARY BUSINESS ACTOR • Administrator PRIMARY SYSTEM ACTOR • None ACTOR • None OTHER PARTICIPATING ACTORS: • None OTHER INTERESTED STAKEHOLDERS: • None DESCRIPTION: This use case narrative describes the pr wishes to delete a courier from the syster for the required courier selected for dele confirm the deletion of the courier and th system notifies the administrator of a sur- system notifies the administrator of a sur- system Step 1: The administrator must be logged THIGGER: This use case is called when the admini- tryPICAL COURSE OF EVENTS: OF EVENTS: Step 1: The administrator selects the desired Courier. Step 2 5.12 "S step 3: The administrator selects the desired Courier. Step 5: The administrator confirms the deletion of the courier from the system. [ALT] The sy to confi- details and the	Business Requirements:				
PRIMARY BUSINESS ACTOR Administrator Administrator PRIMARY SYSTEM ACTOR None None OTHER PARTICIPATING ACTORS: None None OTHER INTERESTED STAKEHOLDERS: None DESCRIPTION: This use case narrative describes the pr wishes to delete a courier from the system for the required courier selected for dele confirm the deletion of the courier and th system notifies the administrator of a sure system notifies the administrator of a sure of EVENTS: PRE-CONDITION: The administrator must be logged This use case is called when the administrator wishes to delete a courier. Step 1: The administrator selects the desired Courier. Step 2: The administrator selects the desired Courier. Image: Step 5: The administrator confirms the deletion of the courier from the system. [ALT] 	System Analysis:				
PRIMARY BUSINESS ACTOR Administrator Administrator PRIMARY SYSTEM ACTOR None None OTHER PARTICIPATING ACTORS: None None OTHER INTERESTED STAKEHOLDERS: None This use case narrative describes the pr wishes to delete a courier from the system for the required courier selected for dele confirm the deletion of the courier and the system notifies the administrator of a sure system notifies the administrator of a sure of EVENTS: The administrator must be logged TRIGGER: This use case is called when the administ selects the desired Courier. OF EVENTS: Step 1: The administrator wishes to delete a courier. Step 2 5.12 "S Step 3: The administrator selects the desired Courier. Step 4 selecte Courie attribut It is use case is called when the administrator selects the desired Courier. The sy to confirm selecte	System Design:				
PRIMARY SYSTEM ACTOR • None OTHER PARTICIPATING ACTORS: • None OTHER INTERESTED STAKEHOLDERS: • None DESCRIPTION: This use case narrative describes the pr wishes to delete a courier from the syste for the required courier selected for dele confirm the deletion of the courier and th system notifies the administrator of a sur system notifies the administrator must be logged TRIGGER: This use case is called when the administ Actor Action System Step 1: The administrator selects the desired Courier. Step 3: The administrator selects the desired Courier. Step 4 selects The sy to confirms the deletion of the courier from the system. [ALT] The sy to confire selected selects					
ACTOR OTHER PARTICIPATING • None ACTORS: • None OTHER INTERESTED • None STAKEHOLDERS: DESCRIPTION: DESCRIPTION: This use case narrative describes the prwishes to delete a courier selected for deleconfirm the deletion of the courier and the system notifies the administrator of a surface system notifies the administrator of a surface system notifies the administrator must be logged. PRE-CONDITION: • The administrator must be logged. TRIGGER: This use case is called when the administrator must be logged. TYPICAL COURSE Actor Action System 2 OF EVENTS: Step 1: The administrator selected for delete a courier. Step 2 Step 3: The administrator selected when the administrator selects the desired Courier. Step 4 Step 3: The administrator selected for delete a courier. Step 4 Step 5: The administrator confirms the deletion of the courier from the system. [ALT] The sy to confirm selected for delete and the administrator selected for delete activity to confirm selected for delete activity to confirem selected for delet					
PARTICIPATING ACTORS: • None OTHER INTERESTED STAKEHOLDERS: • None DESCRIPTION: This use case narrative describes the pr wishes to delete a courier from the syster for the required courier selected for dele confirm the deletion of the courier and the system notifies the administrator of a sur- system notifies the administrator of a sur- pre-CONDITION: TRIGGER: This use case is called when the administrator of EVENTS: Actor Action System Step 1: The administrator wishes to delete a courier. Step 3: The administrator selects the desired Courier. Step 4 selecte Courier attribut The sy to confirms the deletion of the courier from the system. [ALT] Step 6 details and the					
STAKEHOLDERS:DESCRIPTION:This use case narrative describes the pr wishes to delete a courier from the syste for the required courier selected for dele confirm the deletion of the courier and th system notifies the administrator of a sur- system notifies the administrator must be logged TRIGGER: The administrator must be logged Actor ActionTYPICAL COURSE OF EVENTS:Actor ActionSystem System Step 1: The administrator wishes to delete a courier.Step 3: The administrator selects the desired Courier.Step 4 selected Courier attributThe sy to confirms the deletion of the courier from the system.The sy to confirm selected Step 6 details and the					
wishes to delete a courier from the system for the required courier selected for dele confirm the deletion of the courier and th system notifies the administrator of a sur- system notifies the administrator must be logger.PRE-CONDITION: TRIGGER: The administrator must be logger.• The administrator must be logger.TRIGGER: TYPICAL COURSE OF EVENTS:Actor Action Step 1: The administrator wishes to delete a courier.System 2 Step 2 Step 3: The administrator selects the desired Courier.Step 3: Step 3: The administrator selects the desired Courier.Step 4 selecter Courier attribut selecterStep 5: Confirms the deletion of the courier from the system. [ALT]Step 6 details and the					
TRIGGER: This use case is called when the administrator TYPICAL COURSE Actor Action System OF EVENTS: Step 1: The administrator Step 2 Step 3: The administrator Step 4 selects the desired Courier. Step 4 Step 5: The administrator Step 6 Of example. Step 5: The administrator Step 6 Of example. Step 5: The administrator Step 6	This use case narrative describes the process in which the administrator wishes to delete a courier from the system. The administrator will search for the required courier selected for deletion. The administrator will then confirm the deletion of the courier and the use case concludes when the system notifies the administrator of a successful deletion.				
Actor Action System OF EVENTS: Step 1: The administrator Step 2 Step 3: The administrator Step 4 selects the desired Courier. Step 4 • •	d onto the system.				
OF EVENTS: Step 1: The administrator wishes to delete a courier. Step 2 Step 3: The administrator selects the desired Courier. Step 4 Step 5: The administrator confirms the deletion of the courier from the system. [ALT] Step 6	istrator wishes to delete a courier.				
wishes to delete a courier. 5.12 "S Step 3: The administrator selects the desired Courier. Step 4 selecter Courie attribut • • •	m Response				
Step 3: The administrator selects the desired Courier. Step 4 selecter Courier attribut • •	2: The system invokes Use Case				
selects the desired Courier. selecter Courier attribut attribut • • •	Search Courier"				
Step 5: The administrator Step 6 confirms the deletion of the details courier from the system. [ALT] and the	I: The system retrieves the ed courier's details from the er entity with the following tes CourierName CourierFee EstimatedDeliveryTime				
confirms the deletion of the courier from the system. [ALT] and the					
	5: The system removes all of the related of the selected Courier e following attributes:				
• [ALT] Step 7	ID CourierName CourierFee EstimatedDeliveryTime 7: The system informs the istrator of the successful deletion				



ALTERNATE COURSES:	 [ALT] Step 5: The administrator does not confirm the deletion of the courier. Terminate this use case. [ALT] Step 6: An existing record of an active order has the courier assigned to it. The system restricts the deletion of the courier to prevent null values. Go to ALT step 6. 			
	[ALT] Step 7: The system informs the administrator of the unsuccessful deletion of the courier.			
CONCLUSION:	This use case concludes when the administrator is notified of the successful deletion of the courier.			
POST-CONDITION:	 The system deletes all of the details related to the selected courier from the Courier entity. The system removes all of the details related to the selected courier. 			
BUSINESS RULES	Only the administrator can delete a courier.			
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None			
ASSUMPTIONS:	None			
OPEN ISSUES:	None			

Table 47 - 5.15 Search Placed Order

ORDER SUBSYSTEM				
AUTHORS (s): Nomusa Vumisa DATE:		ΓΕ: 11/07/2022		
VERSION: 1.0		ST REVIEW DATE: 11/07/2022		
USE CASE NAME:	Search Placed Order	USE CASE TYPE		
USE CASE ID:	5.15	Business Requirements:		
PRIORITY:	Medium	System Analysis:		
SOURCE:	ByteXpress Requirements List	st System Design:		
PRIMARY BUSINESS	Customer/Reseller			
	Nega			
PRIMARY SYSTEM ACTOR	None			
OTHER	None			
PARTICIPATING ACTORS:				
OTHER INTERESTED	None			
STAKEHOLDERS:				
DESCRIPTION:		process where the customer/reseller		
		system. The system responds by displaying		
	the results matching the sear	• •		
PRE-CONDITION:	The customer/reseller must b			
TRIGGER:	I his use case is called when order on the system.	the customer/reseller wants to search for an		
TYPICAL COURSE				
	Actor Action	System Response		
	Step 1: The customer/reselle	r		
	wants to search for an order			
	Step 2: The customer/reselle			
	enters the search parameter	match using the following attributes:		
	From the User table			
		From the User table.		
		From the User table. • EmailAddress		
		EmailAddress		
		EmailAddress From the Order table		
		 EmailAddress From the Order table OrderId 		
		 EmailAddress From the Order table OrderId FirstName 		
		 EmailAddress From the Order table OrderId 		
		 EmailAddress From the Order table OrderId FirstName Surname 		
		 EmailAddress From the Order table Orderld FirstName Surname PhoneNumber OrderDate OrderStatus 		
		 EmailAddress From the Order table Orderld FirstName Surname PhoneNumber OrderDate 		
		 EmailAddress From the Order table Orderld FirstName Surname PhoneNumber OrderDate OrderStatus 		
		EmailAddress From the Order table OrderId FirstName Surname PhoneNumber OrderDate OrderStatus OrderTotal Step 4: The system displays the search results [ALT]		
ALTERNATE		 EmailAddress From the Order table Orderld FirstName Surname PhoneNumber OrderDate OrderStatus OrderTotal Step 4: The system displays the search 		
ALTERNATE COURSES:	ALT Step 4: The search que instances of an order. • Return to Step 2 or te	EmailAddress From the Order table OrderId FirstName Surname PhoneNumber OrderDate OrderStatus OrderTotal Step 4: The system displays the search results [ALT] ry entered does not match any existing		

CONCLUSION:	This use case concludes when the desired order details are displayed on the system.		
POST-CONDITION:			
BUSINESS RULES	None		
IMPLEMENTATION	None		
CONTRAINTS AND			
SPECIFICATIONS			
ASSUMPTIONS:	None		
OPEN ISSUES:	None		

Table 48 - 5.16 View Placed Order

	ORDER SUBSYSTEM			
AUTHORS (s): Nomusa	a Vumisa DATE: 11/07/2022			
VERSION: 1.0		REVIEW DATE: 11/07/2022		
USE CASE NAME:	View Placed Order	USE CASE TYPE		
USE CASE ID:	5.16	Business Requirements:		
PRIORITY:	High	System Analysis:		
SOURCE:	ByteXpress Requirements List	System Design:		
PRIMARY BUSINESS ACTOR	Customer/Reseller			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes an event where the customer/reseller wants to view their orders on the system. The use case begins when the user requests to view their orders and the system responds by retrieving the details. The use case concludes when the details are displayed on the screen			
PRE-CONDITION:	The customer/reseller must be I	ogged on the system		
TRIGGER:	The use case is called when the order details	e customer/reseller wants to view their		
TYPICAL COURSE				
	Actor Action	System Response		
	Step 1: The customer/reseller wants to view their order details	Step 2: The system invokes Use Case 5.15 Search Placed Orders		
	Step 3: The customer/reseller	Step 4: The system displays the		
	selects the order they wish to	selected order details using the		
	view	following attributes:		
		From the User table		
		EmailAddress		
		From the Order table • OrderId • FirstName • Surname • PhoneNumber • StreetAddress • OrderDate • OrderStatus • OrderTotal • ParcelTrackingNumber • DispatchedDate		



	From the Suburb Table			
	 SuburbName PostalCode 			
	• PostalCode			
	From the City Table			
	CityName			
	From the Province Table			
	ProvinceName			
	From the Country Table			
	CountryName			
	From the Courier Table			
	CourierName			
	From the Product table			
	• Name			
	From the OrderLine table			
	OrderItemPrice			
	OrderItemCount			
ALTERNATE COURSES:	None			
CONCLUSION:	This use case concludes when the selected order's details are displayed			
POST-CONDITION:	The Order, Suburb, City, Province, Country, Courier, Product and			
	Order line Tables were read			
BUSINESS RULES	None			
IMPLEMENTATION	The customer/reseller cannot view their order details without an			
CONTRAINTS AND	internet connection			
SPECIFICATIONS				
ASSUMPTIONS:	None			
OPEN ISSUES:	None			

Table 49 - 5.17 Cancel Placed Order

ORDER SUBSYSTEM					
AUTHORS (s): Nomusa	Vumisa DATE	: 07/11/2022			
VERSION: 1.0		REVIEW DATE: 07/11/2022			
USE CASE NAME:	Cancel Placed Order	USE CASE TYPE			
USE CASE ID:	5.17	Business Requirements:			
PRIORITY:	Medium	System Analysis:			
SOURCE:	ByteXpress Requirements List	System Design:			
PRIMARY BUSINESS ACTOR	Customer/Reseller				
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	• None				
OTHER INTERESTED STAKEHOLDERS:	None				
DESCRIPTION:	This use case describes the process where the reseller cancels their order on the system. The reseller will search for the required order and then cancel their order. The use case concludes when the system notifies the reseller that the order has been cancelled.				
PRE-CONDITION:	The reseller must be logThe order status must b	÷ .			
TRIGGER:	This use case is called when th system.	e reseller wants to cancel an order on the			
TYPICAL COURSE					
	Actor Action	System Response			
	Step 1 : The reseller wants to cancel an order.	Step 2: The system invokes Use Case 5.16 View Placed Order			
	Step 3: The reseller selects the cancel optionStep 4: The system prompts the reseller to confirm the cancellation the reseller order				
	Step 5: The reseller confirms the cancellation of the reseller order. [ALT]	Step 6: The system updates the order status to "Cancelled" using the following attribute:			
		From the Order table OrderStatus Step 7: The system informs the reseller			
		of the successful cancellation and sends them an email confirming the order cancellation using the following attributes:			
		From the User table FirstName EmailAddress 			

	From the Order table OrderId OrderDate PaymentStatus 			
ALTERNATE	ALT Step 3: The reseller does not want to cancel their order			
COURSES:	 Select the back option 			
	Terminate this use case.			
	ALT Step 5: The reseller does not confirm the cancellation of their order.			
	Select the cancel option			
	The use case is terminated			
CONCLUSION:	This use case concludes when the reseller is notified of the successful cancellation and an email is sent to them confirming the order cancellation			
POST-CONDITION:	The system updates the order status to "Cancelled"			
BUSINESS RULES	None			
IMPLEMENTATION	 Only orders with a Pending status can be cancelled 			
CONTRAINTS AND	•			
SPECIFICATIONS				
ASSUMPTIONS:	None			
OPEN ISSUES:	None			

Table 50- 5.18 Cancel Reseller Order

ORDER SUBSYSTEM				
AUTHORS (s): Nomusa Vumisa DATE: 07/1		07/11/2022		
VERSION: 1.0	LAST	REVIEW DATE: 07/11/2022		
USE CASE NAME:	Cancel Reseller Order	USE CASE TYPE		
USE CASE ID:	5.18	Business Requirements:		
PRIORITY:	Medium	System Analysis:		
SOURCE:	ByteXpress Requirements List	System Design:		
PRIMARY BUSINESS ACTOR	 Administrator/Sales Assi 	stant		
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	Reseller			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process where the administrator or sales assistant cancels a reseller order on the system. The administrator or sales assistant will search for the required order and then update the order status to cancelled. The use case concludes when the system notifies the administrator or sales assistant that the order has been cancelled and sends an email to the reseller informing them of the cancellation.			
PRE-CONDITION:	 The administrator or sales assistant must be logged onto the system. The order status must be "Processing" 			
TRIGGER:	This use case is called when the cancel an order on the system.	administrator or sales assistant wants to		
TYPICAL COURSE	Actor Action Step 1 : The administrator or sales assistant wants to cancel an order.	System Response Step 2: The system invokes Use Case 5.7 View Order Overview.		
	Step 3: The administrator or sales assistant selects the cancel option [ALT]	Step 4: The system prompts the administrator to confirm the cancellation of the reseller order		
	Step 5: The administrator or sales assistant confirms the cancellation of the reseller order.	Step 6: The system updates the order status to "Cancelled" using the following attribute:		
	[ALT]	From the Order table		
		OrderStatus		

	Step 7: The system informs the administrator of the successful cancellation and sends an email to the reseller informing them of the order cancellation using the following attribute:
	From the User table FirstName EmailAddress
	From the Order table OrderId OrderDate PaymentStatus
ALTERNATE COURSES:	 ALT Step 3: The administrator or sales assistant does not want to cancel the reseller order Select the back option Terminate this use case.
	 ALT Step 5: The administrator or sales assistant does not confirm the cancellation of the reseller order. Select the cancel option The use case is terminated
CONCLUSION:	This use case concludes when the administrator or sales assistant is notified of the successful cancellation and an email is sent to the reseller informing them of the order cancellation
POST-CONDITION:	The system updates the order status to "Cancelled"
BUSINESS RULES	None
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 Only the administrator and sales assistant can cancel an order. •
ASSUMPTIONS:	None
OPEN ISSUES:	None



Table 51- 5.19 Approve/Reject Reseller Order

ORDER SUBSYSTEM					
AUTHORS (s): Nomusa	AUTHORS (s): Nomusa Vumisa DATE: 0		07/11/2022		
VERSION: 1.0	LAS		N DATE: 07/11/2022		
USE CASE NAME:	Approve/Reject Reseller Order		USE CASE TYPE		
USE CASE ID:	5.19		Business Requirements:		
PRIORITY:	Medium		System Analysis:	\boxtimes	
SOURCE:	ByteXpress Requirements List	st	System Design:		
PRIMARY BUSINESS	Administrator				
ACTOR					
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	Reseller				
OTHER INTERESTED STAKEHOLDERS:	None				
DESCRIPTION:	This use case describes the process where the administrator approves or rejects a reseller order on the system. The administrator will search for the required order and confirm the approval/rejection of the order. The system then updated the order status. The use case concludes when the system notifies the administrator that the order has been approved/rejected.				
PRE-CONDITION:	 The administrator mu The order status mus 		-		
TRIGGER:	This use case is called when an order on the system.	the admin	istrator wants to approve or r	eject	
TYPICAL COURSE	Actor Action	Systen	n Response		
	Step 1: The administrator wants to approve/reject an orderStep 2: The system invokes 5.7 View Orders Overview.				
	Step 3: The administrator selects the approve option [ALT]	admir	4: The system prompts the istrator to confirm the val/rejection of the reseller or	der	
	Step 5: The administrator confirms the approval/rejection of the reseller order. [ALT]	n status	6: The system updates the or to "Processing" if approved o cted" using the following attribute	or	
		From •	the Order table OrderStatus		
		admir appro	7: The system informs the istrator of the successful val/rejection and sends an en reseller informing them of the		

	order status using the following attribute: From the User table • FirstName • EmailAddress From the Order table	
	OrderId OrderDate	
	PaymentStatus	
ALTERNATE COURSES:	 ALT Step 3A: The administrator selects the reject option Proceed to Step 4 ALT Step 3B: The administrator does not want to approve or reject the order Select the back option The use case is terminated ALT Step 5: The administrator does not confirm the approval/rejection of the reseller order. 	
	Select the cancel optionThe use case is terminated	
CONCLUSION:	This use case concludes when the administrator is notified of the successful approval/rejection and an email is sent to the reseller informing them of their order status	
POST-CONDITION:	The system updates the order status to "Processing" if approved or to "Rejected" if rejected	
BUSINESS RULES	None	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 Only the administrator can approval/rejection an order. Only orders with a Pending status can be approved or rejected 	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	



Table 52- 5.20 Dispatch Order

ORDER SUBSYSTEM			
AUTHORS (s): Nomusa		: 07/11/2022	
VERSION: 1.0		REVIEW DATE: 07/11/2022	
USE CASE NAME:	Dispatch Order	USE CASE TYPE	
USE CASE ID:	5.20	Business Requirements:	
PRIORITY:	Medium	System Analysis:	
SOURCE:	ByteXpress Requirements List	System Design:	
PRIMARY BUSINESS ACTOR	 Administrator/Sales Ass 	istant	
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	Customer/Reseller		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes the process where an order has been handed over to the couriers for delivery. The administrator or sales assistant will search for the required order, add the tracking number and then update the order status to dispatched. The use case concludes when the system notifies the administrator or sales assistant that the order has been dispatched and an email is sent to the recipient informing them of the dispatching of their order.		
PRE-CONDITION:	 The administrator or sales assistant must be logged onto the system. The order status must be "Processing" 		
TRIGGER:	This use case is called when the administrator or sales assistant wants to dispatch an order.		
TYPICAL COURSE			
	Actor Action Step 1 : The administrator or sales assistant wants to dispatch an order	System Response Step 2: The system invokes Use Case 5.7 View Orders Overview	
	Step 3: The administrator or sales assistant enters the parcel tracking number [ALT]	Step 4: The system captures and validates the entered details[ALT]	
		Step 5: The system prompts the administrator to confirm the dispatching of the order	
	Step 6: The administrator or sales assistant confirms the dispatching of the order. [ALT]	Step 7: The system updates the order status to "Dispatched" and saves the tracking number using the following attributes:	

	From the Order table		
	OrderStatus		
	PatcelTrackingNumber		
	Step 8: The system informs the		
	administrator of the successful status		
	update and sends a SMS to the		
	recipient, informing them that their order		
	has been dispatched using the following		
	attributes:		
	From the Order table		
	PhoneNumber		
	FirstName		
	OrderId		
	 ParcelTrackingNumber 		
ALTERNATE	ALT Step 3: The administrator or sales assistant does not want to		
COURSES:	dispatch the order		
	 Select the back option The use case is terminated 		
	ALT Step 4: The required field is empty		
	The system displays a validation error message		
	Return to step 3		
	ALT Step 6: The administrator or sales assistant does not confirm the		
	dispatching of the order		
	Select the cancel option.		
	The use case is terminated		
CONCLUSION:	This use case concludes when the administrator or sales assistant is		
	notified of the successful status update and a sms is sent to the recipient		
	informing them of their order status		
POST-CONDITION:	The system updates the order status to "Dispatched"		
BUSINESS RULES	None		
IMPLEMENTATION	Only the administrator and sales assistant can dispatch an order		
CONTRAINTS AND			
SPECIFICATIONS			
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



Table 53- 5.21 Log Back Order

Order Subsystem					
AUTHORS (s): Kyle var	Eeden	DATE: 21/08/2022			
VERSION: 1.0	ERSION: 1.0		LAST REVIEW DATE: 29/08/2022		
USE CASE NAME:	Log Back Order		USE C	CASE TYPE	
USE CASE ID:	5.21		Business Red	quirements:	
PRIORITY:	High		System Analy	ysis:	\boxtimes
SOURCE:	ByteXpress Requiremen	ts List	System Desi	gn:	
PRIMARY BUSINESS ACTOR	Administrator				
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	Reseller (ERA)				
OTHER INTERESTED STAKEHOLDERS:	None				
DESCRIPTION:	This use case describes the process in which the administrator wishes to back-log a reseller order placed on the system. Once the administrator requests the system to log the back-log, the system will prompt the administrator to confirm that whether they wish to proceed with logging the back-order request. After confirming to proceed, the system will update the status of the order to reflect it has been back-logged. An email is also generated and sent to the reseller which informs the reseller who placed the order that their order has been backlogged. The use case concludes with the system displaying a confirmation alert which informs the administrator that the order has been backlogged successfully. The administrator must be logged into the system. Use case 5.7				
	The reseller order must have a status of "Pending" assigned.				
TRIGGER:	The administrator wishes to delay a reseller order on the system.				
TYPICAL COURSE	Actor Action		System Response		
OF EVENTS:	Step 1 : The administrator requests the system to b the reseller order due to insufficient stock availability	acklog	Step 2: The system pr administrator to confirm wish to proceed with a order to the orders bac	m whether the adding the spe	-

Step 3: The administrator	Step 4: The system updates the order's
selects the option provided to confirm to backlog the order.	status to "Delayed" by updating the following attributes in the Order entity:
[ALT]	
	OrderStatus
	BackOrderDate
	Step 5: The system generates an email
	which is populated with the following
	details retrieved for the order from the below-mentioned entities:
	below-mentioned entities:
	From the User entity:
	FirstName
	EmailAddress
	From the Order entity:
	OrderIdOrderStatus
	OrderPaymentStatus
	OrderDate
	From the ConfirmationReminder
	entity:
	Value
	Step 6: The system sends the email to
	the reseller's email address who has
	placed the order.
	L



	Step 7: The system displays a confirmation alert which informs the administrator that the order backlog has been performed successfully.	
ALTERNATE COURSES:	 ALT Step 3: The administrator does not wish to proceed with adding the order to the orders backlog: The use case concludes. 	
CONCLUSION:	The system displays a confirmation alert to confirm that the order has been backlogged successfully.	
POST-CONDITION:	 The backlogged order's details is sent to the reseller's email address. The order has a status of "Delayed" assigned. 	
BUSINESS RULES	 Only the administrator of the system should be allowed to add orders to the orders backlog list. Only reseller orders which is in a "Pending" state can be backlogged. The reseller should be informed that their order has been delayed. 	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 An email should be sent to the reseller which informs them that their placed order has been backlogged by Natuurlik. Only "Pending" reseller orders can be added to the orders backlog by the administrator. 	
ASSUMPTIONS:	 The administrator has access to the internet and the system is not offline. 	
OPEN ISSUES:	None	



Table 54- 5.22 Confirm Order

Order Subsystem			
AUTHORS (s): Kyle van Eeden		DATE: 21/08/2022	
VERSION: 1.1		LAST F	REVIEW DATE: 29/08/2022
USE CASE NAME:	Confirm Order		USE CASE TYPE
USE CASE ID:	5.22		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requiremen	ts List	System Design:
PRIMARY BUSINESS ACTOR	Reseller		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes the process in which a reseller confirms an order that has been backlogged on the system. The use case begins with reseller requesting the system to confirm the order by selecting the relevant option provided. The system then prompts the reseller to confirm whether they wish to accept the delayed order and once the reseller confirms, the system will update the order's status and the system sends an order confirmation email to the reseller's email address. The use case concludes once the system displays a confirmation alert which informs the reseller that their order has been successfully confirmed.		
PRE-CONDITION:	The reseller must be logged into the system.		
	The order to be confirmed must have an order status of "Delayed" assigned.		
	Use Case 5.7		
TRIGGER:	The reseller wishes to co orders backlog.	onfirm an	order which has been added to the
TYPICAL COURSE	Actor Action		System Response



OF EVENTS:	Step 1 : The reseller requests the system to confirm their backlogged order.	Step 2 : The system prompts the reseller to confirm whether they wish to proceed with accepting the delayed order.
	Step 3: The reseller selects the option to accept the delayed order.	Step 4: The system updates the following attribute for the specific reseller order in the Order entity:
		OrderStatus
		Upon having confirmed the backlogged order, the system will assign the "Processing" status value to the order.
		Step 5: The system generates an email using the following details retrieved from the respective entities:
		From the User entity: • FirstName
		Email Address
		From the Order entity: • OrderID • OrderStatus • OrderPaymentStatus
		OrderDate Step 6: The system sends the generated email to the reseller's email address.
		Step 7: The system displays a confirmation alert which informs the reseller that the backlogged order has been confirmed successfully.
ALTERNATE COURSES:	ALT Step 3: The reseller no long order:	ger wishes to confirm the backlogged

	 The reseller selects the option provided to cancel the order confirmation operation. The use case concludes. 	
CONCLUSION:	The system displays a confirmation alert to inform the reseller that their order has been confirmed successfully.	
POST-CONDITION:	 The reseller order's status is "Processing" after having confirmed a modified order. An email is sent to the reseller's email address which informs them that the delayed order has been accepted successfully. 	
BUSINESS RULES	 A reseller should only be allowed to confirm an order placed by them, and which has been placed in the orders backlog list by Natuurlik. The reseller only has 7 days to accept or reject the delayed order before it being rejected automatically by the system. 	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 Only "Delayed" reseller orders can be confirmed/accepted by the reseller. An email is to be sent to the reseller's email address, which confirms that the order has been accepted successfully and is being processed by Natuurlik. 	
ASSUMPTIONS:	 The reseller has access to the internet and the system is not offline. The reseller has reviewed the details of the backlogged order and wishes to accept it. 	
OPEN ISSUES:	None	

Table 55- 5.23 Reject Order

Order Subsystem				
AUTHORS (s): Kyle var	n Eeden	DATE: 25/0	8/2022	
VERSION: 1.1	LAST		EW DATE: 29/08/2022	
USE CASE NAME:	Reject Order		USE CASE TYPE	
USE CASE ID:	5.23		Business Requirements:	
PRIORITY:	High		System Analysis:	\boxtimes
SOURCE:	ByteXpress Requiremen	ts List	System Design:	
PRIMARY BUSINESS ACTOR	Reseller			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which a reseller rejects an order that has been placed on the orders backlog after being placed. The use case begins with the reseller requesting the system to reject the order by selecting the relevant option provided. The system then prompts the reseller to confirm whether they wish proceed with rejecting the delayed order. Once the reseller confirms that they wish to reject the order, the system will update the order's status to "Rejected" and the details is saved in the Order entity. The use case concludes once the system displays a confirmation alert which informs the reseller that their order has been rejected successfully.			
PRE-CONDITION:	The reseller must be logged into the system.			
	The order to be rejected must have an order status of "Delayed" assigned. Use Case 5.7			
TRIGGER:	The reseller wishes to re	ject their back	logged order on the system.	
TYPICAL COURSE	Actor Action	Syst	em Response	

	Stop 1: The receller requests	Stop 2: The evotor promote the	
OF EVENTS:	Step 1: The reseller requests the system to reject the backlogged order.	Step 2 : The system prompts the reseller to confirm whether they wish to proceed with the order rejection operation.	
	Step 3: The reseller selects the option to proceed to reject the backlogged order.	Step 4: The system updates the following attribute for the specific reseller order in the Order entity:	
	[(1]	OrderStatus	
		Upon having rejected the modified order, the system will assign the "Rejected" status to the order.	
		Step 5: The system displays a confirmation alert which informs the reseller that the backlogged order has been rejected successfully.	
ALTERNATE COURSES:	 ALT Step 3: The reseller no longer wishes to reject the delayed order: The reseller selects the option provided to cancel the order rejection operation. The use case concludes. 		
CONCLUSION:	The system displays a confirmation alert to inform the reseller that their order has been rejected successfully on the system.		
POST-CONDITION:	• The reseller order's status is changed to "Rejected" after having rejected a modified order and is saved to the Order entity.		
BUSINESS RULES	 A reseller should only be allowed to reject an order placed by them, and which has been placed on the orders backlog by Natuurlik. The reseller should be given the option to either accept or reject an order which has been assigned to the orders backlog. 		
IMPLEMENTATION CONSTRAINTS AND SPECIFICATIONS	 Only orders with a "Delayed" status can be rejected by a reseller using this functionality. 		
ASSUMPTIONS:	 The reseller has access to the internet and the system is not offline. The reseller has reviewed the order backlog email sent by Natuurlik and wishes to reject the order on the system. 		
OPEN ISSUES:	None		


Table 56- 5.24 Send Order Confirmation Reminder

ORDER SUBSYSTEM				
AUTHORS (s): Nomusa Vumisa		DATE: 27/08/2022		
VERSION: 1.1	LAST		REVIEW DATE: 27/08/2022	
USE CASE NAME:	Send Order Confirmatio	n Remind	er USE CASE TYPE	
USE CASE ID:	5.24		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Time			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	Reseller			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	The use case begins when a reseller has a back order and it has reached the notification threshold. The system then sends an email reminder to the reseller on the confirmation due date.			
PRE-CONDITION:	The order status must be "Delayed"			
TRIGGER:	This use case is called v confirmation threshold h		order status is delayed and the eached.	
TYPICAL COURSE	Actor Action		System Response	
	Step 1: The confirmation threshold has been read	n ched	 Step 2: The system reads the following attributes to verify that the order status is "Delayed" and if the due date threshold has been reached From the Order table OrderStatus BackOrderDate 	
			From the ConfirmationReminder table Value 	

		Step 3: The system generates a confirmation reminder email using the following attributes:
		From the User table Email FirstName
		From the Order table OrderId OrderStatus
		From the ConfirmationReminder table Value
		Step 4: The system sends a confirmation reminder to the reseller
ALTERNATE COURSES:		
CONCLUSION:	This use case concludes when t	he reminder has been sent to the reseller
POST-CONDITION:	The reseller is reminded to confi from the User and Order tables	rm their order using attributes retrieved
BUSINESS RULES	None	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 Only the reseller should Reminders must be sent 	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	



Table 57- 5.25 Update Order Confirmation Time

ORDER SUBSYSTEM				
AUTHORS (s): Nomusa	Vumisa C	DATE: 2	28/08/2022	
VERSION: 1.0 LAST		.AST R	REVIEW DATE: 28/08/2022	
USE CASE NAME:	Update Order Confirmation	n Time	USE CASE TYPE	
USE CASE ID:	5.25		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requirements	List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which the administrator wishes to update the order confirmation time on the system. The administrator will then update the confirmation time and save it to the database. The use case ends when the administrator receives a successful update notification.			
PRE-CONDITION:	The administrator must be logged onto the system			
TRIGGER:	The use case is triggered when the administrator wants to update the order confirmation time		ne administrator wants to update the	
TYPICAL COURSE	Actor Action		System Response	
OF EVENTS:	Step 1: The administrator wishes to update the resel order confirmation time Step 3: The administrator selects their desired order	ller	Step 2: The system retrieves the following attribute from the ConfirmationReminder table: • Days Step 4: The system requests the	
	Selects their desired order confirmation time interval Step 5: The administrator confirms the updating of th order confirmation time [ALT]	ne	administrator to confirm the updating of the order confirmation time Step 6: The system reads from the ConfirmationReminder table to ensure that the record being updated is not already active using the following attribute:	



	IsActive	
	[ALT]	
	Step 7 : The system activates the selected order confirmation time using the following attributes:	
	From the ConfirmationReminder Table	
	IsActive	
	Step 8: The system displays a	
	successful creation message	
ALTERNATE	ALT Step 5: The administrator does not confirm the updating of the order	
COURSES:	confirmation time	
	The use case is terminated	
	ALT Step 6: The order confirmation time is already active on the system	
	The system displays an error message	
CONCLUSION:	The use case is terminated This use case concludes when the order confirmation time is updated.	
CONCLUSION.	This use case concludes when the order commation time is updated.	
POST-CONDITION:	The order confirmation time was updated in the ConfirmationReminder Table	
BUSINESS RULES	Only the administrator can update the order confirmation time	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 Only one order confirmation time can be active at a time The order confirmation time cannot be updated without an internet connection 	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	





2.6. Query Reason Subsystem

Table 58 - 6.1 Create Query Reason

QUERY REASON SUBSYSTEM				
AUTHORS (s): Aphiwe Shozi		DATE:	DATE: 14/05/2022	
VERSION: 1.0		LAST REVIEW DATE: 14/05/2022		
USE CASE NAME:	Create Query Reason		USE CASE TYPE	
USE CASE ID:	6.1		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremen	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which the administrator wishes to add a new Query Reason onto the system. The use case begins when the administrator wishes to adds a Query Reason. The administrator will proceed to capture the Query Reason details and save it to the system database.			
PRE-CONDITION:	 The administrator must be logged onto the system. The Query Reason must not already exist on the system 			
TRIGGER:	The use case is triggered when the administrator wants to create a new Query Reason.			
TYPICAL COURSE	Actor Action		System Response	



OF EVENTS:	Step 1 : The administrator wants to create a new Query Reason.	 Step 2: The system requires the admin to add information about the Query Reason in the Query Reason Table such as : Name
	Step 3: The administrator provides the required the details. [ALT]	Step 4: The system captures and validates the entered details [ALT]
		Step 5 : The system reads from the Query Reason table to ensure that the record being added doesn't match any existing record using the following attribute:
		• ld [ALT]
		Step 6 : The system saves the new Query Reason details which have the following attributes:
		From the Query Reason Table Id Name
		Step 7: The system save the new Query Reason record to the Query Reason table
ALTERNATE COURSES:	 ALT Step 3: The administrator The use case is terminal 	no longer wants to add a Query Reason ted
	 ALT Step 4: The entered detail required fields are empty The system displays a v Return to step 3 	s are not in the correct format or the alidation error message
	ALT Step 5: The Query Reasor	n already exists on the system

	 The system displays a validation error message The use case is terminated
CONCLUSION:	This use case concludes when a new Query Reason is created.
POST-CONDITION:	The Query Reason details are added to the database.
BUSINESS RULES	Only the administrator can add a new Query Reason.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None
ASSUMPTIONS:	None
OPEN ISSUES:	None

Table 59 - 6.2 Search Query Reason

QUERY REASON SUBSYSTEM				
AUTHORS (s): Aphiwe Shozi		DATE: 14/05/2022		
VERSION: 1.0	LAST REVI		REVIEW DATE: 14/05/2022	
USE CASE NAME:	Search Query Reason		USE CASE TYPE	
USE CASE ID:	6.2		Business Requirements:	
PRIORITY:	Medium		System Analysis:	\boxtimes
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in the administrator wishes to search through the existing Query Reasons on the system. The administrator can use the Query Reason details for a search query and the system will retrieve the Query Reason that matches			
PRE-CONDITION:	 The administrator must be logged onto the system. The administrator can only search through Query Reasons that are saved on the system 			
TRIGGER:	This use case is called when the administrator wants to search for a Query Reason on the system.		a	
TYPICAL COURSE	Actor Action		System Response	
OF EVENTS:	Step 1: The administrate wants to search for a Qu Reason.			
	Step 2: The administrate enters the search param		Step 3: The system searches usin following attributes in the Query Reason table:	ng the



		Name
		Step 4 : The system displays the search results [ALT]
ALTERNATE COURSES:	instances of Query Reasons in t	
CONCLUSION:	Return to Step 2 or terminate the use case This use case concludes when the desired Query Reason's details are displayed on the system.	
POST-CONDITION:	The Query Reason Table was s corresponds to the search query	-
BUSINESS RULES	None	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	



Table 60 - 6.3 Update Query Reason

QUERY REASON SUBSYSTEM				
AUTHORS (s): Aphiwe Shozi		DATE: 14/05/2022		
VERSION: 1.0	LAST R		REVIEW DATE: 14/05/2022	
USE CASE NAME:	Update Query Reason		USE CASE TYPE	
USE CASE ID:	6.3		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	None	None		
DESCRIPTION:	This use case describes the process in which the administrator wishes to update the details of Query Reason to the system. The use case begins when the administrator wishes to update the details of an existing Query Reason record.			
PRE-CONDITION:	 The administrator must be logged onto the system. Only Query Reasons that exists on the system can be updated 			
TRIGGER:	The use is triggered when the administrator updates the details of a Query Reason that already exists on the system.			
TYPICAL COURSE	Actor Action		System Response	
OF EVENTS:	Step 1: The administrate wishes to update a Que Reason's details	or S	Step 2: The system invokes Use Case 11.2 Search Query Reason.	
	Step 3: The administrate selects the desired Que Reason	ry c	Step 4 : The system retrieves the desired Query Reasons' details from the following tables	

		From the Query Reason Table Name
	Step 5 : The administrator enters the updated details.	Step 6 : The system captures and validates the entered details
	[ALT]	[ALT]
		Step 7: The system requests the administrator to confirm the updating of the Query Reason details
	Step 8: The administrator confirms the updating of the Query Reason details [ALT]	Step 9: The system reads from the Query Reason table to ensure that the record being updated does not match any existing records using the following attribute:
		• ld
		[ALT]
		Step 10 : The system saves the updated Query Reason details which have the following attributes:
		From the Query Reason Table
		Name
		Step 11: The system displays a successful update message
ALTERNATE COURSES:	ALT Step 5: The administrator r Reason	no longer wants to update a Query
	The use case is terminat	ted
	ALT Step 6: The entered details required fields are empty	s are not in the correct format or the
	The system displays a valueReturn to step 5	alidation error message
	ų	



	ALT Step 8 : The administrator does not confirm updating the Query Reason
	Return to Step 5 or terminate the use case
	ALT Step 9: The Query Reason already exists on the system
	The system displays a validation error messageThe use case is terminated
CONCLUSION:	This use case concludes when the details of the respective Query Reason record has been updated successfully on the system
POST-CONDITION:	The Query Reason details are updated on the database.
BUSINESS RULES	Only the administrator can update a Query Reason.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None
ASSUMPTIONS:	None
OPEN ISSUES:	None



Table 61 - 6.4 Delete Query Reason

QUERY REASON SUBSYSTEM			
AUTHORS (s): Aphiwe S	bhozi	DATE: 14/05/	2022
VERSION: 1.0	LAST REVIEW		N DATE: 14/05/2022
USE CASE NAME:	Delete Query Reason		USE CASE TYPE
USE CASE ID:	6.4		Business Requirements:
PRIORITY:	Medium		System Analysis:
SOURCE:	ByteXpress Requiremer	nts List	System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	• None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case narrative describes the process in which the administrator wishes to delete a Query Reason from the system. The administrator will search for the required Query Reason selected for deletion. The administrator will then confirm the deletion of the Query Reason and the use case concludes when the system notifies the administrator of a successful deletion.		
PRE-CONDITION:	The administrator must	be logged in to	the system.
TRIGGER:	This use case is called v Reason.	when the admin	istrator wishes to delete a Query
TYPICAL COURSE	Actor Action	Svste	m Response
OF EVENTS:	Step 1: The administrate wishes to delete a Query Reason.	or Step 2	2: The system invokes Use Case Search Query Reason.
	Step 3: The administrate selects the desired Que Reason	ry desire the fo	4: The system retrieves the ed Query Reasons' details from llowing tables
		From	the Query Reason Table
		•	Name

	· · · · · · · · · · · · · · · · · · ·	1	
	Step 5: The administrator	Step 6: The system requests the	
	selects the delete option	administrator to confirm the deletion of the Query Reason.	
	[ALT]	the Query Reason.	
	Step 7: The administrator	Step 8: The system removes all the	
	confirms the deletion of the	details related to the Query Reason	
	Query Reason from the	from the database from the following tables:	
	system. [ALT]	tables.	
		From the Query Reason Table	
		Name	
		Stop 9: The system informs the	
		Step 9: The system informs the administrator of the successful deletion	
		of the Query Reason	
ALTERNATE	ALT Step 5: The administrator does not want to delete the Query		
COURSES:	Reason and selects the cancel option.		
	Terminate this use case.		
	ALT Step 7: The administrator does not confirm the deletion of the Query		
	Reason.		
	Return to step 4		
CONCLUSION:	This use case concludes when	the administrator is notified of the	
	successful deletion of the Query Reason.		
POST-CONDITION:	 The system deletes all the details related to the selected Query 		
	Reason from the Query Reason table.		
BUSINESS RULES	Only the administrator can delete a Query Reason.		
IMPLEMENTATION CONTRAINTS AND	None		
SPECIFICATIONS			
ASSUMPTIONS:	None		
OPEN ISSUES:	None		

Table 62 6.5 Review Order Query

ORDER SUBSYSTEM					
AUTHORS (s): Ofhani M	ungani	DATE:	07/28/202	2	
VERSION: 1.1	VERSION: 1.1 LAS		AST REVIEW DATE: 07/28/2022		
USE CASE NAME:	View Order Query			USE CASE TYPE	
USE CASE ID:	6.5		E	Business Requirements:	
PRIORITY:	High		Ş	System Analysis:	\boxtimes
SOURCE:	ByteXpress Requiremer	nts List	ç	System Design:	
PRIMARY BUSINESS ACTOR	 Administrator/Sa 	ales Ass	istant		
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	• None				
OTHER INTERESTED STAKEHOLDERS:	None				
DESCRIPTION:	This use case describes an event where the administrator or sales assistant wants to view an order query on the system. The use case begins when the administrator/ sales assistant requests to view an order query and the system responds by retrieving the order				
	query details. The use case concludes when the details are displayed on the screen.			d on	
PRE-CONDITION:	 The administrator or sales assistant must be logged on the system. 			;	
TRIGGER:	The use case is called when the administrator or sales assistant wants to view an order query				
TYPICAL COURSE	Actor Action		System Res	sponse	
	Step 1 : The administrate sales assistant wishes to an order query on the sy	o view	Step 2: T	he system retrieves the details for all order query:	
			from the C	DrderQuery entity:	
				ate escription	



		Status	
		from the Order entity:	
		OrderId	
		from the QueryReason entity:	
		Name	
	Step 3: The administrator or sales assistant selects an	Step 4: The system requires the	
	option to review an order	administrator to provide feedback to an order query in the OrderQuery entity on	
	query.	the following attribute:	
		Feedback	
	Step 5 : The administrator or assistant inputs the required	Step 6 : The system captures and validates the information provided by	
	details [ALT]	the administrator ensuring the format is	
		adhered to and no required text fields	
		are left empty. [ALT]	
		Step 7: The system saves the information to the OrderQuery entity on	
		the database and update the order	
		query status attribute from pending review to null.	
		Step 8: The system displays a success message on the screen to confirm the	
		submission of the feedback on the order	
		query	
ALTERNATE COURSES:		sales assistant doesn't want to provide	
COURSES.	feed back to an order query		
	Terminate use case		
	ALT Step 6: The system fails to	validate the information provided	
	ALT Step 6 : The system fails to validate the information provided because of a missing field.		
	Return to Step 5.		
CONCLUSION:	The use case concludes when the feedback for an order query is added		
	on the system.		
POST-CONDITION:	The customer or reseller receives feedback on the system about their		
	order query		

BUSINESS RULES	None.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The administrator or sales assistant cannot view an order query without an internet connection. Only the administrator or sales assistant can query an order.
ASSUMPTIONS:	None
OPEN ISSUES:	None



Table 63- 6.6 View Order Query Feedback

ORDER QUERY SUBSYSTEM			
AUTHORS (s): Thenjiwe	Ntsonda	DATE:	07/29/2022
VERSION: 1.0		LAST F	REVIEW DATE: 07/2392022
USE CASE NAME:	View Order Query Feedback		USE CASE TYPE
USE CASE ID:	6.6		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requiremer	nts List	System Design:
PRIMARY BUSINESS ACTOR	Customer or Res	seller	
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	• None		
OTHER INTERESTED STAKEHOLDERS:	• None		
DESCRIPTION:	This use case begins when a customer or reseller wishes to view the feedback of a query they submitted on the system. The system retrieves the selected order query details from the relevant tables and displays the details to the customer or reseller.		
PRE-CONDITION:	 Customer or reseller must have submitted an order query prior Customer or reseller must be logged in 		
TRIGGER:	This use case is called ward feedback on a query the		ustomer or reseller wishes to view the ted on the system.
TYPICAL COURSE	Actor Action		System Response
	Step 1: The customer of reseller wishes to view t feedback on a query the submitted on the system	he ⊧y	Step 2: Invoke use case 1.3 View Profile Details
	Step 3: The customer o reseller selects the desin query they submitted		Step 4: The system retrieves the following from the OrderQuery table and displays the order query details:
			DescriptionQueryFeedback



		 From the Order table: Order Number From the QueryReason table: Query Reason 	
ALTERNATE COURSES:	None		
CONCLUSION:	The system displays the selected order query details to the customer or reseller		
POST-CONDITION:	The OrderQuery, Order and Query Reason tables are searched, and the corresponding values are retrieved.		
BUSINESS RULES	 Only the logged in custor their submitted order que 	mer or reseller should be allowed to view eries.	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None		
ASSUMPTIONS:	The customer and reselle	er have a stable internet connection.	
OPEN ISSUES:	None		



2.7. Review Subsystem

REVIEW REASON SUBSYSTEM			
AUTHORS (s): Aphiwe S	Shozi	DATE:	14/05/2022
VERSION: 1.0	ON: 1.0 LAST		REVIEW DATE: 14/05/2022
USE CASE NAME:	Create Review Reason		USE CASE TYPE
USE CASE ID:	7.1		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requiremer	nts List	System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	• None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes the process in which the administrator wishes to add a new Review Reason onto the system. The use case begins when the administrator wishes to adds a Review Reason. The administrator will proceed to capture the Review Reason details and save it to the system database.		
PRE-CONDITION:	 The administrator must be logged onto the system. The Review Reason must not already exist on the system 		
TRIGGER:	The use case is triggered when the administrator wants to create a new Review Reason.		
TYPICAL COURSE	Actor Action		System Response
OF EVENTS:	Step 1 : The administrate wants to create a new R Reason.		Step 2: The system requires the admin to add information about the Review Reason in the <u>Review Reason Table</u> such as : • Name
	Step 3 : The administrate provides the required th details.		Step 4: The system captures and validates the entered details [ALT]

Table 64 - 7.1 Create Review Reason



		Step 5: The system reads from the Review Reason table to ensure that the record being added doesn't match any existing record using the following attribute: • Id [ALT] Step 6: The system saves the new Review Reason details which have the following attributes:	
		From the Review Reason Table Id Name 	
		Step 7: The system save the new Review Reason record to the <u>Review</u> <u>Reason table</u>	
ALTERNATE COURSES:	The use case is terminate	are not in the correct format or the lidation error message n already exists on the system lidation error message	
CONCLUSION:	This use case concludes when a new Review Reason is created.		
POST-CONDITION:	The Review Reason details are added to the database.		
BUSINESS RULES	Only the administrator can add a new Review Reason.		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



Table 65 -7.2 Search Review Reason

REVIEW REASON SUBSYSTEM				
AUTHORS (s): Aphiwe S	hozi	DATE:	: 14/05/2022	
VERSION: 1.0	LAST		REVIEW DATE: 14/05/2022	
USE CASE NAME:	Search Review Reason		USE CASE TYPE	
USE CASE ID:	7.2		Business Requirements:	
PRIORITY:	Medium		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in the administrator wishes to search through the existing Review Reasons on the system. The administrator can use the Review Reason details for a search Review and the system will retrieve the Review Reason that matches			
PRE-CONDITION:	 The administrator must be logged onto the system. The administrator can only search through Review Reasons that are saved on the system 			
TRIGGER:	This use case is called when the administrator wants to search for a Review Reason on the system.			
TYPICAL COURSE	Actor Action		System Response	
OF EVENTS:	Step 1 : The administrate wants to search for a ReReason.	eview		
	Step 2: The administrate enters the search param		Step 3: The system searches using the following attributes in the Review Reason table:	
			Name	



	Step 4: The system displays the search results [ALT]		
ALTERNATE COURSES:	ALT Step 4: The search Review entered does not match any existing instances of Review Reasons in the system database.		
	Return to Step 2		
CONCLUSION:	This use case concludes when the desired Review Reason's details are displayed on the system.		
POST-CONDITION:	The Review Reason Table was searched for and an entry that corresponds to the search Review or parameter entered.		
BUSINESS RULES	None		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



Table 66 - 7.3 Update Review Reason

REVIEW REASON SUBSYSTEM			
AUTHORS (s): Aphiwe S	shozi	DATE:	: 14/05/2022
VERSION: 1.0	LAST		REVIEW DATE: 14/05/2022
USE CASE NAME:	Update Review Reason	•	USE CASE TYPE
USE CASE ID:	7.3		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requiremer	nts List	System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes the process in which the administrator wishes to update the details of Review Reason to the system. The use case begins when the administrator wishes to update the details of an existing Review Reason record.		
PRE-CONDITION:	 The administrator must be logged onto the system. Only Review Reasons that exists on the system can be updated 		
TRIGGER:	The use is triggered when the administrator updates the details of a Review Reason that already exists on the system.		
TYPICAL COURSE	Actor Action System Response		
OF EVENTS:	Step 1 : The administrate wishes to update a Revi Reason's details		Step 2: The system invokes Use Case 11.2 Search Review Reason.



	Step 3: The administrator selects the desired Review Reason	Step 4 : The system retrieves the desired Review Reasons' details from the following tables
		From the Review Reason Table
		Name
	Step 5 : The administrator enters the updated details.	Step 6 : The system captures and validates the entered details
	[ALT]	[ALT]
		Step 7: The system requests the administrator to confirm the updating of the Review Reason details
	Step 8: The administrator confirms the updating of the Review Reason details [ALT]	Step 9: The system reads from the Review Reason table to ensure that the record being updated does not match any existing records using the following attribute:
		• ld [ALT]
		Step 10: The system saves the updated Review Reason details which have the following attributes:
		From the Review Reason Table
		Name
		Step 11: The system displays a successful update message
ALTERNATE COURSES:	ALT Step 5: The administrator Reason	no longer wants to update a Review
	• The use case is terminat	ted
	ALT Step 6: The entered details required fields are empty	s are not in the correct format or the
	The system displays a v.Return to step 5	alidation error message

	ALT Step 8 : The administrator does not confirm updating the Review Reason
	Return to Step 5 or terminate the use case
	ALT Step 9: The Review Reason already exists on the system
	The system displays a validation error messageThe use case is terminated
CONCLUSION:	This use case concludes when the details of the respective Review Reason record has been updated successfully on the system
POST-CONDITION:	• The Review Reason details are updated on the database.
BUSINESS RULES	Only the administrator can update a Review Reason.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None
ASSUMPTIONS:	None
OPEN ISSUES:	None



Table 67 - 7.4 Delete Review Reason

REVIEW REASON SUBSYSTEM			
AUTHORS (s): Aphiwe S	shozi	DATE: 14/	05/2022
VERSION: 1.0			IEW DATE: 14/05/2022
USE CASE NAME:	Delete Review Reason		USE CASE TYPE
USE CASE ID:	7.4		Business Requirements:
PRIORITY:	Medium		System Analysis:
SOURCE:	ByteXpress Requiremer	nts List	System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	• None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case narrative describes the process in which the administrator wishes to delete a Review Reason from the system. The administrator will search for the required Review Reason selected for deletion. The administrator will then confirm the deletion of the Review Reason and the use case concludes when the system notifies the administrator of a successful deletion.		
PRE-CONDITION:	The administrator must be logged in to the system.		
TRIGGER:	This use case is called when the administrator wishes to delete a Review Reason.		
TYPICAL COURSE	Actor Action	Sve	stem Response
OF EVENTS:	Step 1: The administrate wishes to delete a Revie Reason.	or Ste	p 2: The system invokes Use Case 2 Search Review Reason .
	Step 3: The administrate selects the desired Revi Reason	ew des	p 4 : The system retrieves the sired Review Reasons' details from following tables



		From the Review Reason Table	
		Name	
	Step 5: The administrator selects the delete option	Step 6: The system requests the administrator to confirm the deletion of	
	[ALT]	the Review Reason.	
	Step 7: The administrator confirms the deletion of the Review Reason from the system. [ALT]	Step 8: The system removes all the details related to the Review Reason from the database from the following tables:	
		From the Review Reason Table	
		Name	
		Step 9: The system informs the administrator of the successful deletion of the Review Reason	
ALTERNATE	ALT Step 5: The administrator of	does not want to delete the Review	
COURSES:	Reason and selects the cancel option.		
	 Terminate this use case. ALT Step 7: The administrator does not confirm the deletion of the Review Reason. 		
	Return to step 4		
CONCLUSION:	This use case concludes when t successful deletion of the Revie	the administrator is notified of the with the wi	
POST-CONDITION:	 The system deletes all the details related to the selected Review Reason from the Review Reason table. 		
BUSINESS RULES		an delete a Review Reason.	
IMPLEMENTATION	None		
CONTRAINTS AND SPECIFICATIONS			
ASSUMPTIONS:	None		



OPEN ISSUES: • None



Table 68 -7.5 View Order Review

REVIEW SUBSYSTEM			
AUTHORS (s): Ofhani M		: 07/28/2022	
VERSION: 1.1		REVIEW DATE: 07/28/2022	
USE CASE NAME:	View Order Review	USE CASE TYPE	
USE CASE ID:	7.5	Business Requirements:	
PRIORITY:	High	System Analysis:	
SOURCE:	ByteXpress Requirements List	System Design:	
PRIMARY BUSINESS	 Administrator/Sales Ass 	sistant	
ACTOR			
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	• None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes an event where the administrator or sales assistant wants to view an order review on the system. The use case begins when the administrator/ sales assistant requests to view an order review and the system responds by retrieving the order review details. The use case concludes when the details are displayed on the screen.		
PRE-CONDITION:	 The administrator or sales assistant must be logged on the system. 		
TRIGGER:	The use case is called when the administrator or sales assistant wants to view an order review		
TYPICAL COURSE	Actor Action Step 1 : The administrator or sales assistant wishes to view an order review on the system	System Response Step 2: The system retrieves the following details for all order reviews: from the OrderReview entity: • Date • Rating • Description from the Order entity: • FirstName • OrderId from the ReviewReason entity: • Name	

	Step 3: The administrator or sales assistant selects an option to view more order information. [ALT]Step 4: The system Invoke use case 5.7. View Orders Overview		
ALTERNATE	ALT Step 3: The administrator or sales assistant doesn't wish to view the		
COURSES:	order details.		
	The use case concludes.		
CONCLUSION:	The use case concludes when more details about the order is displayed		
	by invoking use case 5.7. View Orders Overview		
POST-CONDITION:	Order details is read from the database.		
BUSINESS RULES	None.		
IMPLEMENTATION	The administrator or sales assistant cannot view their order		
CONTRAINTS AND	details without an internet connection.		
SPECIFICATIONS			
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



2.8. Inventory Management Subsystem

INVENTORY MANAGEMENT SUBSYSTEM				
AUTHORS (s): Ofhani M		E: 14/05/2		
VERSION: 1.0			V DATE: 14/05/2022	
USE CASE INVENTORYITEMNAM E:	Create Inventory Item		USE CASE TYPE	
USE CASE ID:	8.1		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requirements List		System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which the administrator wishes to add a new Inventory Item to the system. The use case begins when the administrator adds the new Inventory Item as an option to be choose from when placing an order to the supplier. The administrator will add all of the pertinent information regarding the Inventory Item and save it to the business database.			
PRE-CONDITION:	The administrator must be logged onto the system.			
TRIGGER:	The use case is triggered when the administrator wants to add a new Inventory Item to the system.			
TYPICAL COURSE	Actor Action	Syste	m Response	
OF EVENTS:	Step 1: The administrator wants to add a new Inventory Item to the system.	to add Item w	2: The system requires the admin information about the Inventory vith the following attributes: the InventoryItem entity InventoryItemName QuntityonHand	
		•	Inventory Type entity InventoryTypeName	
	Step 3 : The administrator inputs the required details.	valida ensuri	I: The system captures and tes the information provided by ng the format is adhered to and juired text fields are left empty.	
		Invent record	5: The system reads from the toryltem entity to ensure that the being added does not match any g records. [ALT]	

Table 69 - 8.1 Create Inventory Item



ALTERNATE COURSES:	Step 6: The system saves the new inventory item information to the database with the following attributes: From the InventoryItem entity InventoryItemName QuntityonHand From Inventory Type entity InventoryTypeName Step 7: The system displays a success message on the screen to confirm the addition of the new Inventory Item. ALT Step 4: The system fails to validate the information provided because of missing fields or incorrectly entered information. Return to Step 3. ALT Step 5: An inventory item already exists on the database. Terminate this use case.	
CONCLUSION:	This use case concludes when a new Inventory Item is added.	
POST-CONDITION:	 The Inventory Item details are added to the database. The Inventory Item details are displayed on the system for selection by the administrator when adding an Inventory item. 	
BUSINESS RULES	Only the administrator can add a new Inventory Item.	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	



Table 70 - 8.2 Search Inventory Item

INVENTORY MANAGEMENT SUBSYSTEM				
AUTHORS (s): Ofhani M		E: 14/05/		
VERSION: 1.0			V DATE: 14/05/2022	
USE CASE INVENTORYITEMNAM E:	Search Inventory Item		USE CASE TYPE	
USE CASE ID:	8.2		Business Requirements:	
PRIORITY:	Medium		System Analysis:	
SOURCE:	ByteXpress Requirements List		System Design:	
PRIMARY BUSINESS	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which the administrator searches for Inventory Items on the system. The system responds by displaying the information relating to the search query.			
PRE-CONDITION:	The administrator must	be logge	ed onto the system.	
TRIGGER:	This use case is called when the administrator wants to search for an Inventory Item on the system.			
TYPICAL COURSE	Actor Action	Syste	m Response	
OF EVENTS:	Step 1 : The administrator wants to search for an Inventory Item.			
	Step 2 : The administrator inputs the search parameter.	follow	3: The system searches the ing attributes in the Inventory entity for a match: InventoryItemName QuntityonHand InventoryTypeName- linked by association from Inventory Type entity	
			4 : The system displays the search sinformation. [ALT]	
ALTERNATE COURSES:	 [ALT] Step 4: The search query entered does not match any existing instances of Inventory Items in the system database. Return to Step 3 Terminate use case 			
CONCLUSION:	This use case concludes when the information is displayed on the system.			
		The Inventory Item entity was searched for and an entry that corresponds to the search query or parameter entered.		
POST-CONDITION:	The Inventory Item entity was			

IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None
ASSUMPTIONS:	None
OPEN ISSUES:	None


Table 71 - 8.3 Update Inventory Item

INVENTORY MANAGEMENT SUBSYSTEM			
AUTHORS (s): Ofhani M	ungani DATE	: 14/05/2	2022
VERSION: 1.0	LAST	REVIEW	V DATE: 14/05/2022
USE CASE INVENTORYITEMNAM E:	Update Inventory Item		USE CASE TYPE
USE CASE ID:	8.3		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requirements List		System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:		e system itory Iten nen plac he pertir	ing an order to a supplier. The nent information regarding the
PRE-CONDITION:	The administrator must		
TRIGGER:		dministr	ator updates the Inventory Item
TYPICAL COURSE	Actor Action	Syste	m Response
OF EVENTS:	Step 1 : The administrator wants to update an Inventory Item existing on the system.	4.11 "	2: The system invokes Use Case Search Inventory Item".
	Step 3: The administrator selects the desired inventory item.	to upd Invent entity •	4: The system requires the admin ate more information about the ory Item in the Inventory Item such as: InventoryItemName QuntityonHand InventoryTypeName- linked by association from Inventory Type entity
	Step 5 : The administrator inputs the details required.	valida ensuri	5 : The system captures and tes the information provided by ng the format is adhered to and juired text fields are left empty.



		Step 7 : The system prompts the administrator to confirm the update of an Inventory Item with the details provided.
		Step 8: The system reads from the InventoryItem entity to ensure that the record being added does not match any existing records. [ALT]
	Step 9 : The administrator confirms the information provided. [ALT]	Step 10: The system saves the new inventory item information to the database with the following attributes:
		From the InventoryItem entity InventoryItemName QuntityonHand
		From Inventory Type entity InventoryTypeName
		Step 11: The system displays a success message on the screen to confirm the update of an Inventory Item.
ALTERNATE COURSES:	 ALI Step 6: The system fails to because of missing fields or income Return to Step 5. 	o validate the information provided orrectly entered information.
	 ALT Step 8: An inventory item a Terminate this use case 	5
	 ALT Step 9: The administrator of Inventory Item information. Return to Step 5. Terminate this use case. 	does not confirm the update of a new
CONCLUSION:	This use case concludes when	· · · · · · · · · · · · · · · · · · ·
POST-CONDITION:		Is are updated to the database.
BUSINESS RULES		an update an Inventory Item.
CONTRAINTS AND SPECIFICATIONS	None	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	

Table 72 - 8.4 Delete Inventory Item

	INVENTORY MANAGEM		YSTEM	
AUTHORS (s): Ofhani Mungani DATE: 14		ATE: 14/05/		
VERSION: 1.0		ST REVIE	EW DATE: 14/05/2022	
USE CASE INVENTORYITEMNAM E:	Delete Inventory Item		USE CASE TYPE	
USE CASE ID:	8.4		Business Requirements:	
PRIORITY:	Medium		System Analysis:	
SOURCE:	ByteXpress Requirements I	ist	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case narrative describes the process in which the administrator wishes to delete an Inventory Item from the system. The administrator will search for the required Inventory Item selected for deletion. The administrator will then confirm the deletion of the Inventory Item and the use case concludes when the system notifies the administrator of a successful deletion.			
PRE-CONDITION:	The administrator must be logged onto the system.			
TRIGGER:	This use case is called whe Inventory Item.			
TYPICAL COURSE	Actor Action	Syste	m Response	
OF EVENTS:	Step 1 : The administrator wishes to delete an Invento Item.	-	2: The system invokes Use Case Search Inventory Item".	
	Step 3: The administrator selects the desired inventor item.	y invent	4: The system retrieves the ory item information from the ase with the following attributes:	
		From •	the InventoryItem entity InventoryItemName QuntityonHand	
		From •	Inventory Type entity InventoryTypeName	
	Step 5: The administrator selects the delete option	admin	6: The system prompts the istrator to confirm the deletion of ventory Item selected.	
	[ALT]		-	





	Step 7: The administrator confirms the deletion of the Inventory Item from the system. [ALT]	Step 8: The system removes all of the details related of the selected Inventory Item from database. [ALT]		
		Step 9: The system informs the administrator of the successful deletion of the Inventory Item. [ALT]		
ALTERNATE COURSES:	 ALT Step 2: The system does not invoke the Search Inventory Type case. Go to Step 3 			
	ALT Step 5: The administrator Item.	no longer wants to delete an Inventory		
	Selects cancel button.Terminate this use case).		
	ALT Step 7: The administrator Item.	does not confirm the deletion of Inventory		
	Return to ALT Step 5			
	 ALT Step 8: An existing Inventory item has a supplier or product assigned to it. The system restricts the deletion of the Inventory Item. Go to ALT step 8. 			
	 ALT Step 9: The system informs the administrator of the unsuce deletion of the Inventory Item. Terminate this use case. 			
CONCLUSION:	This use case concludes when successful deletion of the Inver	the administrator is notified of the htory Item.		
POST-CONDITION:	 The system deletes all of the details related to the selected Inventory Item from the Inventory Item entity. The system removes all of the details related to the selected Inventory Item. 			
BUSINESS RULES	Only the administrator of	an delete an Inventory Item.		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None			
ASSUMPTIONS:	None			
OPEN ISSUES:	None			

Table 73 - 8.5 Create Inventory Type

	INVENTORY MANAGEMENT SUBSYSTEM			
AUTHORS (s): Ofhani M	AUTHORS (s): Ofhani Mungani DATE: 14/05/2022			
VERSION: 1.0	LAST REVIEW DATE: 30/08/2022			
USE CASE INVENTORYTYPENAM E:	Create Inventory Type		USE CASE TYPE	
USE CASE ID:	8.5		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requirements	s List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	add a new Inventory Type item. The use case begins Inventory Type as an opti- added on the system. The	e to the system s when the ad on to choose f e administrator	which the administrator wishes to a to be assigned to an Inventory ministrator adds the new rom when an Inventory item is will add all of the pertinent e and save it to the business	
PRE-CONDITION:	The administrator	must be logge	d onto the system.	
TRIGGER:	The use case is triggered Inventory Type to the syst		ninistrator wants to add a new	
TYPICAL COURSE	Actor Action	Syste	m Response	
OF EVENTS:	Step 1 : The administrator wants to add a new Inven Type to the system.	tory to add	2: The system requires the admin information about the Inventory n the InventoryType entity such InventoryTypeName	
	Step 3: The administrator inputs the required details [ALT]	s. validat ensuri	I: The system captures and tes the information provided by ng the format is adhered to and uired text fields are left empty.	
		Invent the rec any ex	5: The system reads from the toryType entity to ensure that cord being added does not match sisting records. [ALT]	
		inform	5: The system saves its ation to the InventoryType entity le following attributes. Id InventoryTypeName	

	Step 7: The system displays a success			
	message on the screen to confirm the			
	addition of the new inventory type.			
ALTERNATE	ALT Step 3: The administrator wishes not to procced to add a new			
COURSES:	inventory type.			
	Terminate Use Case			
	ALT Step 4: The system fails to validate the information provided			
	because of missing fields or incorrectly entered information.			
	Return to Step 3.			
	•			
	ALT Step 5: The inventory type already exists on the database.			
	 The system restricts the addition of the inventory type to prevent duplicate values. 			
	duplicate values			
	Terminate this use case.			
CONCLUSION:	This use case concludes when a new inventory type is added.			
POST-CONDITION:	 The inventory type details are added to the database. 			
	 The inventory type details are displayed on the system for 			
	selection by the administrator when adding an Inventory item.			
BUSINESS RULES	 Only the administrator can add a new inventory type. 			
IMPLEMENTATION	None			
CONTRAINTS AND				
SPECIFICATIONS ASSUMPTIONS:	None			
OPEN ISSUES:				
OPEN 1550E5.	None			

Table 74 - 8.6 Search Inventory Type

	INVENTORY MANAGEME		YSTEM
AUTHORS (s): Ofhani Mungani DATE: 14/05/2			
VERSION: 1.0		ST REVIE	N DATE: 30/08/2022
USE CASE INVENTORYTYPENAM E:	Search Inventory Type		USE CASE TYPE
USE CASE ID:	8.6		Business Requirements:
PRIORITY:	Medium		System Analysis:
SOURCE:	ByteXpress Requirements Lis	st	System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:		tem. The	which the administrator searches system responds by displaying the .
PRE-CONDITION:	The administrator must	st be logge	ed onto the system.
TRIGGER:	This use case is called when inventory type on the system		istrator wants to search for an
TYPICAL COURSE	Actor Action	Syste	m Response
OF EVENTS:	Step 1 : The administrator wants to search for an inventory type.		
	Step 2 : The administrator inputs the search parameter.	retriev	3: The system searches and ves the following attributes in the toryType entity for a match: InventoryTypeName
			4: The system displays the search sinformation. [ALT]
ALTERNATE COURSES:	[ALT] Step 4: The search qu instances of Inventory Types • Return to Step 3 Terminate use case		d does not match any existing tem database.
CONCLUSION:	This use case concludes whe system.	en the info	mation is displayed on the
POST-CONDITION:	The InventoryType entity was corresponds to the search qu		
BUSINESS RULES	None		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None		
ASSUMPTIONS:	None		



INVENTORY MANAGEMENT SUBSYSTEM			
AUTHORS (s): Ofhani M	ungani DATE	: 14/05/2022	
VERSION: 1.0	LAST	REVIEW DATE: 30/08/2022	
USE CASE INVENTORYTYPENAM E:	Update Inventory Type	USE CASE TYPE	
USE CASE ID:	8.7	Business Requirements:	
PRIORITY:	High	System Analysis:	
SOURCE:	ByteXpress Requirements List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	update an inventory type to the administrator updates inventory choose from when creating an i	ocess in which the administrator wishes to system. The use case begins when the v type as an option for the administrator to inventory item. The administrator will nation regarding the inventory type and	
PRE-CONDITION:	The administrator must be logged onto the system.		
TRIGGER:		administrator updates the Inventory Type	
TYPICAL COURSE	Actor Action	System Response	
OF EVENTS:	Step 1 : The administrator wants to update an inventory type existing on the system.	Step 2: The system invokes Use Case 4.11 "Search Inventory Type".	
	Step 3: The administrator selects the desired inventory type.	 Step 4: The system requires the admin to update more information about the inventory type in the InventoryType entity such as: InventoryTypeName 	
	Step 5: The administrator inputs the details required. [ALT]	Step 6: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty.[ALT]Step 7: The system prompts the	
		administrator to confirm the update of	

Table 75 - 8.7 Update Inventory Type



an inventory type with the details

provided.

ALTERNATE COURSES:	inventory type. Terminate Use Case ALT Step 6: The system fails to because of missing fields or inco • Return to Step 5. ALT Step 8: The administrator Inventory Type information. • Return to Step 4. • Terminate this use case ALT Step 9: The inventory type	does not confirm the update of a new
	Terminate this use case	
CONCLUSION:	This use case concludes when	an inventory type is updated.
POST-CONDITION:		Is are updated to the database.
BUSINESS RULES	Only the administrator ca	an update an Inventory Type.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 None 	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	



Table 76 - 8.8 Delete Inventory Type

	INVENTORY MANAGEMEN	T SUBSY	STEM	
AUTHORS (s): Ofhani Mungani DATE: 14/05/202				
VERSION: 1.0		REVIEW	/ DATE: 30/08/2022	
USE CASE INVENTORYTYPENAM E:	Delete Inventory Type		USE CASE TYPE	
USE CASE ID:	8.8		Business Requirements:	
PRIORITY:	Medium		System Analysis:	
SOURCE:	ByteXpress Requirements List		System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case narrative describes the process in which the administrator wishes to delete an inventory type from the system. The administrator will search for the required inventory type selected for deletion. The administrator will then confirm the deletion of the Inventory Type and the use case concludes when the system notifies the administrator of a successful deletion.			
PRE-CONDITION:	The administrator must be logged onto the system.			
TRIGGER:	This use case is called when th Inventory Type.			
TYPICAL COURSE	Actor Action	Systen	n Response	
OF EVENTS:	Step 1: The administrator wishes to delete an inventory type.	Step 2 : 4.11 "S	The system invokes Use Case search Inventory Type".	
	Step 3: The administrator selects the desired inventory type	invento databa	: The system retrieves the bry type information from the se with the following attributes: ne InventoryType entity	
	InventoryTypeName			
	Step 5: The administrator selects the delete option [ALT]	adminis	: The system prompts the strator to confirm the deletion of entory type selected.	
	Step 7: The administrator confirms the deletion of the Inventory Type from the system. [ALT]	details	The system removes all of the related of the selected inventory om database. [ALT]	



	Step 9: The system informs the administrator of the successful deletion			
	of the inventory type. [ALT]			
ALTERNATE COURSES:	ALT Step 5 : The administrator no longer wants to delete an Inventory type.			
	Selects cancel button.			
	Terminate this use case			
	ALT Step 7: The administrator does not confirm the deletion of the			
	Inventory Type.			
	Return to ALT Step 5			
	ALT Step 8: An existing Inventory item has the Inventory Type assigned to it.			
	• The system restricts the deletion of the Inventory Type.			
	Go to ALT step 9.			
	ALT Step 9: The system informs the administrator of the unsuccessful deletion of the inventory type.			
	Terminate use case This use case a substant the extension patified of the			
CONCLUSION:	This use case concludes when the administrator is notified of the successful deletion of the inventory type.			
POST-CONDITION:	The system deletes all of the details related to the selected			
	inventory type from the InventoryType entity .			
	 The system removes all of the details related to the selected inventory type 			
BUSINESS RULES	Only the administrator can delete an inventory type.			
IMPLEMENTATION	None			
CONTRAINTS AND				
SPECIFICATIONS				
ASSUMPTIONS:	None			
OPEN ISSUES:				



Table 77 - 8.9 Add Write-Off Reason

	WRITE-OFF REASON	I SUBSYSTEM			
AUTHORS (s): Thenjiwe Nts	ve Ntsonda DATE: 12/05/2022				
VERSION: 1.0	LA	ST REVIEW D	ATE: 12/05/2022		
USE CASE NAME:	Add Write-Off Reason		USE CASE TYPE		
USE CASE ID:	8.9		Business Requirements:		
PRIORITY:	High		System Analysis:	\boxtimes	
SOURCE:	ByteXpress Requirements List		System Design:		
PRIMARY BUSINESS	Administrator				
ACTOR					
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	• None				
OTHER INTERESTED STAKEHOLDERS:	• None				
DESCRIPTION:	This use case describes the process in which the administrator wishes to add a new write-off reason to the system. The use case begins when the administrator adds the new write-off reason on the system. The administrator will add all of the pertinent information regarding the write-off reason and save it to the business database.				
PRE-CONDITION:	The administrator mu	ist be logged o	onto the system.		
TRIGGER:	The use case is triggered when reason to the system.	n the adminis	trator wants to add a new wri	te-off	
TYPICAL COURSE	Actor Action	System	n Response		
OF EVENTS:	Step 1 : The administrator war to add a new write-off reason the system.	nts Step 2: The system requires the admin t			
	Step 3 : The administrator input the required details.	the inf format	The system captures and vali ormation provided by ensurin is adhered to and no required ire left empty. [ALT]	g the	
		Step 5 : The system requests the administrator to confirm the details of a new write-off reason.			
	Step 6 : The administrator confirms the information provided. [ALT]	Step 7: The system saves its information t the Write-off reason table in the database [ALT]			
		messag additio	The system displays a succes ge on the screen to confirm th n of the new write-off reason	e	
ALTERNATE COURSES:	 ALT Step 4: The system fails to missing fields or incorrectly er Return to Step 3. 		-	e of	



	 ALT Step 6: The administrator does not confirm the addition of the new write-off reason. Return to Step 3 Terminate this use case.
	 ALT Step 7: The added write-off reason matches an existing record on the system The system restricts the addition of the write-off reason to prevent duplicate values.
CONCLUSION:	This use case concludes when a new write-off reason is added.
POST-CONDITION:	• The write-off reason details are added to the database.
BUSINESS RULES	Only the administrator can add a new write-off reason.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None
ASSUMPTIONS:	None
OPEN ISSUES:	None

Table 78 - 8.10 Search Write-Off Reason

WRITE-OFF REASON SUBSYSTEM				
AUTHORS (s): Thenjiwe Ntsonda		DATE: 12/05/2022		
VERSION: 1.0	LA	ST REVIEW D	ATE: 12/05/2022	
USE CASE NAME:	Search Write-Off Reason		USE CASE TYPE	
USE CASE ID:	8.10		Business Requirements:	
PRIORITY:	Medium		System Analysis:	\boxtimes
SOURCE:	ByteXpress Requirements List		System Design:	
PRIMARY BUSINESS	Administrator		· · ·	
ACTOR				
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	• None			
DESCRIPTION:	This use case describes the pro			or
	write-off reasons on the system	•	m responds by displaying the	
	information relating to the search query.			
PRE-CONDITION:	The administrator must be logged onto the system.			
TRIGGER:	This use case is called when the administrator wants to search for a write-off			e-off
	reason on the system.	6	. .	
TYPICAL COURSE	Actor Action	-	n Response	
OF EVENTS:	Step 1: The administrator wan to search for a write-off reaso	-	: The system requests the istrator to enter a search quer	vor
	to scaren for a write on reaso	param		y Ol
	Step 3: The administrator inpu	· ·	: The system searches and ret	rieves
	the search parameter.	-	lowing attributes in the write-	
		reasor	table for a match:	
		•	Name	
		-	: The system displays the sear	ch
			information. [ALT]	
ALTERNATE COURSES:	[ALT] Step 5: The search query			inces
	of write-off reasons in the syst • Return to Step 3			
	Terminate use case			
CONCLUSION:	This use case concludes when	the informat	ion is displayed on the system	
POST-CONDITION:	The Write-off reason table was searched for and an entry that corresponds to			
	the search query or parameter entered.			
BUSINESS RULES	None			
IMPLEMENTATION	None			
CONTRAINTS AND				
SPECIFICATIONS				
ASSUMPTIONS:	None			
OPEN ISSUES:	None			



Table 79 - 8.11 Update Write-Off Reason

	WRITE-OFF REASON	I SUBSYSTEM		
AUTHORS (s): Thenjiwe Nts	onda D <i>i</i>	ATE: 12/05/20	022	
VERSION: 1.0	LA	ST REVIEW D	ATE: 12/05/2022	
USE CASE NAME:	Update Write-Off Reason		USE CASE TYPE	
USE CASE ID:	8.11		Business Requirements:	
PRIORITY:	High		System Analysis:	\boxtimes
SOURCE:	ByteXpress Requirements List		System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	• None			
DESCRIPTION:	This use case describes the process in which the administrator wishes to update a write-off reason on the system. The use case begins when the administrator updates all of the pertinent information regarding the write-off reason and save it to the system.			rator
PRE-CONDITION:	The administrator mu	ist be logged o	onto the system.	
TRIGGER:	The use is triggered when the administrator wishes to update the write-off reason.			off
TYPICAL COURSE	Actor Action	System	n Response	
OF EVENTS:	Step 1 : The administrator war to update a write-off reason existing on the system.	•	The system invokes Use Case Write-off reason".	4.11
		update	The system requires the adm more information about the son in the Write-Off Reason t S: Name	write-
	Step 4 : The administrator input the details required.	the inf format fields a Step 6 admini	The system captures and vali ormation provided by ensurin is adhered to and no required ire left empty. [ALT] The system requests the strator to confirm the update off reason with the details pro	g the d text of a
	Step 7 : The administrator confirms the information provided. [ALT]	Step 8 the wr	The system saves its informative off reason table in the data	tion to abase.
		messag	: The system displays a succes ge on the screen to confirm th e of a write-off reason.	

ALTERNATE COURSES:	 ALT Step 5: The system fails to validate the information provided because of missing fields or incorrectly entered information. Return to Step 4. ALT Step 7: The administrator does not confirm the update of a new write-off reason information. Return to Step 4. Terminate this use case.
CONCLUSION:	This use case concludes when a write-off reason is updated.
POST-CONDITION:	• The write-off reason details are updated to the database.
BUSINESS RULES	Only the administrator can update a write-off reason.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None
ASSUMPTIONS:	None
OPEN ISSUES:	None

Table 80 - 8.12 Delete Write-Off Reason

WRITE-OFF REASON SUBSYSTEM				
AUTHORS (s): Thenjiwe Ntsonda		DATE: 12/05/2022		
VERSION: 1.0	LAS	LAST REVIEW DATE: 12/05/2022		
USE CASE NAME:	Delete Write-Off Reason		USE CASE TYPE	
USE CASE ID:	8.12		Business Requirements:	
PRIORITY:	Medium		System Analysis:	\mathbf{X}
SOURCE:	ByteXpress Requirements List		System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	• None			
DESCRIPTION:	This use case narrative describes the process in which the administrator wishes to delete a write-off reason from the system. The administrator will search for the required write-off reason selected for deletion. The administrator will then confirm the deletion of the write-off reason and the use case concludes when the system notifies the administrator of a successful deletion.			ch for ll then
PRE-CONDITION:	The administrator mus	t be logged	onto the system.	
TRIGGER:	This use case is called when the administrator wishes to delete a write-off reason.			ff
TYPICAL COURSE	Actor Action	Syster	n Response	
OF EVENTS:	Step 1: The administrator wish	-	: The system invokes Use Case	e 4.11
	to delete a write-off reason.		h Write-off reason".	
		admin	: The system requests the istrator to confirm the deletio ite-off reason selected.	n of
	Step 4: The administrator		: The system removes all of th	е
	confirms the deletion of the write-off reason from the syste [ALT]		related of the selected write- from database. [ALT]	off
		Step 6	: The system informs the	
		admin	istrator of the successful delet ite-off reason. [ALT]	ion of
ALTERNATE COURSES:	 [ALT] Step 4: The administrator does not confirm the deletion of the write-off reason. Terminate this use case. [ALT] Step 5: An existing record of an inventory item being written off has the write-off reason assigned to it. The system restricts the deletion of the write-off reason. Go to ALT step 6. 			s the
	of the write-off reason.			eletion



CONCLUSION:	This use case concludes when the administrator is notified of the successful deletion of the write-off reason.		
POST-CONDITION:	 The system deletes all of the details related to the selected write-off reason from the Write-Off Reason table. The system removes all of the details related to the selected write-off reason. 		
BUSINESS RULES	 Only the administrator can delete a write-off reason. 		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		

Table 81 -8.13 Write-Off Inventory

INVENTORY MANAGEMENT SUBSYSTEM			
AUTHORS (s): Ofhani M	ungani DATE:	06/06/2	022
VERSION: 1.0	LAST	REVIEW	/ DATE: 06/06/2022
USE CASE INVENTORYITEMNAM E:	Write-Off Inventory		USE CASE TYPE
USE CASE ID:	8.13		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requirements List		System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	• None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes the process in which the administrator wishes to write off an Inventory Item out of the system. The administrator will add all of the pertinent information regarding the Inventory Item write-off and save it to the business database.		
PRE-CONDITION:	The administrator must b	e logged	d onto the system.
TRIGGER:	The use case is triggered when Inventory Item on the system.	the adm	inistrator wants to write-off an
TYPICAL COURSE	Actor Action	Systen	n Response
OF EVENTS:	Step 1 : The administrator wants to write-off an Inventory Item out of the system.	Step 2 to add	The system requires the admin the write-off information for the bry Item with the following
			ne InventoryWriteOff entity writeOffQuantity
			ne InventoryItem entity InventoryItemName
		From V	VriteOffReason entity Name
	Step 3 : The administrator inputs the required details.	validate ensurir	: The system captures and es the information provided by ng the format is adhered to and uired text fields are left empty.
			: The system prompts the strator to confirm the write-off

	Step 6: The administrator confirms the information provided. [ALT]	Step 7: The system reads from the InventoryItem entity to check if QuantityOnHand is less than the writeOffQuantity from the InventoryWriteOff entity. [ALT]Step 8: The system increases the QuantityOnHand attribute in the InventoryItem entity and saves the 	
ALTERNATE COURSES:	 because of missing fields or inco Return to Step 3. 	Inventory Item write-off. validate the information provided prrectly entered information.	
	 ALT Step 7: QuantityOnHand is less than the writeOffQuantity Display write-off error message Return to Step 3. 		
CONCLUSION:		an Inventory Item is written off.	
POST-CONDITION:	 This use case concludes when an Inventory Item is written off. The write-off Inventory Item details are added to the database. 		
BUSINESS RULES	Only the administrator can write off an Inventory Item.		
IMPLEMENTATION CONTRAINTS AND	None		
SPECIFICATIONS			
ASSUMPTIONS:	None		
OPEN ISSUES:	None		

Table 82 - 8.14 Write-Off product



INVENTORY MANAGEMENT SUBSYSTEM			
AUTHORS (s): Ofhani M		: 06/06/2022	
VERSION: 1.0	LAST	REVIEV	V DATE: 06/06/2022
USE CASE INVENTORYITEMNAM E:	Write-Off Product		USE CASE TYPE
USE CASE ID:	8.14		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requirements List		System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes the process in which the administrator wishes to write off a product out of the system. The administrator will add all of the pertinent information regarding the product write-off and save it to the business database.		
PRE-CONDITION:	The administrator must b	e logge	d onto the system.
TRIGGER:	The use case is triggered when product on the system.	the adm	ninistrator wants to write-off a
TYPICAL COURSE	Actor Action	Syste	m Response
OF EVENTS:	Step 1: The administrator wants to write-off a product out of the system. Step 3: The administrator	Step 2 to add produce From 1 From 1 From 1 Step 4	2: The system requires the admin the write-off information for the ct with the following attributes: the ProductWriteOff entity writeOffQuantity the Product entity Name WriteOffReason entity Name
	inputs the required details.	ensuri no req [ALT] Step 5	tes the information provided by ng the format is adhered to and uired text fields are left empty. The system prompts the istrator to confirm the write-off



	Step 6: The administrator confirms the information provided. [ALT]	Step 7: The system reads from the Product entity to check if QuantityOnHand is less than the writeOffQuantity from the ProductWriteOff entity. [ALT]Step 8: The system increases the QuantityOnHand attribute in the Product entity and saves the new 	
		Name	
		Step 9: The system displays a success message on the screen to confirm the product write-off.	
ALTERNATE COURSES:	 ALT Step 4: The system fails to validate the information provided because of missing fields or incorrectly entered information. Return to Step 3. 		
	ALT STEP 6: The administrator does not confirm the addition of the new product.		
	Return to Step 3		
	 ALT Step 7: QuantityOnHand is less than the WriteOffQuantity Display write-off error message Return to Step 3. 		
CONCLUSION:	This use case concludes when	a product is written off.	
POST-CONDITION:	The write-off product details are added to the database.		
BUSINESS RULES	Only the administrator can write off a product.		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		

Table 83 -8.15 Convert Inventory to Product

INVENTORY MANAGEMENT SUBSYSTEM				
AUTHORS (s): Kyle van	Eeden	DATE:	06/06/2022	
VERSION: 1.1		LAST REVIEW DATE: 09/06/2022		
USE CASE NAME:	Convert Inventory to Pro	oduct	USE CASE TYPE	
USE CASE ID:	8.15		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	 Inventory Manag 	jer or Ac	ministrator	
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	The use case begins when the inventory manager or administrator wishes to produce finished products using the available inventory items on hand. The system will prompt the administrator or inventory manager to select a specific product and the quantity to be produced. The system will update the quantity of various inventory items used to produce the desired amount of products specified and save the updated quantities to the database. This use case concludes when the system displays a production success confirmation message.			
PRE-CONDITION:	The product to be produ	ced mus	st be defined on the system.	
	The product to be produ	ced mus	st have been configured for production.	
TRIGGER:	This use case is called when the system administrator or inventory manager wishes to produce new finished products on the system.			
TYPICAL COURSE	Actor Action		System Response	
	Step 1: The system administrator or inventor manager wishes to prod finished products on the system.	luce	Step 2: The system retrieves all the products defined on the system from the Product entity and prompts the system administrator or inventory manager to capture the following details for production:	



	ProductName
	ProductionQuantity
Step 3: The system administrator or inventory manager searches for the name of the desired product they wish to produce.	Step 4: The system displays the names of all products that have matched the search query specified.
[ALT]	
Step 5: The system administrator or inventory manager selects the product they wish to produce on the system.	 Step 6: The system captures the following details for the selected product: ProductID ProductName
Step 7: The system administrator or inventory manager enters the quantity of the product they wish to produce and selects the option to produce the finished product.	 Step 8: The system validates the following details that have been captured: ProductName ProductionQuantity [ALT]
	Step 9 : The system validates that there are sufficient quantities of all required inventory items as per the product's production configuration details stored in the ProductInventoryItem entity:
	 ProductID InventoryItemID InventoryItemQuantity
	Step 10 : The system saves the quantity of the specific product and all inventory items used for the production process in the following entities:
	In the Product entity: QuantityOnHand



	In the InventoryItem entity:		
	QuantityOnHand		
	Step 11 : The system displays an alert confirming that the production operation was successful.		
ALTERNATE COURSES:	ALT Step 3: The administrator or inventory manager selects the option to cancel the production operation:		
	The use case is terminated.		
	ALT Step 8: The system detects that all required details have not been captured by the administrator or inventory manager:		
	 The system displays a validation error message to point out which fields have raised exceptions. Return to Step 3. 		
	ALT Step 9: The system detects that the desired quantity of the product cannot be produced given the production requirements configured and the available quantity of each required inventory item:		
	 The system informs the administrator or inventory manager that the desired quantity of the product requested cannot be produced. Return to Step 2. 		
CONCLUSION:	This use case concludes when the system displays an alert confirming that the finished products produced have been captured successfully.		
POST-CONDITION:	The quantity on hand of the product produced and its required inventories is updated in the Product and InventoryItem entities, respectively.		
BUSINESS RULES	 Only the system administrator and inventory manager roles should be allowed to produce finished products on the system. The amount of finished products which can be produced at any time should be constrained by the quantity of required inventory items available as per what is stored in the system's database. 		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The system should not produce the quantity of the final products requested if there are insufficient inventory items available as per the database. The quantity of finished products to be produced should always at least be 1. 		
ASSUMPTIONS:	The product's production configuration has already been set up.		
OPEN ISSUES:	None		



Table 84 - 8.16 Search Procured Inventory

INVENTORY SUBSYSTEM				
AUTHORS (s): Thenjiwe	Ntsonda DATE	E: 08/06/2	: 08/06/2022	
VERSION: 1.0	LAST	REVIE	N DATE: 08/06/2022	
USE CASE NAME:	Search Procured Inventory		USE CASE TYPE	
USE CASE ID:	8.16		Business Requirements:	
PRIORITY:	Medium		System Analysis:	
SOURCE:	ByteXpress Requirements List		System Design:	
PRIMARY BUSINESS	Administrator		· · · · · ·	
ACTOR PRIMARY SYSTEM	None			
ACTOR				
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:		ystem. T	here the administrator searches he system responds by displaying Jery.	
PRE-CONDITION:	The administrator must be logg			
TRIGGER:	This use case is called when the procured inventory on the systemeters	ne admin		
TYPICAL COURSE	Actor Action		m Response	
OF EVENTS:	Step 1: The administrator wants to search for procured inventory. Step 2: The administrator enters the search parameter.		3: The system searches using the ing attributes in the	
		Inven • •	toryProcured table: CompanyName InventoryItemName QuantityReceived DateLogged 4: The system displays the search	
		-	s [ALT]	
ALTERNATE COURSES:	 ALT Step 4: The search query entered does not match any existing instances of procured inventory in the database. Return to Step 2 or terminate the use case 			
CONCLUSION:	This use case concludes when the desired procured inventory details are displayed on the system.			
POST-CONDITION:	The InventoryProcured entity was searched for and an entry that corresponds to the search query or parameter entered.			
BUSINESS RULES	None			
IMPLEMENTATION	• None			
CONTRAINTS AND SPECIFICATIONS				
	None			



INVENTORY SUBSYSTEM			
AUTHORS (s): Thenjiwe		: 08/06/2022	
VERSION: 1.0		REVIEW DATE: 08/06/2022	
USE CASE NAME:	View Procured Inventory Details		
USE CASE ID:	8.17	Business Requirements:	
PRIORITY:	Medium	System Analysis:	
SOURCE:	ByteXpress Requirements List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes the process in which the administrator wishes to view the details of the inventory received from a supplier. The use case begins when the administrator wishes to view the details of the inventory received from a supplier on the system. The administrator will select the relevant inventory item and view its details.		
PRE-CONDITION:	The administrator must	be logged onto the system.	
TRIGGER:		the administrator wishes to view the	
	details of the inventory received		
TYPICAL COURSE	Actor Action	System Response	
OF EVENTS:	Step 1 : The administrator wants to view the details of inventory item(s) received from a supplier.	Step 2: The system invokes 18.5 Search Procured Inventory	
	Step 3 : The administrator selects the desired procured inventory item.	Step 4: The system retrieves and displays the procured inventory item details which have the following attributes:	
		From the InventoryProcured Table InvoiceNo QuantityReceived 	
		From the Supplier Table CompanyName 	
		From the InventoryItem Table InventoryItemName [ALT]	
ALTERNATE COURSES:	 ALT Step 4: The administrator wants to return to the previous page The administrator clicks on the return button The system redirects the administrator to the previous page. 		

Table 85 -8.17 View Procured Inventory Details



CONCLUSION:	This use case concludes when the inventory item details are displayed on the system.
POST-CONDITION:	 The selected inventory item details are displayed on the system.
BUSINESS RULES	 Only the administrator can view the procured inventory item details.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None
ASSUMPTIONS:	None
OPEN ISSUES:	None



Table 86 -8.18 Capture Procured Inventory

INVENTORY SUBSYSTEM				
AUTHORS (s): Thenjiwe	Ntsonda	DATE	: 07/18/2022	
VERSION: 1.0 LAS		LAST	T REVIEW DATE: 07/18/2022	
USE CASE NAME:	Capture Returned Produ	ict	USE CASE TYPE	
USE CASE ID:	8.18		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremen	its List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator or	Sales A	ssistant	
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case begins when the administrator or sales assistant wishes to capture products which have been returned by customers and resellers on the system. The administrator or sales assistant begins by selecting the order they wish to log the return for and adding the relevant information regarding its return. The system will then increment the product quantity with the quantity of products returned and change the order status to "Returned".			
PRE-CONDITION:	 The administrator or sales assistant must be logged in. The order status of the order must be "Dispatched" or "Delivered" 			
TRIGGER:	This use case is called when the administrator or sales assistant wishes to capture products which have been returned by customers and resellers on the system.			
TYPICAL COURSE	Actor Action		System Response	
	Step 1 : The administrate sales assistant wishes to return on the system.		Step 2: The system requires the following information from the ReturnedProduct entity with the following attributes:	
			QuantityReceived From the Product entity	



		Name
		From the ReturnReason entity ReturnReasonName
	Step 3: The administrator or sales assistant provides the relevant information. [ALT]	Step 4: The system requires the administrator to confirm the entered details. Step 5: The system captures and
		validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT]
		Step 6: The system increases the QuantityOnHand value in the Product entity with the value received from the QuantityReceived attribute in the ReturnedProduct entity.
		The system then updates the OrderStatus attribute in the Order entity to "Includes Returned Product(s)".
		Step 7: The system saves its information to the ReturnedProduct entity with the following attributes:
		 ReturnedProductId QuantityReceived ProductName DateLogged ReturnReasonName
		Step 8: The system displays a success message to the administrator or sales assistant.
ALTERNATE COURSES:	 ALT Step 3: The administrator or sales assistant does not wish to log the return of a product anymore Terminate use case. 	
	ALT Step 5A: The system fails to validate the information provided because of missing fields or incorrectly entered information.	
	Return to Step 3.	



	 ALT Step 5B: The product selected for return was not in the selected order Display error message ALT Step 5B: The quantity entered is more than what was ordered Display error message 	
CONCLUSION:	The system displays an alert which confirms that the return has been logged onto the system successfully.	
POST-CONDITION:	The order status is changed to "Includes Returned Product(s)".", the product QuantityOnHand is increased, and the returned product's details are saved to the ReturnedProduct entity in the database.	
BUSINESS RULES	 Only products which have been received by the Natuurlik can be logged for a return. Only the administrator and sales assistant have access to this function. 	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None	
ASSUMPTIONS:	 The administrator and sales assistant have a stable internet connection. 	
OPEN ISSUES:	None	

Table 87- 8.19 Capture Returned Product

INVENTORY SUBSYSTEM			
AUTHORS (s): Thenjiwe Ntsonda DATE: 07/18/2022		2022	
VERSION: 1.0			N DATE: 07/18/2022
USE CASE NAME:	Capture Returned Product		USE CASE TYPE
USE CASE ID:	8.16		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requirements List		System Design:
PRIMARY BUSINESS ACTOR	Administrator or Sales		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case begins when the administrator or sales assistant wishes to capture products which have been returned by customers and resellers on the system. The administrator or sales assistant begins by selecting the order they wish to log the return for and adding the relevant information regarding its return. The system will then increment the product quantity with the quantity of products returned and change the order status to "Returned".		
PRE-CONDITION:	 The administrator or sales assistant must be logged in. The order status of the order must be "Dispatched" 		••
TRIGGER:	This use case is called when the administrator or sales assistant wishes to capture products which have been returned by customers and resellers on the system.		
TYPICAL COURSE	Actor Action System Response		
	Step 1 : The administrator or sales assistant wishes to log a return on the system.	Step 2 follow Retur follow • From	2: The system requires the ing information from the nedProduct entity with the ing attributes: QuantityReceived the Product entity Name the ReturnReason entity ReturnReasonName
	Step 3: The administrator or sales assistant provides the relevant information. [ALT]	admin details Step valida ensur	 4: The system requires the istrator to confirm the entered s. 5: The system captures and tes the information provided by ing the format is adhered to and quired text fields are left empty.

ALTERNATE COURSES:	Step 6: The system increases the QuantityOnHand value in the Product entity with the value received from the QuantityReceived attribute in the ReturnedProduct entity. The system then updates the OrderStatus attribute in the Order entity to "Includes Returned Product(s)". Step 7: The system saves its information to the ReturnedProduct entity with the following attributes: ReturnedProductId QuantityReceived ProductName DateLogged ReturnedProduct anymore Terminate use case. ALT Step 3: The administrator or sales assistant. ALT Step 5A: The system fails to validate the information provided because of missing fields or incorrectly entered information. Return to Step 3. ALT Step 5B: The product selected for return was not in the selected order Display error message	
	 ALT Step 5B: The quantity entered is more than what was ordered Display error message 	
CONCLUSION:	The system displays an alert which confirms that the return has been logged onto the system successfully.	
POST-CONDITION:	The order status is changed to "Includes Returned Product(s)".", the product QuantityOnHand is increased, and the returned product's details are saved to the ReturnedProduct entity in the database.	
BUSINESS RULES	 Only products which have been received by the Natuurlik can be logged for a return. Only the administrator and sales assistant have access to this function. 	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None	
ASSUMPTIONS:	 The administrator and sales assistant have a stable internet connection. 	
OPEN ISSUES:	None	



Table 88- 8.20 Package Order

INVENTORY MANAGEMENT SUBSYSTEM				
AUTHORS (s): Kyle van	Eeden	DATE: 13/07/2	2022	
VERSION: 1.1		LAST REVIEW DATE: 26/07/2022		
USE CASE NAME:	Package Order		USE CASE TYPE	
USE CASE ID:	8.20		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator/ Sa	ales Assistant		
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	 None This use case begins when an Administrator or Sales Assistant wishes to capture an order's products which has been prepared before shipping the parcel off to the couriers. The system user will request the system to package products for a particular order and the system will display details on all products which have been packaged at the time of the request. The user can then request the system to package additional products required. The system will then prompt the administrator or sales assistant to select a product from all options made available and to provide the quantity which has been packaged. After providing the required packaging details, the system will validate the provided details to ensure the selected product and its quantity specified is correct as per what is stored in the OrderLine entity for the relevant order. The system then determines whether the order has been placed by a reseller or customer. 			
	there are sufficient level and if the desired quant	s of inventory av ity can be packa	e system will also validate whether vailable of the requested product, ged, the system will deduct the tity on hand of the product and	



	save the updated quantity to the Product entity. The system will then add the packaged order details to the OrderProduct entity.		
	The use case concludes with the system displaying a message to confirm that the package activity has been completed successfully.		
PRE-CONDITION:	 The user requesting to package an order must be logged into an account which has either the Admin or Sales Assistant role assigned. At least one product has to exist on the system to perform this use case. At least one order must have been placed in order to perform this use case. 		
TRIGGER:		system administrator or sales assistant have been packaged for a particular	
TYPICAL COURSE	Actor Action Step 1: The system Administrator or Sales Assistant wishes to capture a product which have been packaged for a particular order on the system. Step 3: The user selects the	System Response Step 2: The system will retrieve the following details for all products which have been packaged for the requested order from the OrderProduct entity: • OrderNumber • ProductId • ProductQuantity • TransactionDate The following is retrieved from the Product entity for each product packaged: • ProductName The system will then display all the package order details retrieved with an option provided to package an additional product. Step 4: The system retrieves the	
	Step 3: The user selects the option to capture an additional	Step 4: The system retrieves the following details from the entities listed below:	



product which has been packaged for the order.	From the Product table:
	ProductName
	From the Order table:
	 OrderId (Order Reference Number of the requested order)
	The system then prompts the user to enter the following required details:
	ProductNameProductQuantity
Step 5: The user selects a product and enters the quantity which has been packaged.	Step 6: The system validates the captured packaging details based on the validation requirements of the OrderProduct table.
[ALT]	The system also validates that the product requested for packaging is associated with the current order and if the correct quantity has been specified by retrieving the following details:
	From the OrderLine entity: • OrderID • ProductID • Count
	[ALT]
	Step 7: The system retrieves the following details from the Order entity for the requested order to determine if it is a reseller order:
	 IsResellerOrder


	[ALT]
	Step 8: If the order has been placed by a reseller, the system will then determine if there is sufficient stock on hand to package the specified quantity of the requested product.
	The following details are retrieved from the Product table to perform the check: • QuantityOnHand
	The system decreases the quantity on hand value of the selected product for packaging by subtracting the packaged product quantity from the quantity on hand value currently stored.
	The system will save the updated quantity on hand value for the particular product using the following attribute in the Product entity:
	 QuantityOnHand [ALT]
	Step 9 : The system retrieves the user's claims details from the User entity to retrieve the following details for the user who has effected the packaging operation:
	FirstName
	The system adds the following captured package order transaction details to the OrderProduct table:
	 OrderId ProductId ProductQuantity CreatedDate PackagedBy



	Step 10: The system displays a		
	confirmation alert which informs the		
	system user that the package order		
	details were created successfully.		
ALTERNATE COURSES:	ALT Step 5: The user does not wish to capture products packaged for an order anymore:		
	The use case is terminated.		
	ALT Step 6 a: The captured details is incomplete or incorrect and the		
	system displays a validation error message informing the user of what		
	details were incorrect or incomplete:		
	Return to Step 5.		
	ALT Step 6 b: The product requested for packaging is not associated		
	with the current order's stored order line details:		
	 The validation error details is displayed to the system user. 		
	 The valuation error details is displayed to the system user. The use case concludes. 		
	ALT Step 6 c: The quantity of the product requested to be packaged is		
	not correct according to what is stored for the order in the OrderLine		
	entity:		
	The validation error details is displayed to the system user		
	 The validation error details is displayed to the system user. The use case concludes. 		
	ALT Step 7 : The order has been placed by a customer:		
	Proceed to Step 9.		
	ALT Step 8: The system detects that there are insufficient stock of the		
	selected product available on hand to complete the packaging activity:		
	• The validation error details is displayed to the system user.		
	The use case concludes.		
CONCLUSION:	This use case concludes when the system displays a confirmation		
	notification which informs the user that the selected product has been packaged successfully for the order.		
	packaged successfully for the order.		
POST-CONDITION:	The new transactional record's details is added to the OrderProduct entity.		
	For a reseller order which has been packaged, the quantity on hand		
	value of the product which has been packaged will be updated in the Product entity.		
BUSINESS RULES	 Only the system administrator or sales assistant users should be permitted to conture products packaged for a specific order. 		
	 permitted to capture products packaged for a specific order. The quantity on hand value of the selected product for packaging 		
	 The quality of hand value of the selected product for packaging should only be reduced for reseller orders. 		
	 The quantity on hand of all ordered products should be reduced at 		
	the time of placing a customer order and not when packaging its		
	required products.		



IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The user has no internet connection and are unable to capture products packaged for a specific order using the system. Users should be restricted to capture a package activity if there are insufficient stock levels to fulfil the request. Users will only be allowed to capture one product packaged for an order at a time. The administrator or sales assistant should not be allowed to capture products packaged if they are not associated with the order for which the packaging operation has been requested. The system should only allow for the correct quantity to be packaged of each required product as per the order details stored on the system.
ASSUMPTIONS:	 The key stakeholders identified would first like to see what products have already been packaged for the order of interest.
OPEN ISSUES:	None

Table 89 - 8.21 Send Low Inventory Alert

INVENTORY MANAGEMENT SUBSYSTEM				
AUTHORS (s): Nomusa Vumisa		DATE: 06/06/2022		
VERSION: 1.0		ST REVIEW DATE: 16/06/2022		
USE CASE NAME:	Send Low Inventory Alert	USE CASE TYPE		
USE CASE ID:	8.21	Business Requirements:		
PRIORITY:	High	System Analysis:		
SOURCE:	ByteXpress Requirements Li	st System Design:		
PRIMARY BUSINESS ACTOR	• Time			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	 Administrator and Inv 	entory Manager		
OTHER INTERESTED STAKEHOLDERS:	None	None		
DESCRIPTION:	The use case begins when the quantity on hand has reached the specified threshold. The system then sends an email to the system administrator and inventory manager.			
PRE-CONDITION:	The threshold value has been	n reached		
TRIGGER:	This use case is called when specified threshold.	the quantity on hand has reached the		
TYPICAL COURSE				
	Actor Action	System Response		
	Step 1: The threshold value has been reached	Step 2: The system reads the following attributes in the Inventory Item table to verify that the quantity on hand has reached the specified threshold		
		 QuantityOnHand 		
		ThresholdValue		
		5		
		ThresholdValue Step 3: The system generates a low inventory email using the following		
		ThresholdValue Step 3: The system generates a low inventory email using the following attributes: From the User table Email From the Inventory Item table InventoryItemName QuantityOnHand		
		ThresholdValue Step 3: The system generates a low inventory email using the following attributes: From the User table Email From the Inventory Item table InventoryItemName		
ALTERNATIVE STEPS: CONCLUSION:		ThresholdValue Step 3: The system generates a low inventory email using the following attributes: From the User table Email From the Inventory Item table InventoryItemName QuantityOnHand Step 4: The system sends a low inventory alert to the administrator and		

POST-CONDITION:	The administrator and inventory manager are informed of the stock levels		
BUSINESS RULES	None		
IMPLEMENTATION	 Only the system administrator and inventory manager roles 		
CONTRAINTS AND	should be notified of the inventory levels.		
SPECIFICATIONS	 Alerts must be sent via email. 		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



Table 90- 8.22 Send Inventory Out of Stock Alert

INVENTORY MANAGEMENT SUBSYSTEM			
AUTHORS (s): Nomusa Vumisa		DATE: 06/06/2022	
VERSION: 1.0			N DATE: 16/06/2022
USE CASE NAME:	Send Inventory Out of Stock	USE CASE TYPE	
USE CASE ID:	8.22		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requirements List	st	System Design:
PRIMARY BUSINESS ACTOR	• Time		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	Administrator and Inv	entory Mar	nager
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	The use case begins when the quantity on hand is out of stock. The system then sends an email to the system administrator and inventory manager.		
PRE-CONDITION:	The quantity on hand has rur	out	
TRIGGER:	This use case is called when	the quanti	ty on hand is out of stock.
	Actor Action Step 1: The quantity on hand has run out	Step 2 attribu verify out Step 3	2: The system reads the following tes in the Inventory Item table to that the quantity on hand has run QuantityOnHand 3: The system generates an out- ck email using the following
		attribu From From • • •	5
		invent	ory manager
ALTERNATIVE STEPS:			
CONCLUSION:	This use case concludes when alert has been sent		
POST-CONDITION:	The administrator and inventory manager are informed of the stock levels		
BUSINESS RULES	None		



IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 Only the system administrator and inventory manager roles should be notified of the inventory levels. Alerts must be sent via email.
ASSUMPTIONS:	None
OPEN ISSUES:	None



2.9. Location Subsystem

AUTHORS (s): Ofhani Mungani		DATE: 06/04/2022		
VERSION: 3.0	LAST REV		IEW DATE: 21/08/2022	
USE CASE NAME:	Add Country		USE CASE TYPE	
USE CASE ID:	9.1		Business Requirements:	
PRIORITY:	High		System Analysis:	\boxtimes
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	 Customers and Resellers – The newly added country is displayed to the customers and resellers during their address registration process. 			
DESCRIPTION:	This use case describes the process where the administrator wishes to add a new country onto the system. The use case begins with the administrator wishing to add a country. The administrator will capture the country's details and save the information on the Country entity. The use case concludes when the system alerts the administrator with "Country successfully added" message.			
PRE-CONDITION:	The administrator must be logged onto the system.			
TRIGGER:	The wishes to add a new country onto the system.			
TYPICAL COURSE	Actor Action	Sv	vstem Response	
OF EVENTS:	Step 1: The administrate wishes to add a new cou	or S i untry. co	tep 2: The system requests the n puntry details which have the follo tribute:	
		Fi	rom the Country table:	

Table 91- 9.1 Add Country



		CountryName	
		Country Value	
	Step 3: The administrator inputs the details. [ALT]	Step 4: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT]	
	Step 4 : The administrator selects the option to add a new country onto the system.	Step 5 : The system reads from the Country table to ensure that the record being added does not match any existing records using the following attribute:	
		 CountryName [ALT] 	
		Step 6 : The system saves the new country details which have the following attributes:	
		 Id CountryName 	
		Step 7 : The system displays a success message on the screen to confirm the addition of a new country.	
ALTERNATE COURSES:	ALT Step 3: The administrator v country.	wishes not to procced to add a new	
	Terminate Use Case		
		validate the information provided orrectly entered information	
	 because of missing fields or incorrectly entered information Return to Step 3 		
	ALT Step 5: The country's name already exists on the system.		
	Terminate Use Case		
CONCLUSION:	A new instance of Country has been successfully added to the system database.		
POST-CONDITION:	The system now has a new country for customers to choose from when capturing their addresses.		
BUSINESS RULES	Only the administrator can add a	new country to the system.	

IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None
ASSUMPTIONS:	None
OPEN ISSUES:	None

Table 92- 9.2 Search Country

Location SUBSYSTEM				
AUTHORS (s): Ofhani M	ungani	DATE:	: 06/04/2022	
VERSION: 3.0		LAST F	AST REVIEW DATE: 21/08/2022	
USE CASE NAME:	Search Country		USE CASE TYPE	
USE CASE ID:	9.2		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requirement	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process where the administrator would like to search for a country onto the system. The use case begins with the administrator wishing to search for a country. The system will prompt the administrator to enter a country's name the administrator wishes to search for. The system will search through the Country entity to find the instance value in the CountryName attribute which match the name provided by the administrator. The use case concludes when the system displays the results of the search query.			
PRE-CONDITION:	The administrator must be logged into the system.			
TRIGGER:	The wishes to search for a country onto the system.			
TYPICAL COURSE	Actor Action		System Response	
OF EVENTS:	Step 1 : The administrat requests to search for a country onto the system	I.		
	Step 2: The administrat inputs the search param		Step 3: The system searches the following attributes in the Country entity for a match:	
			CountryName	

		Step 4 : The system displays the results to the administrator.
		[ALT]
ALTERNATE COURSES:	[ALT] Step 4: The search query instances of country in the syste	entered does not match any existing m database.
	Terminate use case	
CONCLUSION:	This use case concludes when a list of matching results from the search query is displayed on the screen.	
POST-CONDITION:	The Administrator can see the country matched from the search query.	
BUSINESS RULES	Only the administrator can search for a country to the system	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	
	•	



Table 93- 9.3 Update Country

Location SUBSYSTEM				
AUTHORS (s): Ofhani M	ungani	DATE:	: 06/04/2022	
VERSION: 3.0		LAST REVIEW DATE: 21/08/2022		
USE CASE NAME:	Update Country		USE CASE TYPE	
USE CASE ID:	9.3		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	 Customers and Resellers – The newly updated country is displayed to the customers and resellers during their address registration process. 			
DESCRIPTION:	This use case describes the process where the administrator would like to update a country's details onto the system. The use case begins with the administrator requesting to update a country name. The administrator will select an option to search a country and the system will invoke use case 9.2 Search Country to retrieve the country's name. The administrator will select and edit the name of the country and save it onto the system database on the Country entity. The use case concludes when the system displays the country successfully updated message to			
PRE-CONDITION:	the administrator.The administrator must be logged onto the system.			
TRIGGER:	The use is triggered when the administrator wishes to update a country.			
TYPICAL COURSE	Actor Action System		System Response	
OF EVENTS:	Step 1: The administrate requests to update a color on the system		Step 2: The system invokes use case 9.2 "Search Country".	
	Step 3: The administrat selects the desired cour		Step 4 : The system retrieves the desired country details from the following tables:	
			From the Country table:	

		Countrablem -	
		CountryName	
	Step 5: The administrator inputs the details required. [ALT]	Step 6: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT]	
		Step 7 : The system prompts the administrator to confirm the update of a country with the details provided	
	Step 8 : The administrator confirms the information provided. [ALT]	Step 9: The system reads from the Country table to ensure that the record being updated does not match any existing records.	
		[ALT]	
		Step 10: The system saves the updated country details which have the following attribute:	
		CountryName .	
		Step 11: The system displays a success message on the screen to confirm the update of a country.	
ALTERNATE COURSES:	ALT Step 5: The administrator of a country.	wishes not to procced to update a name	
	Terminate Use Case		
	 ALT Step 6: The system fails to validate the information provided because of missing fields or incorrectly entered information. Return to Step 5 		
	ALT Step 8 : The administrator does not confirm the updating of the country's details:		
	Return to Step 5 or terminate the use case		

	ALT Step 9: The entered country's name already exists on the system.	
	Terminate Use Case	
CONCLUSION:	An instance of Country has been successfully updated to the system database.	
POST-CONDITION:	 The system now has an updated country name for customers to choose from when capturing their addresses. 	
BUSINESS RULES	 Only the administrator can search for a country to the system 	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	



Table 94- 9.4 Delete Country

Location SUBSYSTEM				
AUTHORS (s): Ofhani M	ungani	DATE: 0	6/04/2022	
VERSION: 3.0		LAST RE	LAST REVIEW DATE: 21/08/2022	
USE CASE NAME:	Delete Country		USE CASE TYPE	
USE CASE ID:	9.4		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case narrative describes the process in which the administrator wishes to delete a country from the system. The administrator will search for the required country selected for deletion. The administrator will then confirm the deletion of the country and the use case concludes when the system notifies the administrator of a successful deletion.			
PRE-CONDITION:	The administrator must be logged onto the system.			
TRIGGER:	This use case is called when the administrator wishes to delete a country.			
TYPICAL COURSE	Actor Action System Response		ystem Response	
OF EVENTS:	Step 1: The administrate wishes to delete a count	or S	tep 2: The system invokes Use Case .2 "Search Country".	
	Step 3: The administrat selects the desired cour	ntry c	tep 4: The system retrieves the ountry information from the database vith the following attributes:	
		F	rom the Country entityCountryName	



	Step 5: The administrator selects the delete option [ALT]	Step 6: The system prompts the administrator to confirm the deletion of the selected country.	
	Step 7: The administrator confirms the deletion of the country from the system [ALT]	Step 8: The system removed all the details related to the country from the database [ALT]	
		Step 9: The system informs the administrator of the successful deletion of the country	
ALTERNATE COURSES:	[ALT] Step 5: The administrator country.	wishes not to procced to delete a	
	Terminate use case		
	[ALT] Step 7: The administrator does not confirm the deletion of the country.		
	Return to step 5		
	ALT Step 8: The country cannot be deleted as it has an association with the province table		
	The system displays andTerminate use case	error message	
CONCLUSION:	This use case concludes when the administrator is notified of the successful deletion of a country.		
POST-CONDITION:	 The system deletes all of the details related to the selected country from the Country entity. 		
BUSINESS RULES	Only the administrator can delete a country.		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		

Table 95- 9.5 Create Province

LOCATION SUBSYSTEM					
AUTHORS (s): APHIWE	SHOZI	DATE: 21/08	/2022		
VERSION: 1.0		LAST REVIE	LAST REVIEW DATE: 22/08/2022		
USE CASE NAME:	Create Province		USE CASE TYPE		
USE CASE ID:	9.5		Business Requirements:		
PRIORITY:	High		System Analysis:		
SOURCE:	ByteXpress Requiremer	nts List	System Design:		
PRIMARY BUSINESS ACTOR	Administrator				
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	• None				
OTHER INTERESTED STAKEHOLDERS:	• None				
DESCRIPTION:	This use case describes the process in which the administrator wishes to add a new province to the system as one of the locations that Natuurlik offers its Provinces and services to. The use case begins when the administrator adds the new province under its respective country. The administrator will add all of the pertinent information regarding the new province and save it to the business database.			1	
PRE-CONDITION:	 The administrator must be logged onto the system. Only province that fall under countries that are already in the system can be added to the system 				
TRIGGER:	The use case is triggered when the administrator wants to create a new Province.				
TYPICAL COURSE	Actor Action System Response				
OF EVENTS:	Step 1 : The administrate wants to create a new Province.	or Step to ad	2: The system requires the admin d information about the province in rovince entity such as: Province Name Country Name		



	Step 3: The administrator enters the details. [ALT]	Step 4: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT] Step 5: The system reads from the Province table to ensure that the record being added does not match any existing records using the following attribute: • Name [ALT] Step 6: The system saves the new Province details which have the following attributes: From the Province Table • Id • Name • Country	
		Step 7: : The system displays a success message on the screen to confirm the addition of the new province	
ALTERNATE	ALT Step 5: The administrator	does not want to add a province anymore	
COURSES:	• The use case is terminat	ted	
	ALT Step 4: The entered details are not in the correct format or the required fields are empty		
	 The system displays a validation error message Return to step 3 ALT Step 5: The province already exists on the system The system displays a validation error message 		
	The use case is terminated		
CONCLUSION:	This use case concludes when	a new province is created.	

POST-CONDITION:	The Province details are added to the database.
BUSINESS RULES	Only the administrator can add a new Province.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None
ASSUMPTIONS:	None
OPEN ISSUES:	None



Table 96- 9.6 Search Province

LOCATION SUBSYSTEM				
AUTHORS (s): APHIWE SHOZI		DATE: 22/08/2022		
VERSION: 1.0	VERSION: 1.0 LAST		ST REVIEW DATE: 22/08/2022	
USE CASE NAME:	Search Province		USE CASE TYPE	
USE CASE ID:	9.6		Business Requirements:	
PRIORITY:	Medium		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in the administrator wishes to search through the existing provinces on the system. The administrator can use the province details for a search query and the system will retrieve the province that matches			
PRE-CONDITION:	The administrator must be logged onto the system.			
TRIGGER:	This use case is called we have a case of the system.		administrator wants to search for a	
TYPICAL COURSE	Actor Action	c	System Response	
OF EVENTS:	Step 1: The administrate wants to search for a Pr	or		
	Step 2: The administrate enters the search param	neter. f	Step 3: The system searches using the following attributes in the Province table:	
			Name	
			Step 4: The system displays the search results [ALT]	



ALTERNATE COURSES:	 ALT Step 4: The search query entered does not match any existing instances of Provinces in the database. Return to Step 2 or terminate the use case
CONCLUSION:	This use case concludes when the desired province's details are displayed on the system.
POST-CONDITION:	The Province entity was searched for and an entry that corresponds to the search query or parameter entered.
BUSINESS RULES	None
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None
ASSUMPTIONS:	None
OPEN ISSUES:	None

Table 97- 9.7 Update Province

LOCATION SUBSYSTEM					
AUTHORS (s): APHIWE	SHOZI	DATE: 2	22/08/2022		
VERSION: 1.0		LAST R	LAST REVIEW DATE: 22/08/2022		
USE CASE NAME:	Update Province		USE CASE TYPE		
USE CASE ID:	9.7		Business Requirements:		
PRIORITY:	High		System Analysis:		
SOURCE:	ByteXpress Requiremer	nts List	System Design:		
PRIMARY BUSINESS ACTOR	Administrator		·		
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	None				
OTHER INTERESTED STAKEHOLDERS:	• None				
DESCRIPTION:	This use case describes the process in which the administrator wishes to update the details of province to the system. The use case begins when the administrator updates a province that Natuurlik offers its products and services to. The administrator will update all of the pertinent information regarding the province and saves it to the business database				
PRE-CONDITION:	The administrator must be logged in to the system.				
TRIGGER:	The use is triggered when the administrator updates the details of a Province that already exists on the system.		-		
TYPICAL COURSE	Actor Action	ç	System Response		
OF EVENTS:	Step 1 : The administrate wishes to update a prov details	or s	Step 2: The system invokes Use Case 9.6 Search Province.		
	Step 3: The administrat selects the desired prov	ince d	Step 4 : The system retrieves the desired provinces' details from the following tables		
		F	From the Province Table		
			Name		

		Country Name	
	Step 5: The administrator enters the updated details. [ALT]	Step 6: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT]	
		Step 7: The system requests the administrator to confirm the updating of the province details	
	Step 8: The administrator confirms the updating of the Province details	Step 9: The system reads from the Province table to ensure that the record being updated does not match any existing records using the following	
	[ALT]	attribute:	
		Name	
		[ALT]	
		Step 10 : The system saves the updated Province details which have the following attributes:	
		From the Province Table	
		NameCountry Name	
		Step 11: The system displays a success message on the screen to confirm the update of a new Province.	
ALTERNATE	ALT Step 5: The administrator of	does not want to add a province anymore	
COURSES:	The use case is terminated		
	ALT Step 6: The entered details are not in the correct format or the required fields are empty		
	The system displays a valueReturn to step 5	alidation error message	
	ALT Step 8 : The administrator does not confirm the updating of the province details		



	Return to Step 5 or terminate the use case		
	ALT Step 9: The province already exists on the system		
	The system displays a validation error messageThe use case is terminated		
CONCLUSION:	This use case concludes when the details of the respective province have been updated successfully on the system		
POST-CONDITION:	The Province details are updated on the database.		
BUSINESS RULES	Only the administrator can update a province.		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



Table 98- 9.8 Delete Province

LOCATION SUBSYSTEM				
AUTHORS (s): APHIWE	SHOZI	DATE: 22/08/2022		
VERSION: 1.0		LAST REVIEW DATE: 22/08/2022		
USE CASE NAME:	Delete Province		USE CASE TYPE	
USE CASE ID:	9.8		Business Requirements:	
PRIORITY:	Medium		System Analysis:	\boxtimes
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case narrative describes the process in which the administrator wishes to delete a Province from the system. The administrator will search for the required Province selected for deletion. The administrator will then confirm the deletion of the Province and the use case concludes when the system notifies the administrator of a successful deletion.			
PRE-CONDITION:	The administrator must be logged in to the system.			
TRIGGER:	This use case is called v Province.	when the admin	istrator wishes to delete a	
TYPICAL COURSE	Actor Action	System	n Response	
OF EVENTS:	Step 1: The administrate wishes to delete a provi	-	2: The system invokes Use Ca earch Province.	ase
	Step 3: The administrate selects the desired prov	ince desire follow	4: The system retrieves the d provinces' details from the ing tables	
		From	the Province Table	
		•	Name	



		Country Name	
	Step 5: The administrator selects the delete option [ALT] Step 7: The administrator confirms the deletion of the province from the system. [ALT]	Step 6: The system prompts the administrator to confirm the deletion of the Province. Step 8: The system removes all the details related to the Province from the database from the following tables: From the Province Table • Name	
		 Name Country Name 	
		Step 9: The system informs the administrator of the successful deletion of the Province	
ALTERNATE COURSES:	 ALT Step 5: The administrator does not want to delete the province Terminate this use case. ALT Step 7: The administrator does not confirm the deletion of the province. Return to step 4 		
CONCLUSION:	This use case concludes when the administrator is notified of the successful deletion of the Province.		
POST-CONDITION:	• The system deletes all the details related to the selected province from the Province table .		
BUSINESS RULES	 Only the administrator can delete a Province. 		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		

Table 99- 9.9 Create City

LOCATION SUBSYSTEM					
AUTHORS (s): APHIWE	SHOZI	DATE: 21/08/2022			
VERSION: 1.0 LAST		LAST F	ST REVIEW DATE: 22/08/2022		
USE CASE NAME:	Create City			USE CASE TYPE	
USE CASE ID:	9.9			Business Requirements:	
PRIORITY:	High			System Analysis:	\boxtimes
SOURCE:	ByteXpress Requiremer	nts List		System Design:	
PRIMARY BUSINESS ACTOR	Administrator				
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	• None				
OTHER INTERESTED STAKEHOLDERS:	• None				
DESCRIPTION:	This use case describes the process in which the administrator wishes to add a new city to the system as one of the locations that Natuurlik offers its products and services to. The use case begins when the administrator adds the new city under its respective province. The administrator will add all of the pertinent information regarding the new city and save it to the business database.			ffers trator ⁄ill	
PRE-CONDITION:	 The administrator must be logged onto the system. Only city that fall under provinces that are already in the system can be added to the system 			em	
TRIGGER:	The use case is triggered when the administrator wants to create a new city.			new	
TYPICAL COURSE	Actor Action		System Re	esponse	
OF EVENTS:	Step 1: The administrate wants to create a new c		Step 2: To add in City entite	The system requires the ad formation about the city in ity such as: City Name Province Name	

	Step 3: The administrator	Step 4: The system captures and	
	enters the details.	validates the information provided by ensuring the format is adhered to and	
	[ALT]	no required text fields are left empty. [ALT]	
		Step 5: The system reads from the City table to ensure that the record being added does not match any existing records using the following attribute:	
		Name	
		[ALT]	
		Step 6 : The system saves the new city details which have the following attributes:	
		From the City Table	
		• Id	
		NameProvince	
		Step 7: : The system displays a success message on the screen to confirm the addition of the new city	
ALTERNATE	ALT Step 5: The administrator of	does not want to add a city anymore	
COURSES:	• The use case is terminat	ted	
	ALT Step 4: The entered details required fields are empty	s are not in the correct format or the	
	The system displays a valueReturn to step 3	alidation error message	
	ALT Step 5: The city already exists on the system		
	 The system displays a validation error message The use case is terminated 		
CONCLUSION:	This use case concludes when a new city is created.		
POST-CONDITION:	The city details are adde	ed to the database.	

BUSINESS RULES	Only the administrator can add a new city.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None
ASSUMPTIONS:	None
OPEN ISSUES:	None



Table 100- 9.10 Search City

LOCATION SUBSYSTEM				
AUTHORS (s): APHIWE	SHOZI	DATE: 22/08	DATE: 22/08/2022	
VERSION: 1.0		LAST REVIEW DATE: 22/08/2022		
USE CASE NAME:	Search City		USE CASE TYPE	
USE CASE ID:	9.10		Business Requirements:	
PRIORITY:	Medium		System Analysis:	\boxtimes
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None	None		
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in the administrator wishes to search through the existing cities on the system. The administrator can use the city details for a search query and the system will retrieve the city that matches			
PRE-CONDITION:	The administrator must be logged onto the system.			
TRIGGER:	This use case is called work on the system.	when the admir	nistrator wants to search for a o	city
TYPICAL COURSE	Actor Action	Suster	n Response	
OF EVENTS:	Step 1: The administrate wants to search for a cit Step 2: The administrate enters the search param	or y. or Step heter. follow	 3: The system searches using /ing attributes in the City table Name 4: The system displays the searches 	:
		-	s [ALT]	
ALTERNATE COURSES:	ALT Step 4: The search instances of cities in the		I does not match any existing	

	 Return to Step 2 or terminate the use case 		
CONCLUSION:	This use case concludes when the desired city's details are displayed on the system.		
POST-CONDITION:	The City entity was searched for and an entry that corresponds to the search query or parameter entered.		
BUSINESS RULES	None		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



Table 101- 9.11 Update City

LOCATION SUBSYSTEM				
AUTHORS (s): APHIWE	SHOZI	DATE: 22/08/2022		
VERSION: 1.0		LAST REVIEW DATE: 22/08/2022		
USE CASE NAME:	Update City		USE CASE TYPE	
USE CASE ID:	9.11		Business Requirements:	
PRIORITY:	High		System Analysis:	\boxtimes
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which the administrator wishes to update the details of city to the system. The use case begins when the administrator updates a city that Natuurlik offers its products and services to. The administrator will update all of the pertinent information regarding the city and saves it to the business database.			
PRE-CONDITION:	The administrator must be logged in to the system.			
TRIGGER:	that already exists on th		rator updates the details of a	city
TYPICAL COURSE	Actor Action	System	n Response	
OF EVENTS:	Step 1 : The administrate wishes to update a city's details	or Step 2	2: The system invokes Use C Search City.	ase
	Step 3: The administrate selects the desired city	•	4 : The system retrieves the ed cities' details from the follor	wing
		From	the City Table	
		•	Name	



		Province Name	
		•	
	Step 5: The administrator enters the updated details. [ALT]	Step 6 : The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty.	
		[ALT]	
		Step 7: The system requests the administrator to confirm the updating of the city details	
	Step 8: The administrator confirms the updating of the city details [ALT]	Step 9: The system reads from the City table to ensure that the record being updated does not match any existing records using the following attribute:	
		• Name	
		[ALT]	
		Step 10 : The system saves the updated City details which have the following attributes:	
		From the City Table	
		NameProvince Name	
		Step 11: The system displays a success message on the screen to confirm the update of a new city.	
ALTERNATE	ALT Step 5: The administrator	does not want to add a city anymore	
COURSES:	• The use case is terminat	ted	
	ALT Step 6: The entered details required fields are empty	s are not in the correct format or the	
	The system displays a validation error messageReturn to step 5		
	ALT Step 8: The administrator does not confirm the updating of the cit details		



	Return to Step 5 or terminate the use case		
	ALT Step 9: The city already exists on the system		
	The system displays a validation error messageThe use case is terminated		
CONCLUSION:	This use case concludes when the details of the respective city have been updated successfully on the system		
POST-CONDITION:	The City details are updated on the database.		
BUSINESS RULES	Only the administrator can update a city.		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



Table 102- 9.12 Delete City

LOCATION SUBSYSTEM				
AUTHORS (s): APHIWE	SHOZI	DATE: 22/08/2022		
VERSION: 1.0		LAST REVIEW DATE: 22/08/2022		
USE CASE NAME:	Delete City		USE CASE TYPE	
USE CASE ID:	9.12		Business Requirements:	
PRIORITY:	Medium		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case narrative describes the process in which the administrator wishes to delete a city from the system. The administrator will search for the required city selected for deletion. The administrator will then confirm the deletion of the city and the use case concludes when the system notifies the administrator of a successful deletion.			
PRE-CONDITION:	The administrator must be logged in to the system.			
TRIGGER:	This use case is called v	when the admi	nistrator wishes to delete a city.	
TYPICAL COURSE	Actor Action	Svste	m Response	
OF EVENTS:	Step 1: The administrate wishes to delete a city.	or Step	2: The system invokes Use Case Search City.	
	Step 3: The administration selects the desired city	-	• 4 : The system retrieves the red cities' details from the following s	
		From	n the City Table	
		•	Name Province Name	


	Step 5: The administrator selects the delete option [ALT]	Step 6: The system prompts the administrator to confirm the deletion of the city.		
	Step 7: The administrator confirms the deletion of the city from the system. [ALT]	Step 8: The system removes all the details related to the city from the database from the following tables:		
		From the City Table		
		NameProvince Name		
		Step 9: The system informs the administrator of the successful deletion of the city		
ALTERNATE COURSES:	 ALT Step 5: The administrator does not want to delete the city Terminate this use case. 			
	 ALT Step 7: The administrator does not confirm the deletion of the Return to step 4 			
CONCLUSION:	This use case concludes when the successful deletion of the city.	the administrator is notified of the		
POST-CONDITION:	 The system deletes all the details related to the selected city from the City table. 			
BUSINESS RULES	Only the administrator can delete a city.			
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None			
ASSUMPTIONS:	None			
OPEN ISSUES:	None			

Table 103- 9.13 Create Suburb

LOCATION SUBSYSTEM					
AUTHORS (s): APHIWE	SHOZI	DATE: 2	NTE: 21/08/2022		
VERSION: 1.0	RSION: 1.0 LAST		REVIEW DATE: 22/08/2022		
USE CASE NAME:	Create Suburb			USE CASE TYPE	
USE CASE ID:	9.13			Business Requirements:	
PRIORITY:	High			System Analysis:	\boxtimes
SOURCE:	ByteXpress Requiremer	nts List		System Design:	
PRIMARY BUSINESS ACTOR	Administrator				
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	• None				
OTHER INTERESTED STAKEHOLDERS:	None				
DESCRIPTION:	This use case describes the process in which the administrator wishes to add a new suburb to the system as one of the locations that Natuurlik offers its products and services to. The use case begins when the administrator adds the new suburb under its respective city. The administrator will add all of the pertinent information regarding the new suburb and save it to the business database.			k	
PRE-CONDITION:	 The administrator must be logged onto the system. Only suburb that fall under cities that are already in the system can be added to the system 			m	
TRIGGER:	The use case is triggered when the administrator wants to create a new suburb.			new	
TYPICAL COURSE	Actor Action		System	Response	
OF EVENTS:	Step 1: The administrate wants to create a new s	or s uburb.	Step 2 to add	2: The system requires the ac information about the suburt iburb entity such as: Suburb Name City Name	



	Step 3: The administrator enters the details. [ALT]	Step 4: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT] Step 5: The system reads from the Suburb table to ensure that the record being added does not match any existing records using the following attribute: • Name [ALT] Step 6: The system saves the new suburb details which have the following attributes: From the Suburb Table • Id • Name		
		City Step 7: : The system displays a success message on the screen to		
		confirm the addition of the new suburb		
ALTERNATE COURSES:	ALT Step 5: The administrator ofThe use case is terminated	does not want to add a suburb anymore ted		
	ALT Step 4: The entered details are not in the correct format or the required fields are empty			
	The system displays a validation error messageReturn to step 3			
	ALT Step 5: The suburb already exists on the system			
	The system displays a validation error messageThe use case is terminated			
CONCLUSION:	This use case concludes when a	a new suburb is created.		

POST-CONDITION:	The suburb details are added to the database.
BUSINESS RULES	Only the administrator can add a new suburb.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None
ASSUMPTIONS:	None
OPEN ISSUES:	None



Table 104- 9.14 Search Suburb

LOCATION SUBSYSTEM				
AUTHORS (s): APHIWE	SHOZI	DATE: 22/08	/2022	
VERSION: 1.0		LAST REVIEW DATE: 22/08/2022		
USE CASE NAME:	Search Suburb		USE CASE TYPE	
USE CASE ID:	9.14		Business Requirements:	
PRIORITY:	Medium		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	search through the exist	ting cities on th	the administrator wishes to e system. The administrator can ery and the system will retrieve the	;
PRE-CONDITION:	The administrator must be logged onto the system.			
TRIGGER:	This use case is called v suburb on the system.	when the admir	nistrator wants to search for a	
TYPICAL COURSE	Actor Action	Svictor	n Response	
OF EVENTS:	Step 1: The administrate wants to search for a su	or	in Response	
	Step 2: The administrate enters the search param	_	 The system searches using the ring attributes in the Suburb table 	
		•	Name	
		-	4: The system displays the search s [ALT]	า
ALTERNATE COURSES:	ALT Step 4: The search instances of cities in the	• •	does not match any existing	

ByteXpress

	Return to Step 2 or terminate the use case
CONCLUSION:	This use case concludes when the desired suburb's details are displayed on the system.
POST-CONDITION:	The Suburb entity was searched for and an entry that corresponds to the search query or parameter entered.
BUSINESS RULES	None
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None
ASSUMPTIONS:	None
OPEN ISSUES:	None



Table 105- 9.15 Update Suburb

LOCATION SUBSYSTEM				
AUTHORS (s): APHIWE	SHOZI	DATE: 22/08/2022		
VERSION: 1.0		LAST REVIEW DATE: 22/08/2022		
USE CASE NAME:	Update Suburb		USE CASE TYPE	
USE CASE ID:	9.15		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which the administrator wishes to update the details of suburb to the system. The use case begins when the administrator updates a suburb that Natuurlik offers its products and services to. The administrator will update all of the pertinent information regarding the suburb and saves it to the business database			
PRE-CONDITION:	The administrator must be logged in to the system.			
TRIGGER:	The use is triggered whe suburb that already exis		trator updates the details of a m.	
TYPICAL COURSE	Actor Action	Syste	m Response	
OF EVENTS:	Step 1 : The administrate wishes to update a subu details	or Step	2: The system invokes Use Case Search Suburb.	
	Step 3: The administration selects the desired subu	-	4 : The system retrieves the ed cities' details from the following s	
		From	the Suburb Table	
		•	Name	



		c. City Name		
		 City Name 		
	Step 5: The administrator enters the updated details. [ALT]	Step 6: The system captures and validates the information provided by ensuring the format is adhered to and no required text fields are left empty. [ALT]		
		Step 7: The system requests the administrator to confirm the updating of the suburb details		
	Step 8: The administrator confirms the updating of the suburb details [ALT]	Step 9: The system reads from the Suburb table to ensure that the record being updated does not match any existing records using the following attribute:		
		• Name		
		[ALT]		
		Step 10 : The system saves the updated Suburb details which have the following attributes:		
		From the Suburb Table		
		NameCity Name		
		Step 11: The system displays a success message on the screen to confirm the update of a new suburb.		
ALTERNATE	ALT Step 5: The administrator	does not want to add a suburb anymore		
COURSES:	• The use case is terminat	ted		
	ALT Step 6: The entered details are not in the correct format or the required fields are empty			
	The system displays a validation error messageReturn to step 5			
	ALT Step 8 : The administrator does not confirm the updating of the suburb details			



	Return to Step 5 or terminate the use case
	ALT Step 9: The suburb already exists on the system
	The system displays a validation error messageThe use case is terminated
CONCLUSION:	This use case concludes when the details of the respective suburb have been updated successfully on the system
POST-CONDITION:	The Suburb details are updated on the database.
BUSINESS RULES	Only the administrator can update a suburb.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None
ASSUMPTIONS:	None
OPEN ISSUES:	None



Table 106- 9.16 Delete Suburb

LOCATION SUBSYSTEM				
AUTHORS (s): APHIWE	SHOZI	DATE: 22/08/	2022	
VERSION: 1.0		LAST REVIEW DATE: 22/08/2022		
USE CASE NAME:	Delete Suburb		USE CASE TYPE	
USE CASE ID:	9.16		Business Requirements:	
PRIORITY:	Medium		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case narrative describes the process in which the administrator wishes to delete a suburb from the system. The administrator will search for the required suburb selected for deletion. The administrator will then confirm the deletion of the suburb and the use case concludes when the system notifies the administrator of a successful deletion.			
PRE-CONDITION:	The administrator must be logged in to the system.			
TRIGGER:	This use case is called v	when the admin	istrator wishes to delete a suburb.	
TYPICAL COURSE	Actor Action	Systen	n Response	
OF EVENTS:	Step 1: The administrate wishes to delete a subu	or Step	2: The system invokes Use Case Search Suburb.	
	Step 3: The administrat selects the desired subu		4 : The system retrieves the ed cities' details from the following	
		From •	the Suburb Table Name	
		•	City Name	



	Step 5: The administrator selects the delete option [ALT] Step 7: The administrator	Step 6: The system prompts the administrator to confirm the deletion of the suburb.		
	confirms the deletion of the suburb from the system. [ALT]	 details related to the suburb from the database from the following tables: From the Suburb Table Name 		
		City Name		
		Step 9: The system informs the administrator of the successful deletion of the suburb		
ALTERNATE COURSES:	 ALT Step 5: The administrator does not want to delete the suburb Terminate this use case. ALT Step 7: The administrator does not confirm the deletion of the suburb. Return to step 4 			
CONCLUSION:	This use case concludes when the administrator is notified of the successful deletion of the suburb.			
POST-CONDITION: BUSINESS RULES	The system deletes all the details related to the selected suburb from the Suburb table .			
	Only the administrator can delete a suburb.			
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None			
ASSUMPTIONS: OPEN ISSUES:	None			
OPEN ISSUES:	None			





2.10. Reporting Subsystem

Table 107- 10.1 Generate Inventory List Report

REPORTING SUBSYSTEM				
AUTHORS (s): APHIWE SHOZI		DATE: 07/08/2022		
VERSION: 1.0		LAST REVIEW DATE: 07/08/2022		
USE CASE NAME:	Generate Inventory List Re	eport	USE CASE TYPE	
USE CASE ID:	10.1		Business Requirements:	
PRIORITY:	High		System Analysis:	\boxtimes
SOURCE:	ByteXpress Requirements	List	System Design:	
PRIMARY BUSINESS ACTOR	AdministratorInventory Manager			
PRIMARY SYSTEM ACTOR	• None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	•			
DESCRIPTION:	This use case describes an event where the administrator or the inventory manager wishes to generate an inventory list report on the system. The administrator or the inventory manager wishes to generate an inventory list report and the system will retrieve the details regarding the company's inventory and generate a list report to display on the screen.			
PRE-CONDITION:	The administrator or inventory manager must be logged on the system.			
TRIGGER:	The use case is triggered when the administrator or inventory manager wants to generate an inventory list report		er	
TYPICAL COURSE	Actor Action	Syste	em Response	



OF EVENTS:	Step 1: The administrator or inventory manager wishes to generate an inventory list report on the system	Step 2:The system retrieves the following attributes:From the InventoryItem entity:• Name • Quantity on HandFrom the InventoryType entity: • NameAnd the following user claims details from the User table for the administrator or inventory manager who made the request:• FirstName • SurnameStep 3:The system calculates the number of Inventory on the system.Step 4: The system generates and displays the report with the retrieved attributes and calculated number of Inventory.
	Step 5: The administrator selects the export option	Step 6: The system exports the report
ALTERNATE COURSES:	None	<u>'</u>
CONCLUSION:	The use case concludes when the inventory list report is downloaded from the system	
POST-CONDITION:	None	
BUSINESS RULES	 Only the administrator and the inventory manager can generate an inventory list report 	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None	
ASSUMPTIONS:	• The administrator and the inventory manager have a stable internet connection	
OPEN ISSUES:	None	

Table 108- 10.2 Generate Sales Report

REPORTING SUBSYSTEM			
AUTHORS (s): Ofhani Mung	ani [DATE: 08/08	/2022
VERSION: 1.0 LAST		AST REVIEW	/ DATE: 25/08/2022
USE CASE NAME:	Generate Sales (by Top 5 Clie	ents) Report	USE CASE TYPE
USE CASE ID:	10.2		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requirements Lis	st	System Design:
PRIMARY BUSINESS ACTOR	Administrator/Sales	s Assistant	
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes an event where the administrator or sales assistant wants to generate sales (by top five clients) report on the system. The use case begins when the administrator/ sales assistant requests to generate sales (by top five clients) report and the system responds by retrieving the order details. The use case concludes when the report is displayed on the screen.		
PRE-CONDITION:	• The administrator or sales assistant must be logged on the system.		
TRIGGER:	The use case is called when the administrator or sales assistant wants to generate sales (by top five clients) report		
TYPICAL COURSE	Actor Action Step 1 : The administrator or assistant wishes to generate (by top five clients) report or system	sales Step sales attri n the	em Response 2: The system retrieves the following butes: the OrderLine entity: Price Count



	from the Order entity: • FirstName • Surname • OrderTotal • DeliveryFee • CreatedDate
	from the Product entity: Name
	Step 3: The system calculates the dashboard sales values on the system
	Step 4: The system displays the sales dashboard.
Step 5: The administrator or sales assistant selects an option to display sales (by top 5 clients) report	Step 6: The system retrieves the following attributes:
	from the Order entity: FirstName Surname OrderTotal DeliveryFee
	 And the following claims details from the User entity for the administrator or sales assistant who made the request FirstName Surname
	Step 7: The system calculates the sales by top 5 client's values on the system
	Step 8 : The system generates and displays the report with the retrieved attributes and sales by top 5 client's values.



	Step 9: The administrator or sales assistant selects an option to export the report.	Step 10: The system exports the sales (by top 5 clients) report	
ALTERNATE COURSES:	None		
CONCLUSION:	The use case concludes when the s	ales report is downloaded	
POST-CONDITION:	Sales details is read from the database using the Order , OrderLine , Product tables.		
BUSINESS RULES	None.		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The administrator or sales assistant cannot generate sales report without an internet connection. 		
ASSUMPTIONS:	The administrator will always export the report		
OPEN ISSUES:	• None		



Table 109 - 10.3 Generate Product List Report

REPORTING SUBSYSTEM			
AUTHORS (s): Thenjiwe Nts	onda	DATE: 13/08/2	2022
VERSION: 1.0		LAST REVIEW DATE: 13/08/2022	
USE CASE NAME:	Generate Product List Rep	ort	USE CASE TYPE
USE CASE ID:	10.3		Business Requirements: 🛛 🗆
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requirements	List	System Design:
PRIMARY BUSINESS ACTOR	Administrator or In	nventory Manag	jer
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION: PRE-CONDITION:	This use case describes the process in which the administrator wishes to generate a product list report on the system. The system will display the report results and provide the options for it to be downloaded. The use case ends when the administrator downloads the report. The administrator must be logged onto the system		
TRIGGER:	The use case is triggered when the administrator wants to generate a product list report		strator wants to generate a product
TYPICAL COURSE OF EVENTS:	Actor Action Step 1 : The administrator of inventory manager wishes generate a product list rep	or Step 2 to attribution foort • • • • • • • •	n Response 2: The system retrieves the following utes from the Product table: Name QuantityOnHand ResellerPrice CustomerPrice the ProductBrand table: Name the ProductCategory table: Name



		And the following user claims details from	
		the User table for the administrator or inventory manager who made the request:	
		5	
		 FirstName Surname 	
		Sumane	
		Step 3: The system calculates the total	
		product quantity on the system using the	
		QuantityOnHand attribute from the	
		Product table.	
		Step 4: The system generates and displays	
		the report with the retrieved attributes and	
		calculated product quantity	
	Step 5: The administrator or	Step 6: The system exports the report	
	inventory manager selects the		
	export option		
ALTERNATE COURSES:	None		
CONCLUSION:	This use case concludes when the	report is downloaded	
POST-CONDITION:	The Product, ProductBrand and ProductCategory tables were read		
BUSINESS RULES	None		
IMPLEMENTATION	Only the administrator or inventory manager has access to this function		
CONTRAINTS AND			
SPECIFICATIONS			
ASSUMPTIONS:	The administrator or inventory manager will always export the report		
OPEN ISSUES:	None		



Table 110- 10.4 Generate Customer List Report

REPORTING SUBSYSTEM			
AUTHORS (s): Nomusa Vum	isa	DATE: 08/	/08/2022
VERSION: 1.0		LAST REV	EW DATE: 08/08/2022
USE CASE NAME:	Generate Customer List Re	port	USE CASE TYPE
USE CASE ID:	10.4		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requirements L	list	System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	• None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes the process in which the administrator wishes to generate a customer report on the system. The system will display the report results and provide the options for it to be downloaded. The use case ends when the administrator downloads the report.		
PRE-CONDITION:	The administrator must be logged onto the system		
TRIGGER:	The use case is triggered when the administrator wants to generate a customer report		
TYPICAL COURSE	Actor Action	S	ystem Response
OF EVENTS:	Step 1 : The administrator w to generate a customer rep	vishes S port a	 tep 2: The system retrieves the following ttributes from the User table: FirstName Surname PhoneNumber EmailAddress rom the UserRole table: Name



		And the following user claims details from the User table for the administrator who made the request: • FirstName • Surname Step 3: The system calculates the number of customers on the system.
	Step 5: The administrator selects	Step 4: The system generates and displays the report with the retrieved attributes and calculated number of customers.Step 6: The system exports the report
ALTERNATE COURSES:	he export option None	
CONCLUSION:	This use case concludes when the report is downloaded	
POST-CONDITION:	The User and UserRole table were	read
BUSINESS RULES	None	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	Only the administrator has access to this function	
ASSUMPTIONS:	The administrator will always export the report	
OPEN ISSUES:	None	



Table 111- 10.5 Generate Reseller List Report

REPORTING SUBSYSTEM				
AUTHORS (s): Nomusa Vum	isa	DATE: 08/	08/2022	
VERSION: 1.0 LAST R		LAST REVI	EW DATE: 08/08/2022	
USE CASE NAME:	Generate Reseller List Repo	ort	USE CASE TYPE	
USE CASE ID:	10.5		Business Requirements:	
PRIORITY:	High		System Analysis:	\mathbf{X}
SOURCE:	ByteXpress Requirements L	ist	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	• None			
DESCRIPTION:	This use case describes the process in which the administrator wishes to generate a reseller report on the system. The system will display the report results and provide the options for it to be downloaded. The use case ends when the administrator downloads the report.			
PRE-CONDITION:	The administrator must be logged onto the system			
TRIGGER:	The use case is triggered wh report	hen the ad	ministrator wants to generate a res	seller
TYPICAL COURSE	Actor Action	Sy	ystem Response	
OF EVENTS:	Step 1 : The administrator w to generate a reseller repor	rt at	 tep 2: The system retrieves the foll tributes from the User table: FirstName Surname PhoneNumber EmailAddress 	owing



		And the following user claims details from the User table for the administrator who made the request: • FirstName • Surname
		Step 3: The system calculates the number
		of resellers on the system.
		Step 4 : The system generates and displays the report with the retrieved attributes and calculated number of resellers.
	Step 5: The administrator selects the export option	Step 6: The system exports the report
ALTERNATE COURSES:	• None	
CONCLUSION:	This use case concludes when the report is downloaded	
POST-CONDITION:	The User and UserRole table were	read
BUSINESS RULES	None	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	Only the administrator has access to this function	
ASSUMPTIONS:	The administrator will always export the report	
OPEN ISSUES:	None	



Table 112- 10.6 Generate Produced Products Report

REPORTING SUBSYSTEM			
AUTHORS (s): Kyle van Eede	en	DATE: 0	06/08/2022
VERSION: 1.1		LAST RE	EVIEW DATE: 14/08/2022
USE CASE NAME:	Generate Produced Produ	cts Repor	ort USE CASE TYPE
USE CASE ID:	10.6		Business Requirements:
PRIORITY:	Low		System Analysis:
SOURCE:	ByteXpress Requirements	List	System Design:
PRIMARY BUSINESS ACTOR	Administrator or I	nventory	y Manager
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	• None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes the process in which the administrator or inventory manager requests the system to generate a report for all finished products produced on the system. The administrator or inventory manager will be allowed to optionally specify a filter criteria to be applied to the report and the system filters the production records retrieved from the database, if any, to retrieve only the details which are to be used for the report to be generated. The use case concludes when the system displays the generated production report which is based on the filter criteria entered.		
PRE-CONDITION:	The administrator or inventory manager must be logged into the system.		
TRIGGER:	The administrator or inventory manager requests the system to display the latest production report details.		
TYPICAL COURSE	Actor Action		System Response
OF EVENTS:	Step 1 : The administrator inventory manager reques system to display the lates production report.	sts the	



	Step 2: The administrator or inventory manager requests the system to generate the report. [ALT]	Step 3: The system retrieves the following details from the ProductionTransaction entity for all produced products transactions: ProductId QuantityBefore QuantityAfter TransactionDate The system also retrieves the following details from the Product entity for each product referenced in a retrieved product on transaction record: ProductName The system also retrieves the following user claims details from the User entity for the administrator or inventory manager who made the request: Name Surname [ALT]
		Step 4: The system calculates the production quantity for each production transaction record retrieved by subtracting the retrieved QuantityAfter attribute value from the QuantityBefore value.
		Step 5 : The system displays the production report, which is populated with the details of all production transactions retrieved from the database.
	Step 6: The administrator or inventory manager selects the option to export the report.	Step 7: The system exports the generated report details to the user's local machine.
ALTERNATE COURSES:	filter criteria to the production rep	nventory manager wishes wishes to apply a port: red filter criteria using the filter options



	 The administrator or inventory manager selects the option provided to generate the report. Proceed to Step 3. ALT Step 3: The administrator or inventory manager has specified a filter criteria for the report to be generated: The system retrieves only the production transaction records from the ProductionTransaction entity which has has met the report filter criteria specified. Proceed to Step 4.
CONCLUSION:	The system displays the production report's details which are filtered according to the filter criteria specified.
POST-CONDITION:	 The production transaction records which meet the filter criteria specified are retrieved from the ProductionTransaction entity. The generated report is populated with all the retrieved product production transaction records.
BUSINESS RULES	 Only the inventory manager and administrator users should be allowed to the view this report. The administrator or inventory manager should be allowed to export the production report in PDF format.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The system should allow the administrator or inventory manager to specify a filter criteria for the report to be generated. This report should be exported upon the user's request, and as a PDF document only. The production report cannot be generated if the system is offline.
ASSUMPTIONS:	 The administrator or inventory manager has access to the internet. The administrator or inventory manager would want to export the report after viewing it on the system.
OPEN ISSUES:	• None



Table 113- 10.7 Generate Orders (By Status) Report

Reporting Subsystem					
AUTHORS (s): Kyle van	Eeden	DATE: 06/08/2022			
VERSION: 1.1		LAST R	EVIEW [DATE: 25/08/2022	
USE CASE NAME:	Generate Orders (By Sta	atus) Rep	ort	USE CASE TYPE	
USE CASE ID:	10.7			Business Requirements:	
PRIORITY:	Low			System Analysis:	\boxtimes
SOURCE:	ByteXpress Requiremer	nts List		System Design:	
PRIMARY BUSINESS ACTOR	Administrator				
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	Power BI Service (ESA)				
OTHER INTERESTED STAKEHOLDERS:	None				
DESCRIPTION:	This use case describes the process in which the administrator wishes to view the latest orders by status report on the system. All orders will be retrieved from the database and grouped by status and order payment status. The total count of orders per status will be displayed along with accumulated totals for each grouping of orders. The use case concludes when the system displays the generated report details.				
PRE-CONDITION:	The administrator must be logged into the system.				
	The administrator must l	be logged	into the	ir Power BI account.	
	The administrator's Power BI account should have access to the Natuurlik Reporting workspace.				
TRIGGER:	The administrator user wishes to view the latest orders by status report			ort	
	on the system.				
TYPICAL COURSE	Actor Action		System Re	esponse	



OF EVENTS:	Step 1: The administrator requests the system to display the latest report on orders categorized by various statuses.	Step 2: The system retrieves the following details for all orders that have been placed on the system from the Order entity:• Order Status • OrderPaymentStatus • OrderTotalStep 3: The system displays the generated report that is retrieved and containing the following report details which have been generated:The total number of orders assigned to each distinct OrderStatus attribute value are displayed.The accumulated totals are displayed for each grouping of orders, with [OrderStatus] as the parent group and 		
		OrderTotal		
ALTERNATE COURSES:	None			
CONCLUSION:	The system displays the generated report details which gives an overview the status all orders are assigned to currently.			
POST-CONDITION:	• The latest orders data is retrieved from the Order entity.			
BUSINESS RULES	 Only the administrator of the system should be allowed to view this report. The administrator should be able to view a report where all orders are grouped by status and payment status. 			
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The orders should be categorized by order status and order payment status and the accumulated totals per order grouping should be calculated and displayed in the generated report. The report's data will only be refreshed every 2 hours until the ByteXecom system has been deployed. 			

	 Only administrators with the required Power BI Service license and access to the Natuurlik Reporting workspace will be able to view this report.
ASSUMPTIONS:	 The administrator has access to the internet and the system is not offline. The administrator has their Power BI Service account credentials readily available. The administrator would like to see a detailed report on which orders are still within a specific status and/or what the payment status of each order is.
OPEN ISSUES:	None

Table 114- 10.8 Generate Sales (By Region) Report

	Reporting	Subsyste	m			
AUTHORS (s): Kyle van Eede	AUTHORS (s): Kyle van Eeden		DATE: 30/08/2022			
VERSION: 1.0		LAST REVIEW DATE: 30/08/2022				
USE CASE NAME:	Generate Sales (By Region) Report		USE CASE TYPE		
USE CASE ID:	10.8			Business Requirements:		
PRIORITY:	Low			System Analysis:	\mathbf{X}	
SOURCE:	ByteXpress Requirements	List		System Design:		
PRIMARY BUSINESS ACTOR	Administrator					
PRIMARY SYSTEM ACTOR	None					
OTHER PARTICIPATING ACTORS:	None					
OTHER INTERESTED STAKEHOLDERS:	None					
DESCRIPTION:	This use case describes the process in which the administrator wishes to view the latest sales by region report on the system. All orders will be retrieved from the database along with associated location details stored in the Province and City entities, respectively, and the orders are grouped by province and city. The system displays the generated report on screen using the latest available details retrieved.					
PRE-CONDITION:	The administrator must be logged into the system. The administrator must be logged into their Power BI account with a Premium Per User capacity. The administrator's Power BI account should have access to the Natuurlik Reporting workspace that has been set up.					
TRIGGER:	The administrator user wishes to view the latest sales by region report on the system.					
TYPICAL COURSE	Actor Action		System	Response		



OF EVENTS:	Step 1 : The administrator requests the system to display the latest report on all orders categorized by various regions.	Step 2 : The system retrieves the following details from the below listed entities in the database:
		From the Order entity:
		 OrderID OrderTotal OrderStatus
		From the Province entity:ProvinceName
		From the City entity:
		CityName
		Step 3: The system displays the generated report containing the following report details which have been generated:
		The total sales revenue calculated for each province is displayed.
		The total count of orders are calculated by using the following attributes to group orders by:
		 ProvinceID CityID
		The accumulated totals are displayed for each grouping of orders by province and city by using the following attribute :
		OrderTotal

	Only orders where the OrderStatus attribute value is equal to "Processing" or "Dispatched"				
ALTERNATE COURSES:	None				
CONCLUSION:	The system displays the generated transactional report details where all orders placed on the system are grouped by province and city.				
POST-CONDITION:	 The latest orders data is retrieved from the Order entity. A report is generated using the retrieved orders data where all orders are grouped by 				
BUSINESS RULES	 Only the administrators of the system who has access to the Power BI workspace should be allowed to view this report. The administrators should be able to view a report where all orders are grouped by provinces and cities. 				
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The orders should be categorized by province and city. The accumulated totals per order grouping should be calculated and displayed in the generated report. The report's data will only be refreshed every 5 minutes until the ByteXecom system has been deployed. Only administrators with the required Power BI Service license and access to the Natuurlik Reporting workspace will be able to view this report. 				
ASSUMPTIONS:	 The administrator has access to the internet and the system is not offline. The administrator has their Power BI Service account credentials readily available. The administrator would like to see a detailed report on which orders are still within a specific status and/or what the payment status of each order is. 				
OPEN ISSUES:	None				



Table 115- 10.9 Generate Sales (by Product) Report

REPORTING SUBSYSTEM					
AUTHORS (s): Ofhani Mung	AUTHORS (s): Ofhani Mungani DATE:		08/08/2022		
VERSION: 1.0		LAST REVIEW DATE: 25/08/2022			
USE CASE NAME:	Generate Sales (by Produc	t) Report	rt USE CASE TYPE		
USE CASE ID:	10.9		Business Requirements:]	
PRIORITY:	High		System Analysis:	3	
SOURCE:	ByteXpress Requirements	List	System Design:]	
PRIMARY BUSINESS ACTOR	Administrator/Sal	les Assist	stant		
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	None				
OTHER INTERESTED STAKEHOLDERS:	None				
DESCRIPTION:	This use case describes an event where the administrator or sales assistant wants to generate sales (by Product) report on the system. The use case begins when the administrator/ sales assistant requests to generate sales (by Product) report and the system responds by retrieving the order details. The use case concludes when the report is displayed on the screen.				
PRE-CONDITION:	The administrator	r or sales	es assistant must be logged on the system	۱.	
TRIGGER:	The use case is called who generate sales (by Produc		administrator or sales assistant wants to rt		
TYPICAL COURSE	Actor Action		System Response		
	Step 1 : The administrator of assistant wishes to genera (by Product) report on the system	te sales		ng	



		FirstName
		Surname
		OrderTotal
		DeliveryFee
		CreatedDate
		from the Product entity:
		from the Product entity.
		• Name
		Step 3: The system calculates the
		dashboard sales values on the system
		Step 4: The system displays the sales
		dashboard.
	Step 5: The administrator or sales	Step 6: The system retrieves the following
	assistant selects an option to	attributes:
	display sales (by Product) report	
		from the OrderLine entity:
		Price
		Count
		from the Product entity:
		Name
		And the following claims details
		from the User entity for the administrator
		or sales assistant who made the request
		or sales assistant who made the request
		FirstName
		Surname
		Step 7: The system calculates the sales by
		product values on the system
		Stop 9: The system generates and displays
		Step 8 : The system generates and displays
		the report with the retrieved attributes and
		sales by product values.
	Step 9: The administrator or sales	Step 10: The system exports the sales (by
	-	
	assistant selects an option to	product) report
	export the report.	
ALTERNATE COURSES:	None	



CONCLUSION:	The use case concludes when the sales report is downloaded			
POST-CONDITION:	ales details is read from the database using the Order , OrderLine , Product ables.			
BUSINESS RULES	None.			
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The administrator or sales assistant cannot generate sales report without an internet connection. 			
ASSUMPTIONS:	The administrator will always export the report			
OPEN ISSUES:	• None			

Table 116- 10.10 Generate Sales (by Month) Report

REPORTING SUBSYSTEM					
AUTHORS (s): Ofhani Mung	ani	DATE: 08/08/2022			
VERSION: 1.0		LAST REVIEW DATE: 25/08/2022			
USE CASE NAME:	Generate Sales (by Month) Report		USE CASE TYPE	
USE CASE ID:	10.10			Business Requirements:	
PRIORITY:	High			System Analysis:	\boxtimes
SOURCE:	ByteXpress Requirements	List		System Design:	
PRIMARY BUSINESS ACTOR	Administrator/Sa	les Assist	ant		
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	None				
OTHER INTERESTED STAKEHOLDERS:	None				
DESCRIPTION:	This use case describes an event where the administrator or sales assistant wants to generate sales (by month) report on the system. The use case begins when the administrator/ sales assistant requests to generate sales (by month) report and the system responds by retrieving the order details. The use case concludes when the report is displayed on the screen.				
PRE-CONDITION:	• The administrator or sales assistant must be logged on the system.				tem.
TRIGGER:	The use case is called whe generate sales (by Produc			ator or sales assistant wants	to
TYPICAL COURSE	Actor Action		System	Response	
	Step 1 : The administrator assistant wishes to genera (by month) report on the s	te sales	Step 2: attribut	The system retrieves the follo	owing
			•	Price Count e Order entity:	
		[]			
--------------------	---	---	--		
		FirstName			
		Surname			
		OrderTotal			
		DeliveryFee			
		CreatedDate			
		from the Product entity:			
		,			
		Name			
		Step 3: The system calculates the			
		dashboard sales values on the system			
		Step 4: The system displays the sales			
		dashboard.			
	Step 5: The administrator or sales	Step 6: The system retrieves the following			
	assistant selects an option to	attributes:			
	display sales (by month) report				
		from the Order entity:			
		nom the order entry.			
		OrderTotal			
		DeliveryFee			
		CreatedDate			
		And the following claims details			
		from the User entity for the administrator			
		-			
		or sales assistant who made the request			
		FirstName			
		Surname			
		Step 7: The system calculates the sales by			
		product values on the system			
		Step 8: The system generates and displays			
		the report with the retrieved attributes and			
		sales by product values.			
	Step 9: The administrator or sales	Step 10: The system exports the sales (by			
	assistant selects an option to	month) report			
	export the report.				
ALTERNATE COURSES:	None				
CONCLUSION:	The use case concludes when the s	ales report is downloaded			
	The use case concludes when the sales report is downloaded				
POST-CONDITION:	Sales details is read from the database using the Order, OrderLine, Product				
	tables.				

BUSINESS RULES	None.
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The administrator or sales assistant cannot generate sales report without an internet connection.
ASSUMPTIONS:	The administrator will always export the report
OPEN ISSUES:	None



Table 117- 10.11 View Dashboard Overview

Reporting Subsystem				
AUTHORS (s): Kyle van Eeden		DATE: 30/08/2022		
VERSION: 1.0		LAST REVIE	W DATE: 02/09/2022	
USE CASE NAME:	View Dashboard Overvi	ew	USE CASE TYPE	
USE CASE ID:	10.11		Business Requirements: [
PRIORITY:	Low		System Analysis:	X
SOURCE:	ByteXpress Requiremer	its List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	Power BI Service (ESA)			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which the administrator wishes to view the Natuurlik Business Intelligence Dashboard using the latest data retrieved from the database. A report will be generated using the retrieved data and the use case concludes once the system displays the dashboard overview.			
PRE-CONDITION:	The administrator must be logged into the system.			
	The administrator must be logged into their Power BI account with a Premium Per User capacity.			
	The administrator's Power BI account should have access to the Natuurlik Reporting workspace that has been set up.			
TRIGGER:	The administrator user wishes to view the Natuurlik dashboard overview.			
TYPICAL COURSE	Actor Action System Response			



		-
OF EVENTS:	Step 1 : The administrator requests the system to display the latest dashboard.	Step 2 : The system retrieves the following details from the below listed entities in the database:
		From the Order entity:
		 OrderID OrderTotal OrderStatus OrderPaymentStatus IsResellerOrder BackOrderDate DispatchedDate
		From the OrderLine entity: • OrderID • ProductID • CartItemQuantity
		CartItemPrice From the OrderProduct entity:
		 OrderID ProductID ProductQuantity TransactionDate
		From the OrderQuery entity:
		 OrderID QueryFeedback QueryStatus LoggedDate
		From the QueryReason entity:
		Description
		From the ReturnedProduct entity:
		 OrderID ProductID QuantityReceived ReturnReasonID DateLogged



From the ReturnReason entity: ReturnReasonName
From the User entity: • FirstName • Surname
From the Country entity: • CountryName
From the Province entity:ProvinceName
From the City entity: • CityName
From the Suburb entity:SuburbName
From the Product entity:ProductName
 From the Category entity: CategoryName From the Brand entity:
BrandName From the Courier entity:
CourierNameCourierFee
Step 3: The system displays the retrieved dashboard.



ALTERNATE COURSES: CONCLUSION:	None The system displays the generated dashboard details.	
POST-CONDITION:	 The latest orders data is retrieved from the Order entity. All associated orders transaction details is retrieved from the Courier, OrderLine and Product entities. All user-related details is retrieved from the User entity. All location-related details is referenced from the Country, Province, City and Suburb entities. A dashboard is generated using all information retrieved from the database. 	
BUSINESS RULES	 Only the administrators of the system who has access to the Power BI workspace should be allowed to view this report. The administrators should be able to view a dashboard overview which summarizes all business activities. 	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The report's data will only be refreshed every 2 hours until the ByteXecom system has been deployed. Only administrators with the required Power BI Service license and access to the Natuurlik Reporting workspace will be able to view this dashboard. 	
ASSUMPTIONS:	 The administrator has access to the internet and the system is not offline. The administrator has their Power BI Service account credentials readily available if not logged in already. 	
OPEN ISSUES:	None	



2.11. Supplier Subsystem

SUPPLIER SUBSYSTEM				
AUTHORS (s): Nomusa Vumisa		DATE: 20/08/2022		
VERSION: 1.0	LAST R		REVIEW DATE: 20/08/2022	
USE CASE NAME:	Create Supplier		USE CASE TYPE	
USE CASE ID:	11.1		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process in which the administrator wishes to add a new supplier to the system. The use case begins when the administrator wishes to add a new supplier on the system. The administrator will enter all the required information regarding the supplier and save it to the database. The use case ends when the administrator receives a successful creation notification.			
PRE-CONDITION:	 The administrator must be logged onto the system. 			
TRIGGER:	The supplier must not already exist on the system The use case is triggered when the administrator wants to create a new supplier.			
TYPICAL COURSE	Actor Action System Response			
OF EVENTS:	Step 1 : The administrate wants to create a new supplier.	S	Step 2: The system requests the new supplier details which have the following attributes:	
		F	From the Supplier Table CompanyName EmailAddress PhoneNumber 	

Table 118 - 11.1 Create Supplier



StreetName From the Suburb Table SuburbName From the City Table CityName From the Province Table ProvinceName From the Country Table CountryName Step 3: The administrator enters the details. Step 4: The system captures and validates the entered details	
 SuburbName From the City Table CityName From the Province Table ProvinceName From the Country Table CountryName Step 3: The administrator Step 4: The system captures and 	
From the City Table CityName From the Province Table ProvinceName From the Country Table CountryName Step 3: The administrator Step 4: The system captures and	
 CityName CityName From the Province Table ProvinceName From the Country Table CountryName Step 3: The administrator Step 4: The system captures and 	
From the Province Table ProvinceName From the Country Table CountryName Step 3: The administrator Step 4: The system captures and	
ProvinceName From the Country Table CountryName Step 3: The administrator Step 4: The system captures and	
From the Country Table • CountryName Step 3: The administrator Step 4: The system captures and	
CountryName Step 3: The administrator Step 4: The system captures and	
Step 3: The administrator Step 4: The system captures and	
[ALT] [ALT]	
Step 5: The system reads from the Supplier table to ensure that the rec being added does not match any existing records using the following attribute:	ord
 CompanyName EmailAddress 	
[ALT]	
Step 6: The system saves the new supplier details which have the follow attributes:	<i>i</i> ing
From the Supplier Table	
 Id CompanyName EmailAddress PhoneNumber StreetName SuburbId 	



	Step 7: The system displays a successful creation message		
ALTERNATE COURSES:	 ALT Step 5: The administrator does not want to add a Supplier anymore The use case is terminated 		
	ALT Step 4: The entered details are not in the correct format or the required fields are empty		
	The system displays a validation error messageReturn to step 3		
	ALT Step 5: The supplier already exists on the system		
	The system displays a validation error messageThe use case is terminated		
CONCLUSION:	This use case concludes when a new supplier is created.		
POST-CONDITION:	The supplier details are added to the database.		
BUSINESS RULES	Only the administrator can add a new supplier.		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



Table 119 - 11.2 Search Supplier

SUPPLIER SUBSYSTEM				
AUTHORS (s): Nomusa	Vumisa	DATE: 14/05/2022		
VERSION: 1.0	LAST REVIEW		V DATE: 14/05/2022	
USE CASE NAME:	Search Supplier		USE CASE TYPE	
USE CASE ID:	11.2		Business Requirements:	
PRIORITY:	Medium		System Analysis:	\boxtimes
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes the process where the administrator searches for a supplier on the system. The system responds by displaying the information relating to the search query.			
PRE-CONDITION:	The administrator must be logged onto the system.			
TRIGGER:	This use case is called when the administrator wants to search for a supplier on the system.			
TYPICAL COURSE	Actor Action	System	n Response	
OF EVENTS:	Step 1: The administrate wants to search for a su	or		
	Step 2 : The administrate enters the search param	-	3: The system searches using ing attributes in the Supplier	g the
		• •	CompanyName EmailAddress PhoneNumber	oreh
		-	4: The system displays the se s <mark>[ALT]</mark>	aich
ALTERNATE COURSES:	ALT Step 4: The search instances of suppliers in		does not match any existing	



	Return to Step 2 or terminate the use case
CONCLUSION:	This use case concludes when the desired supplier's details are displayed on the system.
POST-CONDITION:	The supplier entity was searched for and an entry that corresponds to the search query or parameter entered.
BUSINESS RULES	None
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None
ASSUMPTIONS:	None
OPEN ISSUES:	None

Table 120 - 11.3 Update Supplier

SUPPLIER SUBSYSTEM					
AUTHORS (s): Nomusa Vumisa D		DATE: 14/05/2022			
VERSION: 1.0		LAST RE	LAST REVIEW DATE: 14/05/2022		
USE CASE NAME:	Update Supplier		USE CASE TYPE		
USE CASE ID:	11.3		Business Requirements:		
PRIORITY:	High		System Analysis:		
SOURCE:	ByteXpress Requiremer	nts List	System Design:		
PRIMARY BUSINESS ACTOR	Administrator				
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	None				
OTHER INTERESTED STAKEHOLDERS:	None				
DESCRIPTION:	This use case describes the process in which the administrator wishes to update a supplier on the system. The use case begins when the administrator wishes to update the details of a supplier. The administrator will then update the supplier details and save it to the database. The use case ends when the administrator receives a successful update notification.				
PRE-CONDITION:	The administrator must be logged in to the system.				
TRIGGER:	The use is triggered when the administrator wishes to update a supplier		nistrator wishes to update a supplier		
TYPICAL COURSE	Actor Action	Sv	stem Response		
OF EVENTS:	Step 1 : The administrate wishes to update a supp details	or St	ep 2: The system invokes Use Case .2 Search Supplier .		
	Step 3: The administrate selects the desired supp	olier de fo	ep 4 : The system retrieves the esired suppliers' details from the llowing tables		
		Fr	rom the Supplier Table		
			CompanyName		



	 EmailAddress
	PhoneNumber
	StreetName
	From the Suburb Table
	SuburbName
	From the City Table
	CityName
	From the Province Table
	ProvinceName
	From the Country Table
Otop F. The extension structure	CountryName
Step 5: The administrato enters the updated detail	
[ALT]	[ALT]
	Step 7: The system requests the
	administrator to confirm the updating of
	the supplier details
Step 8: The administrato	or Step 9: The system reads from the
confirms the updating of	
supplier details	being updated does not match any
[ALT]	existing records using the following
[70-1]	attribute:
	CompanyNameEmailAddress
	[ALT]
	Step 10: The system saves the updated
	supplier details which have the following
	attributes:
	From the Supplier Table
	CompanyName
	EmailAddress BhonoNumber
	PhoneNumberStreetName



	Suburbld		
	Step 11: The system displays a		
	successful update message		
ALTERNATE	ALT Step 5: The administrator does not want to add a Supplier anymore		
COURSES:	The use case is terminated		
	ALT Step 6: The entered details are not in the correct format or the required fields are empty		
	The system displays a validation error messageReturn to step 5		
	ALT Step 8 : The administrator does not confirm the updating of the supplier details		
	Return to Step 5 or terminate the use case		
	ALT Step 9: The supplier already exists on the system		
	The system displays a validation error messageThe use case is terminated		
CONCLUSION:	This use case concludes when the supplier details are updated.		
POST-CONDITION:	The supplier details are updated on the database.		
BUSINESS RULES	Only the administrator can update a supplier.		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



Table 121 - 11.4 Delete Supplier

SUPPLIER SUBSYSTEM					
AUTHORS (s): Nomusa	THORS (s): Nomusa Vumisa DATE: 14/05/2022		/2022		
VERSION: 1.0	RSION: 1.0 LAST REVI		IEW DATE: 14/05/2022		
USE CASE NAME:	Delete Supplier		USE CASE TYPE		
USE CASE ID:	11.4		Business Requirements:		
PRIORITY:	Medium		System Analysis:		
SOURCE:	ByteXpress Requiremer	nts List	System Design:		
PRIMARY BUSINESS ACTOR	Administrator				
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	• None				
OTHER INTERESTED STAKEHOLDERS:	• None				
DESCRIPTION:	This use case narrative describes the process in which the administrator wishes to delete a supplier from the system. The administrator will search for the required supplier and then confirm the deletion of the supplier and the use case concludes when the system notifies the administrator of a successful deletion.				
PRE-CONDITION:	The administrator must be logged in to the system.				
TRIGGER:	This use case is called when the administrator wishes to delete a supplier.				
TYPICAL COURSE	Actor Action	Svste	n Response		
OF EVENTS:	Step 1: The administrate wishes to delete a suppl	or Step	2: The system invokes Use Case Search Supplier.		
	Step 3: The administrate selects the desired supp	olier desir	4 : The system retrieves the ed suppliers' details from the <i>v</i> ing tables		
		From	the Supplier Table		





	 CompanyName EmailAddress PhoneNumber StreetName
	From the Suburb Table SuburbName
	From the City Table CityName
	From the Province Table ProvinceName
	From the Country Table CountryName
Step 5: The administrator selects the delete option [ALT]	Step 6: The system prompts the administrator to confirm the deletion of the supplier.
Step 7: The administrator confirms the deletion of the supplier from the system. [ALT]	Step 8: The system reads from the InventoryProcured table to ensure that the record being deleted does not have an association with Procured Inventory using the following attribute:
	 Supplier_Id
	[ALT]
	Step 9: The system removes all the details related to the supplier from the database from the following tables:
	From the Supplier Table CompanyName EmailAddress PhoneNumber StreetName Suburbld



	Step 10: The system informs the administrator of the successful deletion of the supplier		
ALTERNATE COURSES:	 ALT Step 5: The administrator does not want to delete the supplier Terminate this use case. ALT Step 7: The administrator does not confirm the deletion of the supplier. Return to step 4 		
	 ALT Step 8: The supplier cannot be deleted as it has an association with the Procure Inventory Table The system displays an error message The use case is terminated 		
CONCLUSION:	This use case concludes when the administrator is notified of the successful deletion of the supplier.		
POST-CONDITION:	• The system deletes all the details related to the selected supplier from the supplier table .		
BUSINESS RULES	 Only the administrator can delete a supplier. A supplier from which inventory has been received or ordered cannot be deleted on the system. 		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	• None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



Table 122 - 11.5 Send Supplier Order

SUPPLIER SUBSYSTEM					
AUTHORS (s): Kyle van	THORS (s): Kyle van Eeden DATE: 27/06/2022		27/06/2022		
VERSION: 1.1	ERSION: 1.1		LAST REVIEW DATE: 27/06/2022		
USE CASE NAME:	Send Supplier Order		USE CASE TYPE		
USE CASE ID:	11.5		Business Requirements:		
PRIORITY:	High		System Analysis:		
SOURCE:	ByteXpress Requiremer	nts List	System Design:		
PRIMARY BUSINESS ACTOR	Administrator				
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	None				
OTHER INTERESTED STAKEHOLDERS:	None				
DESCRIPTION:	The use case begins when a user with the Administrator role assigned wishes to send a supplier an email that contains all of the required inventories and their required quantities. The administrator select a specific supplier to send the request to and the system displays a form on which all the supplier order details is to be captured. The administrator should be able to search all inventories defined on the system to add all relevant items along with their required quantities. After the input provided has been validated, the system sends an email containing all the supplier order details to the selected supplier's email address. The use case concludes when the system confirms that the email has been sent successfully.				
PRE-CONDITION:	At least one Inventory Item has to be defined on the system to send a supplier order email. The supplier to send the supplier order to must be defined on the system.				
TRIGGER:	This use case is called when a system administrator wishes to send a supplier order email to a specific supplier within Natuurlik's suppliers list.				
TYPICAL COURSE	Actor Action		System Response		
	Step 1: The system administrator wishes toStep 2: The system displays the following details for all the supplier retrieved from the Supplier entity a				



request inventories from one of Natuurlik's suppliers.	select a single supplier to send the email to:		
	Details to be read Supplier Name Supplier Email Address	Attributes in the table CompanyNa me SupplierEm ail	Notes Name of each supplier retrieved. Email address of each supplier.
Step 3: The administrator wishes to search for the specific supplier they wish to contact and enters a value to search by.	Step 4: The retrieved fror only displayin that have ma specified.	m the Suppli ng the details	of suppliers
Step 5: The system administrator selects the option to send a supplier order email to a specific supplier.	•	ails retrieved	ays the from the the ecific supplier
[ALT]	items that are	e associated	
	selected sup sent, if any, t	plier's last or by retrieving t	der request



			inventory
	Inventory Item Order Quantity	OrderQuanti ty	item. Quantity of each inventory item last ordered.
	The system r associated ir Inventorylte	nventory item	
	Details to be read	Attributes in the table	Notes
	Inventory Item Name	Inventorylte mName	Name of each inventory item
Step 7: The administrator enters a search criteria value to look up an Inventory Item they wish to order and that is not included in the list of inventory items displayed.	Step 8: The following deta where the na matched the Items from th	ails for all inv ame attribute search quer	ventory items value y entered
[ALT]	Details to be read Inventory Item Name	Attributes in the table InventoryIte mName	Notes Name of each inventory item that matched the search query.
Step 9: The administrator selects the Inventory Item they wish to include in the supplier order email.	inventory iter inventories if	m to the supp it was not in the updated	cluded before I list to display
Step 11: The administrator enters all required details and the quantities of each inventory item they wish to request from the selected supplier and selects the option to send the supplier order email. [ALT]	Step 12: The the provided the identified	details are c	•



		[ALT]	
		Step 13 : The system generates an email containing the following captured supplier order details:	
		 Supplier Email (Recipient) Subject Message Inventory Item Name Inventory Item Quantity 	
		Step 14: The system sends the supplier order email to the selected supplier's email address.	
		Step 15 : The system displays an alert confirming that the supplier order request email has been sent successfully.	
ALTERNATE COURSES:	ALT Step 5: The administrator no longer wishes to send a supplier order request to an existing supplier or the required supplier's details is not yet defined on the system:		
	 The administrator clicks the option provided to cancel the operation: The use case is terminated. 		
	ALT Step 7 a: The administrator does not wish to search for any other Inventory Item to add to the supplier order request:		
	 Proceed to Step 11. ALT Step 7 b: The administrator wishes to remove an Inventory Item included in the table of inventories and selects the option provided to remove a specific item: 		
	 The system removes the Inventory Item temporarily from the list of Inventory Items. Proceed to Step 11. 		
	ALT Step 10: The system detects that the Inventory Item selected already exists in the inventories list:		
	 Proceed to Step 11. ALT Step 11: The administrator no longer wishes to send the supplier order email and selects the option to cancel the operation: 		
		cts validation errors in the details captured es validation errors for all required fields ntaining incorrect data:	
	The system displays theReturn to Step 11.	validation errors raised for each field.	



CONCLUSION:	This use case concludes when the system displays a confirmation notification which informs the administrator that the supplier order email has been sent successfully.	
POST-CONDITION:	The updated inventory items list is saved to the SupplierInventoryItem entity.	
BUSINESS RULES	 Only the system administrator roles should be permitted to send emails to suppliers using this functionality. The list of inventory items to be requested from a supplier should be specified by the system administrators. 	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 Remember the inventory items list that has been requested from a specific supplier and populate the list automatically for the next supplier order. The supplier order email cannot be sent as the system is offline or the administrator has no stable internet connection. 	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	

2.12. Driver Subsystem

DRIVER SUBSYSTEM				
AUTHORS (s): Ofhani N	s): Ofhani Mungani DATE: 30/08/2023		/08/2023	
VERSION: 1.0	LAST REVIEW DA		VIEW DATE: 30/08/2023	
USE CASE NAME:	View Deliveries		USE CASE TYPE	
USE CASE ID:	12.1		Business Requirements:	
PRIORITY:	High		System Analysis:	\boxtimes
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Delivery Driver			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes an event where the delivery driver wants to view orders to deliver on a mobile device. The use case begins when the delivery driver requests to view orders to deliver and the system responds by retrieving the details. The use case concludes when the details are displayed on the mobile application screen.			
PRE-CONDITION:	The main system server should be online.			
TRIGGER:	The order status should be dispatched. The use case is called when the delivery driver wants to view orders to deliver.			to
TYPICAL COURSE	Actor Action	System Response		
OF EVENTS:	Step 1: The delivery driv wants to view orders to on the mobile application	ver S deliver de	tep 2: The system displays the o etails using the following attributes rom the Order Table OrderId FirstName Surname PhoneNumber	
			StreetAddressCreatedDate	

Table 123- 12.1 View Deliveries





		 From the Suburb Table SuburbName PostalCode From the City Table CityName From the Province Table ProvinceName From the Country Table CountryName 	
ALTERNATE COURSES:	None		
CONCLUSION:	This use case concludes when the order's details are displayed.		
POST-CONDITION:	The Order, Suburb, City, Province and Country Tables were read		
BUSINESS RULES	 The mobile application only handles deliveries linked to Garsfontein suburb. 		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The delivery driver cannot view orders without an internet connection. The delivery driver should own an android device. 		
ASSUMPTIONS:	The delivery driver owns an android device.		
OPEN ISSUES:	None		



Table 124- 12.2 View Previous Deliveries

DRIVER SUBSYSTEM				
AUTHORS (s): Ofhani Mungani		DATE: 30/08/2023		
VERSION: 1.0	LAST RE		EVIEW DATE: 30/08/2023	
USE CASE NAME:	View Previous Deliveries	S	USE CASE TYPE	
USE CASE ID:	12.2		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Delivery Driver			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes an event where the delivery driver wants to view previous deliveries on a mobile device. The use case begins when the delivery driver requests to view previous deliveries and the system responds by retrieving the details. The use case concludes when the details are displayed on the mobile application screen.			
PRE-CONDITION:	The main system server should be online.			
TRIGGER:	The use case is called when the delivery driver wants to view previous deliveries.			
TYPICAL COURSE	Actor Action	S	ystem Response	
OF EVENTS:	Step 1: The delivery driver wants to view previous deliveries on the mobile application.	1	tep 2: The system invokes Use Case 2.1 View Delivery	
	Step 3: The delivery drives selects an option to view previous deliveries.	v d	tep 4: The system displays the elivery details using the following ttributes:	
		F	rom the Order Table	
			OrderId	
		F	rom the Delivery Table	



	Date	
ALTERNATE COURSES:	None	
CONCLUSION:	This use case concludes when the delivery's details are displayed.	
POST-CONDITION:	The Delivery Tables were read	
BUSINESS RULES	 The mobile application only handles deliveries linked to Garsfontein suburb. 	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The delivery driver cannot view orders without an internet connection. The delivery driver cannot view orders without an android device 	
ASSUMPTIONS:	The delivery driver owns an android device.	
OPEN ISSUES:	None	



Table 125- 12.3 Confirm Deliveries

DRIVER SUBSYSTEM				
AUTHORS (s): Ofhani Mungani		DATE: 30/08/2023		
VERSION: 1.0	VERSION: 1.0 LAST		ST REVIEW DATE: 30/08/2023	
USE CASE NAME:	Confirm Deliveries		USE CASE TYPE	
USE CASE ID:	12.3		Business Requirements:	
PRIORITY:	High		System Analysis:	
SOURCE:	ByteXpress Requiremer	nts List	System Design:	
PRIMARY BUSINESS ACTOR	Delivery Driver			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	• None			
OTHER INTERESTED STAKEHOLDERS:	None			
DESCRIPTION:	This use case describes an event where the delivery driver is done delivering an order and wants to confirm the completion of the task. The use case begins when the delivery driver wants to confirm the completion of a delivery and the system responds by creating a new delivery on the system's database. The use case concludes when a message indicating that order is delivered is displayed on the mobile application screen.			
PRE-CONDITION:	The main system server should online.			
TRIGGER:	The use case is called when the delivery driver wants to confirm the completion of an order delivery.			
TYPICAL COURSE	Actor Action	S۱	vstem Response	
OF EVENTS:	Step 1 : The delivery driv wants to confirm the completion of an order delivery.	/er S	tep 2: The system invokes Use Case 2.1 View Delivery	
	Step 3: The delivery driving selects an option to come a delivery.	plete st	tep 4: The system updates order tatus to delivered using the following ttributes:	
		F	rom the Order table	
			OrderStatus	

	Step 5: The system Creates a new delivery using the following attributes:Into the Delivery tableInto the Delivery tableIdDateOrderIdand displays a success message on the screen to confirm the completion of an order delivery.Step 6: The delivery driver selects an option to dismiss the success message	
ALTERNATE COURSES:	None	
CONCLUSION:	This use case concludes when the delivery driver dismisses the toaster alert.	
POST-CONDITION:	• A new completed delivery is created in the Delivery table	
BUSINESS RULES	 The mobile application only handles deliveries linked to Garsfontein suburb. 	
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The delivery driver cannot confirm deliveries without an internet connection. The delivery driver should own an android device. 	
ASSUMPTIONS:	The delivery driver owns an android device.	
OPEN ISSUES:	None	





2.13. VAT Subsystem

VAT SUBSYSTEM			
AUTHORS (s): Aphiwe S	we Shozi DATE: 06/062		2022
VERSION: 1.0		LAST REVIE	N DATE: 06/062022
USE CASE NAME:	Create VAT Amount		USE CASE TYPE
USE CASE ID:	13.1		Business Requirements:
PRIORITY:	High		System Analysis:
SOURCE:	ByteXpress Requiremen	ts List	System Design:
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes the process in which the administrator wishes to add a new VAT Amount onto the system. The use case begins when the administrator wishes to add a VAT Amount. The administrator will proceed to capture the VAT Amount details and save it to the system database.		
PRE-CONDITION:	The administrato	r must be logge	ed onto the system.
TRIGGER:	The use case is triggere VAT Amount.	d when the adr	ninistrator wants to create a new
TYPICAL COURSE	Actor Action	Systen	n Response
OF EVENTS:	Step 1: The administrate wants to create a new V Amount.	AT to add	2: The system requires the admin d information about the VAT nt in the VAT Table such as : Created Date Percentage Is Active
	Step 3: The administrate provides the required the details. [ALT]	e valida [ALT] Step table create	 4: The system captures and tes the entered details 5: The system reads from the VAT to ensure that the record being ed does not match any existing ds using the following attribute:

Table 126 - 13.1 Create VAT Amount



	 Id Created Date Percentage Is Active 	
	[ALT]	
	Step 6: The system saves the new VAT Amount details which have the following attributes:	
	From the VAT Table	
	 Id Created Date Percentage 	
	 Fercentage Is Active 	
	[ALT]	
	Step 7: The system save the new VAT	
ALTERNATE	Amount to the <u>VAT Table</u> ALT Step 3 : The administrator does not want to add a VAT Amount	
COURSES:	anymore	
	The use case is terminated	
	ALT Step 4: The entered details are not in the correct format or the required fields are empty	
	 The system displays a validation error message 	
	Return to step 3	
	ALT Stop 5: The VAT Amount is already exists on the system	
	 ALT Step 5: The VAT Amount is already exists on the system The system displays a validation error message 	
	 The use case is terminated 	
CONCLUSION:	This use case concludes when a new VAT Amount is created.	
POST-CONDITION:	The VAT Amount details are added to the database.	
BUSINESS RULES	Only the administrator can add a new VAT Amount.	
	None	
CONTRAINTS AND SPECIFICATIONS		
ASSUMPTIONS:	None	
OPEN ISSUES:	None	



Table 127 - 13.2 Search VAT Amount

	VAT SUBSYSTE	Μ	
AUTHORS (s): Aphiwe S			
VERSION: 1.1		REVIEW DATE: 24/07/2022	
USE CASE NAME:	Search VAT	USE CASE TYPE	
USE CASE ID:	13.2	Business Requirements:	
PRIORITY:	Medium	System Analysis:	
SOURCE:	ByteXpress Requirements List	System Design:	
PRIMARY BUSINESS ACTOR	Administrator		
PRIMARY SYSTEM ACTOR	None		
OTHER PARTICIPATING ACTORS:	• None		
OTHER INTERESTED STAKEHOLDERS:	None		
DESCRIPTION:	This use case describes the process in the administrator wishes to perform a search on all the existing VAT instances' details on the system. The administrator can search for VAT details defined on the system by entering a search query based on either the VAT Value or VAT Status values assigned to all instances. The use case concludes once the system has filtered the records and displays only the details of those VAT records which have matched the specified search query.		
PRE-CONDITION:	The administrator must be logged onto the system.		
TRIGGER:	This use case is called when the Amount on the system.	e administrator wants to search for a VAT	
TYPICAL COURSE	Actor Action	System Response	
OF EVENTS:	Step 1 : The administrator wishes to search for existing VAT details defined on the system.	 Step 2: The system displays the following details for all VAT instances retrieved from the VAT table: VAT Value VAT Status 	
	Step 3 : The administrator enters the search parameter in the field provided.	Step 4: The system filters the details by only displaying the details of those VAT instances where the details have matched the search query provided. [ALT]	
ALTERNATE COURSES:	 ALT Step 4: The search query entered does not match the details of any existing instances defined on the system: The system indicates that no results have been found. The use case is terminated. 		
CONCLUSION:	This use case concludes when only the details are displayed of those VAT instances where its details have matched the search query specified.		
POST-CONDITION:	Only the details of VAT instances that have matched the search query provided is displayed.		



BUSINESS RULES	 Only administrator users should be allowed to search for VAT details defined on the system.
IMPLEMENTATION CONSTRAINTS AND SPECIFICATIONS	 The system is offline or the administrator user does not have access to the internet, resulting in the user being unable to search for VAT details on the system.
ASSUMPTIONS:	None
OPEN ISSUES:	None

Table 128 - 13.3 Update VAT

	VAT SUBSYSTE	Μ		
AUTHORS (s): Aphiwe S				
VERSION: 1.1		REVIEW DATE: 24/07/2022		
USE CASE NAME:	Update VAT Details	USE CASE TYPE		
USE CASE ID:	13.3	Business Requirements:		
PRIORITY:	High	System Analysis:		
SOURCE:	ByteXpress Requirements List	System Design:		
PRIMARY BUSINESS ACTOR	Administrator			
PRIMARY SYSTEM ACTOR	None			
OTHER PARTICIPATING ACTORS:	None			
OTHER INTERESTED STAKEHOLDERS:	System Owner			
DESCRIPTION:	This use case describes the process in which the administrator wishes to update the details of existing VAT instances on the system. The use case begins when the administrator requests the system to update the details of an existing VAT instance. The system will then prompt the administrator to enter the updated details and after having entered the details, the system will prompt the administrator to confirm the updated details. The captured input is then validated and if validation has passed, the system will save the updated details to the VAT table. This use case concludes when the system displays an alert confirming that the updated VAT details have been saved successfully.			
PRE-CONDITION:	The administrator must b	be logged onto the system.		
TRIGGER:	The use is triggered when the a update the details of an existing	dministrator requests the system to VAT instance.		
TYPICAL COURSE	Actor Action	System Response		
OF EVENTS:	Step 1 : The administrator wishes to update a VAT instance's details.	Step 2: The system invokes Use Case 13.2 Search VAT.		
	Step 3: The administrator selects the option provided to update the desired VAT record's details.	 Step 4: The system retrieves the VAT instance's details which has been requested to be updated from the following tables: From the VAT Table: VAT Value VAT Status The system also prompts the administrator to capture the updated details for the VAT instance. 		



	Step 5 : The administrator enters the updated VAT details.	Step 6: The system captures and validates the entered details. [ALT]
	[ALT] Step 8: The administrator selects the option to proceed with the update operation.	 Step 7: The system prompts the administrator to confirm the updated VAT details provided. Step 9: The system reads the following attribute values for all VAT instances from the VAT table:
	[ALT]	 VAT Value VAT Status
		The retrieved details is used to ensure that the updated VAT Value captured is unique across all existing VAT instances.
		The system will also perform a check to ensure that only one instance has a status of 'Active' assigned if the VAT instance's status has been changed from 'Inactive' to 'Active'.
		[ALT] Step 10: The system saves the updated VAT details for the requested instance in the VAT table:
		VAT ValueVAT Status
		Step 11: The system displays an alert that confirms the VAT details have been updated successfully.
ALTERNATE COURSES:	anymore:	does not wish to update the VAT details s the option provided to cancel the update ted.
	required fields are empty:	s are not in the correct format or the alidation error message for each field for was raised.
	ALT Step 8: The administrator of updating of the VAT instance's of the VAT instance's of the VAT instance.	s the option provided to cancel the update



	 ALT Step 9 a: The VAT Value value already exists on the system for another VAT instance: The system displays a validation error message informing the administrator that the VAT Value already exists. 	
	The use case is terminated	
	ALT Step 9 b: Another VAT instance already has a status value of 'Active' assigned:	
	 The system displays a validation error message informing the administrator that only one VAT instance may be active at a time. The use case is terminated 	
CONCLUSION:	This use case concludes when the details of the respective VAT record has been updated successfully on the system and the system has displayed a message confirming the update was performed successfully.	
POST-CONDITION:	The requested VAT instance's details is updated in the VAT table.	
BUSINESS RULES	 Only administrator users should be allowed to update a VAT instance's details. 	
IMPLEMENTATION CONSTRAINTS AND SPECIFICATIONS	 The system is offline or the administrator user does not have access to the internet, resulting in the user being unable to update the details of a VAT instance defined on the system. 	
ASSUMPTIONS:	None	
OPEN ISSUES:	None	
Table 129 - 13.4 Delete VAT

	VAT SUBSYSTE	M			
AUTHORS (s): Aphiwe S	Shozi DATE	: 06/06/2022			
VERSION: 1.1	LAST	REVIEW DATE: 24/07/2022			
USE CASE NAME:	Delete VAT	USE CASE TYPE			
USE CASE ID:	13.4	Business Requirements:			
PRIORITY:	Medium	System Analysis:			
SOURCE:	ByteXpress Requirements List	System Design:			
PRIMARY BUSINESS ACTOR	Administrator				
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	 None 				
OTHER INTERESTED STAKEHOLDERS:	None				
DESCRIPTION:	This use case narrative describes the process in which the administrator wishes to delete a VAT instance's details from the system. The administrator will search for the required VAT instance to be deleted and request the system to remove its details. The system will display the current details stored for the requested VAT instance and the administrator be prompted to confirm the removal of the VAT instance. Once the administrator confirms to proceed with the removal, the system will remove all of the details stored for the particular instance from the VAT table. The use case concludes once the system displays an alert which confirms that the VAT instance's details has been removed successfully.				
PRE-CONDITION:	The administrator must be logg	ed in to the system.			
TRIGGER:	This use case is called when th instance from the system.	e administrator wishes to delete a VAT			
TYPICAL COURSE	Actor Action	System Response			
OF EVENTS:	Step 1: The administrator wishes to delete a VAT instance.Step 2: The system invokes Use 11.2 Search VAT Amount.				
	Step 3: The administrator selects option to delete the desired VAT instance from the system.Step 4: The system retrieves the requested VAT instance's details fr the following tableFrom the VAT Table : • VAT Value • VAT Status • Created Date				
	Step 5: The administrator selects the delete option provided.	Step 6: The system prompts the administrator to confirm the removal of the requested VAT instance.			



	[ALT] Step 7: The administrator selects the option to confirm the removal of the VAT details from the system. [ALT]	 Step 8: The system retrieves the following details from the Order table for all existing orders: VAT ID The retrieved information is used to determine whether the VAT instance requested for removal has been associated with any orders on the system. 			
		[ALT] Step 9: The system removes the following details for the requested VAT instance from the VAT table: • VAT ID			
		 VAT Value VAT Status Created Date Step 10: The system informs the			
		administrator of the successful deletion of the VAT details by displaying a confirmation alert.			
ALTERNATE COURSES:	from the system anymore:	does not wish to delete the VAT instance s the option provided to cancel the delete red.			
	 ALT Step 7: The administrator does not wish to proceed with the remote of the requested VAT instance's details: The administrator selects the option provided to cancel the del operation. 				
	 The use case is terminated. ALT Step 8: The VAT instance's details cannot be removed from the system since it is associated with an order which has been placed on the system: The system displays a validation error message informing the administrator why the VAT details cannot be removed. 				
CONCLUSION:		he system displays an alert which			
POST-CONDITION:	 confirms the VAT details has been removed successfully. The system has removed all the VAT record's details from the VAT table. 				
BUSINESS RULES		nould be allowed to delete a VAT instance			



IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 The system should restrict administrator users from removing VAT details which have been associated with orders placed on the system to ensure referential integrity. The system is offline or the administrator does not have access to the internet, resulting in the administrator not being able to remove VAT details from the system at that time.
ASSUMPTIONS:	None
OPEN ISSUES:	None

2.14. Reseller Credit Settlement Time Subsystem

RE	SELLER CREDIT SETTL	EMENT	TIME S	UBSYSTEM	
AUTHORS (s): Nomusa	Vumisa	DATE:	14/05/2	022	
VERSION: 1.0		LAST F	REVIEW	/ DATE: 14/05/2022	
USE CASE NAME:	Update Reseller Credit Settlement Time			USE CASE TYPE	
USE CASE ID:	14.1			Business Requirements:	
PRIORITY:	High			System Analysis:	\mathbf{X}
SOURCE:	ByteXpress Requiremen	ts List		System Design:	
PRIMARY BUSINESS ACTOR	Administrator				
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	None				
OTHER INTERESTED STAKEHOLDERS:	None				
DESCRIPTION:	This use case describes the process in which the administrator wishes to update the reseller credit settlement time on the system. The administrator will then update the settlement time and save it to the database. The use case ends when the administrator receives a successful update notification.				
PRE-CONDITION:	The administrator must b	be logge	d onto th	ne system	
TRIGGER:	The use case is triggered reseller credit settlement		the admi	inistrator wants to update th	ne
TYPICAL COURSE	Actor Action		System	Response	
OF EVENTS:	Step 1: The administrator Step 2: The system retrieves the vishes to update the reseller following attribute from the credit settlement time PaymentReminder table: • Days				
	Step 3: The administrator selects their desired settlement time intervalStep 4: The system requests the administrator to confirm the upda the settlement time			strator to confirm the updati	
	Step 5: The administrator confirms the updating of the settlement time [ALT]Step 6: The system reads from the PaymentReminder table to ensure the record being updated is not a active using the following attribute			ntReminder table to ensur- ord being updated is not alr	e that eady
			•	IsActive	
			[ALT]		

Table 130 - 14.1 Update Reseller Credit Settlement Time



	Step 7: The system activates the selected settlement time using the following attributes:From the PaymentReminder Table			
	IsActive Step 8: The system displays a			
	successful creation message			
ALTERNATE COURSES:	 ALT Step 5: The administrator does not confirm the updating of the settlement time The use case is terminated 			
	 ALT Step 6: The settlement time is already active on the system The system displays an error message The use case is terminated 			
CONCLUSION:	This use case concludes when the settlement time is updated.			
POST-CONDITION:	The settlement time was updated in the PaymentReminder Table			
BUSINESS RULES	Only the administrator can update the settlement time			
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	 Only one settlement time can be active at a time The settlement time cannot be updated without an internet connection 			
ASSUMPTIONS:	None			
OPEN ISSUES:	None			



2.15. Video Subsystem

AUTHORS (s): Thenjiwe NtsondaDATE: 18/04/2022VERSION: 1.0LAST REVIEW DATE: 23,USE CASE NAME:Add VideoUSE CASE ID:15.1PRIORITY:HighSOURCE:ByteXcom Requirements ListPRIMARY BUSINESS ACTOR• AdministratorPRIMARY SYSTEM ACTOR• None	/08/2022 USE CASE TYPE Business Requirements: □ System Analysis: □ System Design: ⊠
USE CASE NAME:Add VideoUSE CASE ID:15.1PRIORITY:HighSOURCE:ByteXcom Requirements ListPRIMARY BUSINESS ACTOR• AdministratorPRIMARY SYSTEM• None	USE CASE TYPE Business Requirements: System Analysis:
USE CASE ID:15.1PRIORITY:HighSOURCE:ByteXcom Requirements ListPRIMARY BUSINESS ACTOR• AdministratorPRIMARY SYSTEM• None	Business Requirements: System Analysis:
PRIORITY:HighSOURCE:ByteXcom Requirements ListPRIMARY BUSINESS ACTORAdministratorPRIMARY SYSTEMNone	System Analysis:
SOURCE: ByteXcom Requirements List PRIMARY BUSINESS ACTOR • Administrator PRIMARY SYSTEM • None	
PRIMARY BUSINESS • Administrator ACTOR • None	
ACTOR PRIMARY SYSTEM • None	
OTHER • None PARTICIPATING ACTORS:	
OTHER INTERESTED • None STAKEHOLDERS:	
DESCRIPTION: This use case describes the process in which the a video to the system. The use case begins when the The administrator will add all the pertinent inform it to the business database.	ne administrator adds the new video.
PRE-CONDITION: • The administrator must be logged onto the	he system.
TRIGGER: The use case is triggered when the administrator	wants to add a new video.
TYPICAL COURSE SYS	STEM RESPONSE
OF EVENTS: ACTOR ACTION MANUAL AUTO ACTION	MATED ACTION
administrator navigates to the Video Screen under the Video tab on the side bar Details read Name Video And di follow	

Table 131- 15.1 Add Video

		Туре	
	Video List	Heading	Page main
			heading
	Question Mark Icon	Button	When clicked, this control will open a pdf which contains the help document
	Create New Video	Button	When clicked, this control will direct the user to the Create video page
	Search bar	Textbox	This control will be used when the user inserts the search parameters
	Search icon	Button	This control will be used to activate the search
	Results table	Table	This control will be used to display all the videos that exist on the system
	Name	Label	This control will be used as a heading to display the Name for all videos
	Video Link	Label	This control will be used as a heading to display a video link for all videos
	Action - Update	Button	This control will be placed in a row, with the delete button, under the "Action" heading for each entry in the Video table. The button will direct the user to the Update Video screen
	Action - Delete	Button	This control will be placed in a row, with the delete



-		
		button, under
		the "Action"
		heading for
		each entry in
		the Video
		table. The
		button will
		direct the
		user to the
		Delete Video
		Details screen
	Showing "" to Label "" of ""	This control
	entries	will be used
	entres	to display the
		number of
		entries
		displayed per
		page as well
		as the total
		number of
		entries in the
		database
	"Previous" Label and	This control is
	and "Next" button	used to
		navigate
		through the
		entry pages
		and to
		indicate on
		which page
		the
		administrator
		is currently on
Step 3: The system	Step 4: The system displa	
administrator clicks on	Video coroon with the fe	
administrator clicks on	Video screen with the fo	
the Create New Video		llowing controls:
	Control Name Control	
the Create New Video	Control Name Control Type	llowing controls:
the Create New Video	Control Name Control	llowing controls:
the Create New Video	Control Name Control Type	Notes Page main
the Create New Video	Control NameControlTypeCreate VideoVideoinformation	Ilowing controls: Notes Page main heading Page subheading
the Create New Video	Control NameControlTypeCreate VideoVideoHeading	Ilowing controls: Notes Page main heading Page subheading This control will
the Create New Video	Control NameControlTypeCreate VideoVideoinformation	Ilowing controls: Notes Page main heading Page subheading This control will be used as a
the Create New Video	Control NameControlTypeCreate VideoVideoinformation	Ilowing controls: Notes Page main heading Page subheading This control will be used as a label to
the Create New Video	Control NameControlTypeCreate VideoVideoinformation	Ilowing controls: Notes Page main heading Page subheading This control will be used as a label to indicate the
the Create New Video	Control NameControlTypeCreate VideoVideoinformation	Ilowing controls: Notes Page main heading Page subheading This control will be used as a label to indicate the Name attribute
the Create New Video	Control NameControlTypeCreate VideoVideoinformation	Ilowing controls: Notes Page main heading Page subheading This control will be used as a label to indicate the Name attribute of the video
the Create New Video	Control NameControl TypeCreate VideoHeadingVideoHeadinginformationHeadingNameLabel	llowing controls: Notes Page main heading Page subheading This control will be used as a label to indicate the Name attribute of the video record
the Create New Video	Control NameControlTypeCreate VideoVideoinformation	llowing controls: Notes Page main heading Page subheading This control will be used as a label to indicate the Name attribute of the video record This control will
the Create New Video	Control NameControl TypeCreate VideoHeadingVideoHeadinginformationHeadingNameLabel	Ilowing controls: Notes Page main heading Page subheading This control will be used as a label to indicate the Name attribute of the video record This control will be used by the
the Create New Video	Control NameControl TypeCreate VideoHeadingVideoHeadinginformationHeadingNameLabel	llowing controls: Notes Page main heading Page subheading This control will be used as a label to indicate the Name attribute of the video record This control will
the Create New Video	Control NameControl TypeCreate VideoHeadingVideoHeadinginformationHeadingNameLabel	llowing controls: Notes Page main heading Page subheading This control will be used as a label to indicate the Name attribute of the video record This control will be used by the administrator



	Video Link Video Link	Label Textbox	This control will be used as a label to indicate the Video Link attribute of the video record This control will be used by the administrator to insert the link of the
	Create	Button	video This control will be used to confirm the addition of the video
	Cancel	Button	This control will be used to cancel the addition of the video
	Note: All contruinters stated o	therwise.	-
Step 5: The system administrator enters the details and clicks on the Create button		-	s and validates the Video table
[ALT]	Details to be validated	Attributes in the video table	Notes
	Name Video Link	Name VideoUrl	Required, Unique Required,
	Step 7: The sy query to chec the Video tab attributes	k if the video	already exists in
	[ALT] Details to be read	Attributes in th Notes	e table
	Name Video Link	Name VideoUrl	



			Step 8: The system saves the informa into the Video table using an INSERT query:		
			Details to be	Attributes in	Notes
			saved Videold	the table Videold	A unique value generated by the system and saved to the database.
			Name	Name	Required
			Video Link	VideoUrl	Required
			Step 9: The sy	ystem redirect	ts the system
			administrator	r to the Video	Screen and
			displays a me	ssage box wit	h the following
			controls:		
			Control Name	Control Name	Notes
			Checkbox	lcon	This control is used to indicate a successful
			"Video Created Successfully"	Label	creation This control is used to indicate a successful creation
ALTERNATE COURSES:	ALT Step 6: The administrato The administrato The use case it te ALT Step 7: The Video alr	r clicks on the ca rminated	ancel button	deo anymore	
	The system displa	-	-	h the followin	g controls
	Control Name	Control Nan	1e	Notes	
	Video already exists!	Label		This control is used to inform the administrator that the video already exists	
	Okay	Button		This control the creation	is used to cancel of the video
	The administratoThe use case is te		ay" button		
	ALT Step 8A: The details of are empty • The system displa				
	controls Control Name	Control Name	<u></u>	Notes	
	Name	Textbox			ill be outline in
					validation error

	Name is required Video Link Video Link is required	Label Textbox Label	This control will be used as a label to indicate a validation error in the Name textbox This control will be outline in red to show a validation error This control will be used as a		
			label to indicate a validation error in the Video Link textbox		
	Return to step 3				
CONCLUSION:	This use case concludes when a video has been added on the system				
POST-CONDITION:	A new user has been added to the Video table in the database				
BUSINESS RULES	Only the administrator has access to this function.				
IMPLEMENTATION CONSTRAINTS AND SPECIFICATIONS	• The system is offline, and the system administrator will not be able to add a new video.				
ASSUMPTIONS:	None				
OPEN ISSUES:	None				

Table 132- 15.2 Search Video

	V	IDEO SUBSYSTEI	M			
AUTHORS (s): Thenjiw	ve Ntsonda	DATE: 18/04/2	.022			
VERSION: 1.0		LAST REVIEW	DATE: 23/08/202	22		
USE CASE NAME:	Search Video	-		USE CASE T	YPE	
USE CASE ID:	15.2		Busi	ness Requiremer	nts: 🗆	
PRIORITY:	Medium		Syste	em Analysis:		
SOURCE:	ByteXcom Requirement	Syste	em Design:	\boxtimes		
PRIMARY BUSINESS ACTOR	Administrator					
PRIMARY SYSTEM ACTOR	• None					
OTHER PARTICIPATING ACTORS:	• None					
OTHER INTERESTED STAKEHOLDERS:	• None					
DESCRIPTION:	This use case describes the process in which the administrator searches for videos on the system. The system responds by displaying the information relating to the search query.					
PRE-CONDITION:	The administrat	or must be logge	ed onto the syste	em.		
TRIGGER:	This use case is called w system.	hen the adminis	trator wants to s	earch for a video	on the	
TYPICAL COURSE			SYSTEM R	ESPONSE		
OF EVENTS:	ACTOR ACTION	MANUAL ACTION	AUTOMATED	ACTION		
	Step 1: The administrator wishes to search for a video on the system. Step 2: The administrator navigates to the Video Screen under the Video tab on the side bar		Step 3: The system retrieves following information using an SQL READ QUERY From the Video table: Details to be read Attributes in the table read Name Name Video Link VideoUrl And displays the Video Screen with the following controls:			
			Control Name	Control N Type	otes	



	Videos List	Heading	Page main heading
	Question Mark Icon	Button	When clicked, this control will open a pdf
			which contains the help document
	Create New Video	Button	When clicked, this control will direct the user to the Add video page
	Search bar	Textbox	This control will be used when the user inserts the search parameters
	Search icon	Button	This control will be used to activate the search
	Results table	Table	This control will be used to display all the videos that exist on the system
	Name	Label	This control will be used as a heading to display the Name for all videos
	Video Link	Label	This control will be used as a heading to display the Video Link for all videos
	Action	Table Heading	This control will be used as a heading to display the actions the administrator can perform with each entry – Edit and Delete
	Action - Update	Button	This control will be placed in a row, with the delete button, under the "Action" heading for each entry in the Video
			table. The button will



		[]	-	r	1 1
					direct the
					user to the
					Update Video
					screen
			Action -	Button	This control
			Delete		will be placed
					in a row, with
					the delete
					button, under
					the "Action"
					heading for
					each entry in the Video
					table. The
					button will
					direct the
					user to the
					Delete Video
					Details screen
			Showing "" to	Label	This control
			"" of ""		will be used
			entries		to display the
					number of
					entries
					displayed per
					page as well
					as the total
					number of
					entries in the
					database
			"Previous"	Label and	This control is
			and "Next"	button	used to
					navigate
					through the
					entry pages
					and to
					indicate on
					which page the
					administrator
					is currently on
	Step 4: The		Step 5: The sy	stem searche	
	administrator enters		table and disp		
			-	-	
	their search query into		the search qu		eo Screen [ALT]
	the search textbox.				
	ALT Step 5: The search of	query entered doe	s not match an	y records exis	ting in the
	Video entity.				
	 The system disp on the results ta 	lays a "No Records ible.	s Found" messa	age in the Vid e	eo Screen and
CONCLUSION:	This use case concludes		d video is displa	aved on the so	creen.
POST-CONDITION:	The administrator select			-	
BUSINESS RULES		-			-
	 Only the administrator has access to this function. 				

IMPLEMENTATION	None
CONSTRAINTS AND	
SPECIFICATIONS	
ASSUMPTIONS:	None
OPEN ISSUES:	None

Table 133- 15.3 Update Video

VIDEO SUBSYSTEM					
AUTHORS (s): Thenjiw	ve Ntsonda	DATE: 18/04/20	22		
VERSION: 1.0		LAST REVIEW D	ATE: 23/08/2022		
USE CASE NAME:	Update Video		l	JSE CASE TYPE	
USE CASE ID:	15.3		Business R	Requirements: 🛛	
PRIORITY:	Medium		System An	nalysis: 🛛	
SOURCE:	ByteXcom Requirements	s List	System De	esign: 🛛	
PRIMARY BUSINESS	Administrator				
ACTOR					
PRIMARY SYSTEM ACTOR	• None				
OTHER	None				
PARTICIPATING ACTORS:					
OTHER INTERESTED	None				
STAKEHOLDERS:					
DESCRIPTION:	This use case describes t	•		•	
	use case begins when th		•		
	update all the pertinent database.	information rega	rding the video and s	save it to the business	
PRE-CONDITION:		or must be leage	onto the system.		
TRIGGER:			-	late a video	
	The use case is triggered when the administrator wants to update a video.				
TYPICAL COURSE			SYSTEM RESPON		
TYPICAL COURSE OF EVENTS:	ACTOR ACTION	MANUAL	SYSTEM RESPON	NSE	
	ACTOR ACTION	MANUAL ACTION		NSE	
	Step 1: The		AUTOMATED ACTIOn Step 2: The system	NSE	
	Step 1: The administrator wishes		AUTOMATED ACTION	NSE ON	
	Step 1: The administrator wishes to update a video in		AUTOMATED ACTIOn Step 2: The system	NSE ON	
	Step 1: The administrator wishes		AUTOMATED ACTIOn Step 2: The system	NSE ON	
	Step 1: The administrator wishes to update a video in		AUTOMATED ACTIOn Step 2: The system Search Video	NSE ON	
	Step 1: The administrator wishes to update a video in the video catalogue.		AUTOMATED ACTIO Step 2: The system Search Video Step 3: The system	NSE ON invokes use case 15.2	
	Step 1: The administrator wishes to update a video in the video catalogue. Step 2: The		AUTOMATED ACTIONS Step 2: The system Search Video Step 3: The system video's information attributes and table	NSE ON invokes use case 15.2 n retrieves the selected n from the following es using a method in a	
	Step 1: The administrator wishes to update a video in the video catalogue. Step 2: The administrator clicks on		AUTOMATED ACTIONS Step 2: The system Search Video Step 3: The system video's information attributes and table	NSE ON invokes use case 15.2 or retrieves the selected of from the following	
	Step 1: The administrator wishes to update a video in the video catalogue. Step 2: The administrator clicks on		AUTOMATED ACTIONS Step 2: The system Search Video Step 3: The system video's information attributes and table	NSE ON invokes use case 15.2 n retrieves the selected n from the following es using a method in a d an SQL READ Query:	
	Step 1: The administrator wishes to update a video in the video catalogue. Step 2: The administrator clicks on		AUTOMATED ACTIONS Step 2: The system Search Video Step 3: The system video's information attributes and table .NET Controller and From the Video table Details to be Attrik	NSE ON invokes use case 15.2 n retrieves the selected n from the following es using a method in a d an SQL READ Query: ole:	
	Step 1: The administrator wishes to update a video in the video catalogue. Step 2: The administrator clicks on		AUTOMATED ACTION Step 2: The system Search Video Step 3: The system video's information attributes and table .NET Controller and From the Video table Details to be Attrik read Attrik	NSE ON invokes use case 15.2 or retrieves the selected of from the following es using a method in a d an SQL READ Query: ole:	
	Step 1: The administrator wishes to update a video in the video catalogue. Step 2: The administrator clicks on		AUTOMATED ACTIONS Step 2: The system Search Video Step 3: The system video's information attributes and table .NET Controller and From the Video table Details to be Attrik	NSE ON invokes use case 15.2 or retrieves the selected of from the following es using a method in a d an SQL READ Query: ole: butes in the table s e	
	Step 1: The administrator wishes to update a video in the video catalogue. Step 2: The administrator clicks on		AUTOMATED ACTION Step 2: The system Search Video Step 3: The system video's information attributes and table .NET Controller and From the Video table Details to be Attributes Name Name Video Link Video	NSE ON invokes use case 15.2 in retrieves the selected in from the following es using a method in a d an SQL READ Query: ole: butes in the table s e oUrl	
	Step 1: The administrator wishes to update a video in the video catalogue. Step 2: The administrator clicks on		AUTOMATED ACTION Step 2: The system Search Video Step 3: The system video's information attributes and table .NET Controller and From the Video table Details to be Attributes Name Name Video Link Video	NSE ON invokes use case 15.2 or retrieves the selected of from the following es using a method in a d an SQL READ Query: ole: butes in the table s e oUrl odate Video Screen	
	Step 1: The administrator wishes to update a video in the video catalogue. Step 2: The administrator clicks on		AUTOMATED ACTION Step 2: The system Search Video Step 3: The system video's information attributes and table .NET Controller and From the Video table Details to be Attributes Name Name Video Link Video	NSE ON invokes use case 15.2 or retrieves the selected of from the following es using a method in a d an SQL READ Query: ole: butes in the table s e oUrl odate Video Screen	

	Control Name	Control Type	Notes
	Update Video	Heading	Page main heading
	Video information	Heading	Page subheading
	Name	Label	This control will be used as a label to indicate the Name attribute of the video record
	Name	Textbox	This control will be used by the administrator to update a name of the video
	Video Link	Label	This control will be used as a label to indicate the Video Link attribute of the video record
	Video Link	Textbox	This control will be used by the administrator to update a video link of the video
	Update	Button	This control will be used to confirm the addition of the video
	Cancel	Button	This control will be used to cancel the edit of the video
	Note: All contro unless stated o		by default
Step 4: The system administrator updates the video information and clicks on the	• •		s and validates the Video table
Update button [ALT]	Details to be read	Attributes in the table	Notes
	Name Video Link	Name VideoUrl	Required, Unique, Required,
	Step 6: The s		Unique
	-	k if the video	already exists in
	attributes		0



	[ALT]			
	Details to be updated	Attributes in the table Notes		
	Name	Name		
	Video Link	VideoUrl		
	with the follo	wing controls:		
	Control Name	Control Type	Notes	
	Confirmation required	Label	This control is used to display the type of message box displayed	
	Confirm updated video details?	Label	This control is used to request confirmation on the updated video details	
	Confirm	Button	This control is used to confirm the updating of the video details	
	Cancel	Button	This control is used to close the message box for the user to edit the video details	
Step 8: The system administrator clicks on the Confirm button [ALT]		ystem saves the information o table using an UPDATE SQL		
	Details to be saved	Attributes in the table	Notes	
	Name	Name	Required, Unique,	
	Video Link	VideoUrl	Required, Unique	



			Step 10: The system redirects the system administrator to the Video Screen and displays a message box with the following controls:				
			Control Name	Control Name	Notes		
			Checkbox	lcon	This control is used to indicate a successful update		
			"Video Created Successfully"	Label	This control is used to indicate a successful update		
ALTERNATE	ALT Step 4: The adminis	trator does not w	ant to edit the	video anymor	e		
COURSES:	 The administrat 	or clicks on the ca	incel button				
	• The use case is t	terminated					
	ALT Step 5: The details (entered are not in	the correct for	mat or the red	nuired fields		
	are empty	ALT Step 5: The details entered are not in the correct format or the required fields					
	are empty	reempty					
	controls Control Name	Control Name		Notes			
	Name	Textbox		This control will be outline in			
				red to show a validation error			
	Name is required	Label	This control will be used label to indicate a validat error in the Name textbo		te a validation		
	Video Link	Textbox		This control will be outline in red to show a validation error			
	Video Link is required	Label		This control will be used as a label to indicate a validation error in the Video Link textbox			
	ALT Step 6: The Video a	lready exists on th	ne system				
		lays an error mod	-	h the followin	g controls		
	Control Name	Control Nam	e	Notes			
				This control i	s used to		
	Video already exists!	Label		inform the ad			
	Video already exists!			that the vide	o already exists		
		Label Button		that the vide This control i	o already exists s used to cancel		
	Video already exists!			that the vide	o already exists s used to cancel		
	Video already exists! Okay	Button or clicks the "Oka	y" button	that the vide This control i	o already exists s used to cancel		

CONCLUSION:	This use case concludes when a video has been added on the system			
POST-CONDITION:	A video has been updated in the Video table in the database			
BUSINESS RULES	Only the administrator has access to this function.			
IMPLEMENTATION	None			
CONSTRAINTS AND				
SPECIFICATIONS				
ASSUMPTIONS:	None			
OPEN ISSUES:	None			



	V	IDEO SUBSYSTEN	Л			
AUTHORS (s): Thenjiw	ve Ntsonda	DATE: 18/04/20	022			
VERSION: 1.0		LAST REVIEW D	ATE: 23/08/20)22		
USE CASE NAME:	Delete Video	•		USE CASE TYPE		
USE CASE ID:	15.4		Bus	iness Requirements:		
PRIORITY:	Medium		Syst	tem Analysis:		
SOURCE:	ByteXcom Requirement	s List	Syst	tem Design:	\boxtimes	
PRIMARY BUSINESS ACTOR	Administrator					
PRIMARY SYSTEM ACTOR	• None					
OTHER PARTICIPATING ACTORS:	• None					
OTHER INTERESTED STAKEHOLDERS:	• None					
DESCRIPTION:	video on the system. Th	se case describes the process in which the administrator wishes to delete a on the system. The use case begins when the administrator selects the video vish to delete. This product will then be removed from the system.				
PRE-CONDITION:	The administrat	strator must be logged onto the system.				
TRIGGER:	The use case is triggered	d when the admir	nistrator wants	to delete a video.		
TYPICAL COURSE			SYSTEM F	RESPONSE		
OF EVENTS:	ACTOR ACTION					
		MANUAL	AUTOMATE	O ACTION		
		ACTION				
	Step 1: The administrator wishes to delete a video		Step 2: The s Search Video	system invokes use case D	e 15.2	
			Step 3: The system retrieves the video information from the following attribute and tables using a method in a .NET Controller and an SQL READ Query: From the Video table:			
			Details to be read Name Video Link	Attributes in the table Notes Name VideoUrl		

Table 134- 15.4 Delete Video

	And displays t	he Delete \	/ideo Screen with
	the following		
	Control Name	Control Type	Notes
	Delete Video	Heading	Page main heading
	Name	Label	This control will be used as a label to indicate the Name attribute of the video record
	Name	Label	This control will be used by the administrator to display the name of the video
	Video Link		This control will be used as a label to indicate the Video Link attribute of the video record
	Video Link		This control will be used by the administrator to display the Video Link of the video
	Delete	Button	This control will be used to confirm the deletion of the video
	Cancel	Button	This control will be used to cancel the deletion of the video
Step 4: The administrator clicks on the Delete button	Step 5: The sy with the follo	-	ays a message box ols:
	Control Name	Control Type	Notes
	Confirmation required	Label	This control is used to display the type of message box displayed
	Are you sure	Label	This control is
	you want to	l	used to request



				1	1 1		
			delete this video?		confirmation of the deletion of		
					the video		
			Confirm	Button	This control is		
					used to confirm the deletion of		
					the video		
					details		
			Cancel	Button	This control is		
					used to close		
					the message		
					box deletion of		
-					the video		
	Step 6: The system		Step 7: The sy				
	administrator clicks on		video from th		-		
	the Confirm button		database usir	ig a method ir	n a .NET		
	[ALT]		controller and	d an SQL DELE	TE query.		
			Details to be	Attributes in th	ne table		
			deleted	Notes			
			Videold	Videold			
			Name	Name			
-			Step 8: The system redirects the system				
			administrator to the Video screen and				
					h the following		
			controls:	Suge box wit	in the following		
			controis.				
			Control Name	Control Name	Notes		
			Checkbox	lcon	This control is		
					used to		
					indicate a		
					successful		
			"Video	Label	deletion This control is		
			Deleted	Laber	used to		
			Successfully"		indicate a		
			,		successful		
					deletion		
ALTERNATE	ALT Step 5: The adminis	trator does not wa	ant to delete tl	ne video anyn	nore		
COURSES:	• The administrate	or clicks on the ca	ncel button				
	• The use case is t	erminated					
CONCLUSION:	This use case concludes	when a video has	been deleted	on the system			
POST-CONDITION:	The video has been rem	oved from the sys	tem database.				
	Only the admini	strator has access	to this functio	n.			
BUSINESS RULES							
BUSINESS RULES IMPLEMENTATION	None						
	• None						
IMPLEMENTATION	• None						
IMPLEMENTATION CONSTRAINTS AND	None None						



Table 135- 15.5 View Video Details

	VIDEO SUBSYSTEM					
AUTHORS (s): Thenjiw	ve Ntsonda	DATE: 08/06/20	022			
VERSION: 1.0		LAST REVIEW D	ATE: 23/08/20	22		
USE CASE NAME:	View Video Details		USE CASE TYPE			
USE CASE ID:	15.5		Busi	ness Requiremer	nts: 🗆	
PRIORITY:	High		System Analysis:			
SOURCE:	ByteXcom Requirements	s List	Syst	em Design:		
PRIMARY BUSINESS	• User					
ACTOR						
PRIMARY SYSTEM	• None					
ACTOR						
OTHER	• None					
PARTICIPATING ACTORS:						
OTHER INTERESTED	None					
STAKEHOLDERS:						
DESCRIPTION:	This use case describes t	the process in wh	ich the user wi	shes to view th	e videos on	
	the system. The use case	•				
	The user will select the relevant inventory item and view its details.					
PRE-CONDITION:	None					
TRIGGER:	The use case is triggered	l when the user v	vishes to view	the video(s) on	the system	
TYPICAL COURSE			SYSTEM F	RESPONSE		
OF EVENTS:	ACTOR ACTION	MANUAL	AUTOMATE	D ACTION		
		ACTION				
	Step 1: The user clicks		-	ystem retrieves	-	
	on the About Us nav link			om the followin a .NET controlle		
	IIIIK		READ query:			
			From the Vic	leo Table		
			Details to be	Attributes in t	he table	
			read			
			Name	Name		
			Video Link	VideoUrl		
			and displays	the About Us S	creen which	
				owing controls:		
			Control Name	Control Type	Notes	
			About Us	Heading	Page main	
					heading	
			Company	Label	This control will be used	
	l		Logo		will be used	



	· · ·			N
				as a label to
				indicate the
				company logo
				which is
				retrieved
				from the
				www/root
				folder
		Company	Label	This control
		Description		will be used
				to display the
				company's
				description
				name
		Our Team	Label	This control
				will be used
				as a label to
				display the
				second page
				heading
		The team's	Images	This control
		images		will be used
				to display the
				team's
				images which
				are retrieved
				from the
				www/root
				folder
		Team's	Label	This control
		Names		will be used
				as a label to
				indicate the
				names of the
				team
		Team's	Label	This control
		Description		will be used
				as a label to
				indicate the
				descriptions
			l a h a l	of the team
		Why	Label	This control
		Natuurlik		will be used
				as a label to
				display the
				third page
		Video	Vidoo	heading This control
		Video	Video	This control will be used
				to display the videos added
				to the system which are
				retrieved
				from the



				1	
					Video Link
			Video Title	Label	attribute This control
			video fille	Laber	will be used
					to display the
					title of all
					videos which
					are on the
					system and
					are retrieved
					from the Title
					attribute
	Step 3: The user clicks on the video they wish to play		Step 4: The sy embedded fro following com Control Name Frameborde r Autoplay	Motes This control determine the video borde This control the video to the page loa	using the is used to he width of the r is used to allow auto play when
			een		elected video on
			Note: These controls are configured on YouTube.		
ALTERNATE COURSES:	• None				
CONCLUSION:	This use case concludes when the inventory procured details are displayed on the				
	system				
POST-CONDITION:	The selected video is played on the system.				
BUSINESS RULES	None				
IMPLEMENTATION	None				
CONSTRAINTS AND					
SPECIFICATIONS					
ASSUMPTIONS:	The user will always choose to play the selected video				
OPEN ISSUES:	None				



2.16 Help Subsystem

	HELP SUI	BSYSTEM	l		
AUTHORS (s): Nomusa Vumisa		DATE: 03/09/2022			
VERSION: 1.0		LAST REVIEW DATE: 03/09/2022			
USE CASE NAME:	View Help Document		USE CASE TYPE		
USE CASE ID:	16.1		Business Requirements:		
PRIORITY:	Medium		System Analysis:		
SOURCE:	ByteXpress Requiremer	nts List	System Design:		
PRIMARY BUSINESS ACTOR	Administrator				
PRIMARY SYSTEM ACTOR	None				
OTHER PARTICIPATING ACTORS:	None				
OTHER INTERESTED STAKEHOLDERS:	None				
DESCRIPTION:	This use case describes the process where the administrator wants to view a help document on the system. The system responds by displaying the results matching the search query and the administrator selects their desired document.				
PRE-CONDITION:	The administrator must be logged onto the system.				
TRIGGER:	This use case is called we document on the system		dministrator wants to view a help		
TYPICAL COURSE	Actor Action	S	ystem Response		
OF EVENTS:	Step 1 : The administrate sales assistant want to v help document	or or			
	Step 2: The administrate enters the search param		Step 3: The system searches for a natch		
			Step 4: The system displays the search esults [ALT]		
	Step 5: The administrate selects the help docume they wish to view		Step 6: The system retrieves the help locument		

Table 136- 16.1 View Help Document



	Step 7: The system displays the selected help document		
ALTERNATE COURSES:	 ALT Step 4: The search query entered does not match any existing instances of an order. Return to Step 2 or terminate the use case 		
CONCLUSION:	This use case concludes when the desired help document is displayed on the system.		
POST-CONDITION:	The data table was searched and the help document was retrieved		
BUSINESS RULES	None		
IMPLEMENTATION CONTRAINTS AND SPECIFICATIONS	None		
ASSUMPTIONS:	None		
OPEN ISSUES:	None		



Conclusion

In conclusion, the ByteXpress team compiled a comprehensive list of the logical flow of their use cases through the logical narratives. These narratives include all of the business processes carried out by the system.



3. Iteration Conclusion

In conclusion the compiled iteration documents detailed the design and development of our ByteXecom E-commerce system. The documents contained the updated requirements lists, complexity matrix, logical and technical narratives, technical primitive, UML activity diagrams as well as the test cases and screen designs for our use cases.

