



### ByteXpress - Team 9

ByteXecom E-commerce System

Aphiwe Shozzi

u19363967

u19363967@tuks.co.za  
0827135234

Kyle van Eeden

u18035176

u18035176@tuks.co.za  
0614700577

Nomusa Vumisa (GL)

u17254061

u17254061@tuks.co.za  
0662254267

Ofhani Mungani

u18022571

u18022571@tuks.co.za  
0766495693

Thenjiwe Ntsonda (PM)

u18139958

u18139958@tuks.co.za  
0817473388

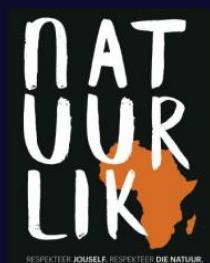
## ITERATION - 9

**System Documentation** - This iteration has the collated system documentation of the final versions of all system design documentation of the ByteXpress E-commerce 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 Logistics.



**Client**  
Jannes Janse van Rensburg

**Email**  
jan2rens@gmail.com

**Cellphone number**  
072 881 0004

## Table of Contents

1. Iteration Introduction.....	6
2. Technical Primitive Level Diagrams.....	7
Introduction .....	7
2.1. User Management Subsystem.....	8
2.2. Administrative Subsystem.....	16
2.3. Reseller Subsystem .....	21
2.4. Product Subsystem.....	23
2.5. Order Subsystem.....	41
2.6. Query Reason Subsystem.....	66
2.7. Review Subsystem.....	72
2.8. Inventory Management Subsystem.....	77
2.9. Location Subsystem.....	99
2.10. Reporting Subsystem .....	3
2.11. Supplier Subsystem.....	14
2.12. Driver Subsystem.....	20
2.13. VAT Subsystem.....	23
2.14. Reseller Credit Settlement Time Subsystem.....	28
2.15. Video Subsystem .....	29
Conclusion .....	35
3. Iteration Conclusion .....	35

## Table of Figures

Figure 1- 1.1 Login.....	8
Figure 2- 1.2 Logout .....	9
Figure 3- 1 .3 View Profile Details .....	10
Figure 4- 1.4 Reset Password .....	11
Figure 5- 1.5 Forget Password.....	12
Figure 6- 1.6 Register Customer.....	13
Figure 7- 1.7 Update Customer Details.....	14
Figure 8- 1.8 update Email Address .....	15
Figure 9 - 2.1 Register User .....	16
Figure 10 - 2.2 Search User .....	17
Figure 11 - 2.3 Update User .....	18
Figure 12- 2.4 Delete User.....	19
Figure 13- 3.1 Send Payment Reminder.....	21
Figure 14 - 3.2 Capture Payment .....	22
Figure 15- 4.1 Add Product .....	23
Figure 16- 4.2 Search Product .....	24

Figure 17- 4.3Update Product Details.....	25
Figure 18- 4.4 Delete Product .....	26
Figure 19- 4.5 Add Product Category .....	27
Figure 20- 4.6 Search Product category .....	28
Figure 21- 4.7 Update Product Category.....	29
Figure 22- 4.8 Delete Product .....	30
Figure 23- 4.9 Add Product brand .....	31
Figure 24- 4.10 Search Product brand .....	32
Figure 25- 4.11 Update Product brand .....	33
Figure 26- 4.12 Delete Product brand.....	34
Figure 27- 4.13 Create Return Reason .....	35
Figure 28- 4.14 Search Return Reason .....	36
Figure 29- 4.15 Update Return Reason.....	37
Figure 30- 4.16 Delete Return Reason .....	38
Figure 31- 4.17 Browse Product Catalogue.....	39
Figure 32- 4.18 Configure Product .....	40
Figure 33 -5.1 Add Item(s) to Cart.....	41
Figure 34 - 5.2 Update Cart.....	42
Figure 35 - 5.3 Remove Item(s) from Cart.....	43
Figure 36- 5.4 View Cart.....	44
Figure 37 - 5.5 Checkout Cart.....	45
Figure 38- 5.6 Make Payment .....	46
Figure 39- 5.7 View Orders Overview .....	47
Figure 40- 5.8 Search Order .....	48
Figure 41- 5.9 Query Order .....	49
Figure 42 - 5.10 Review Order.....	50
Figure 43 - 5.11 Create Courier .....	51
Figure 44 - 5.12 Search Courier.....	52
Figure 45 - 5.13 Update Courier .....	53
Figure 46 - 5.14 Delete Courier .....	54
Figure 47- 5.15 Search Placed Order.....	55
Figure 48 - 5.16 View Placed Order.....	56
Figure 49- 5.17 Cancel Placed Order .....	57
Figure 50- 5.18 Cancel Reseller Order.....	58
Figure 51- 5.19 Approve/Reject Reseller Order .....	59
Figure 52 - 5.20 Dispatch Order .....	60
Figure 53- 5.21 Log Back Order .....	61
Figure 54- 5.22 Confirm Order .....	62
Figure 55- 5.23 Reject Order .....	63
Figure 56- 5.24 Send Order Confirmation Reminder .....	64
Figure 57- 5.25 Update Order Confirmation Time .....	65
Figure 58 - 6.1 Create Query Reason .....	66
Figure 59 - 6.2 Search Query Reason .....	67
Figure 60 - 6.3 Update Query Reason .....	68
Figure 61- 6.4 Delete Query Reason .....	69
Figure 62- 6.5 Review Order Query.....	70
Figure 63- 6.6 View Order Query Feedback .....	71
Figure 64 - 7.1 Create Review Reason .....	72
Figure 65 - 7.2 Search Review Reason .....	73
Figure 66 - 7.3 Update Review Reason .....	74

Figure 67- 7.4 Delete Review Reason.....	75
Figure 68- 7.5 View Order Review.....	76
Figure 69 -8.1 Add Inventory Item .....	77
Figure 70 - 8.2 Search Inventory Item.....	78
Figure 71 - 8.3 Update Inventory Item.....	79
Figure 72 - 8.4 Delete Inventory Item .....	80
Figure 73 - 8.5 Add Inventory Type.....	81
Figure 74 - 8.6 Search Inventory Type.....	82
Figure 75 - 8.7 Update Inventory Type .....	83
Figure 76 - 8.8 Delete Inventory Type.....	84
Figure 77 - 8.9 Add Write-off Reason.....	85
Figure 78 - 8.10 Search Write-off Reason .....	86
Figure 79 - 8.11 Update Write-off Reason .....	87
Figure 80 - 8.12 Delete Write-off Reason .....	88
Figure 81-8.13 Write-off Inventory .....	89
Figure 82 - 8.14 Write-off product .....	90
Figure 83- 8.15 Convert Inventory to Product (s) .....	91
Figure 84 - 8.16 Search Procured Inventory.....	92
Figure 85- 8.17 View Procured Inventory Item Details .....	93
Figure 86 - 8.18 Capture Procured Inventory .....	94
Figure 87- 8.19 Capture Returned Product.....	95
Figure 88- 8.20 Package Order .....	96
Figure 89- 8.21 Send Low Inventory Alert.....	97
Figure 90- 8.22 Send Inventory Out of Stock Alert .....	98
Figure 91- 9.1 Create Country .....	99
Figure 92- 9.2 Search Country.....	100
Figure 93- 9.3 Update Country.....	101
Figure 94- 9.4 Delete Country .....	102
Figure 95- 9.5 Add Province .....	103
Figure 96- 9.6 Search Province .....	104
Figure 97- 9.7 Update Province.....	105
Figure 98- 9.8 Delete Province .....	106
Figure 99- 9.9 Create City.....	107
Figure 100- 9.10 Search City.....	108
Figure 101- 9.11 Update City .....	109
Figure 102- 9.12 Delete City.....	110
Figure 103- 9.13 Add Suburb.....	111
Figure 104- 9.14 Search Suburb .....	112
Figure 105- 9.15 Update Suburb .....	0
Figure 106- 9.16 Delete Suburb .....	1
Figure 107 -10.1 Generate Inventory List Report .....	3
Figure 108- 10.2 Generate Sales Report .....	4
Figure 109- 10.3 Generate Product List Report .....	5
Figure 110- 10.4 Generate Customer List Report .....	6
Figure 111- 10.5 Generate Reseller List Report .....	7
Figure 112- 10.6 Generate Produced Products Report.....	8
Figure 113- 10.7 Generate Orders (By Status) Report .....	9
Figure 114- 10.8 Generate Sales (By Region) Report.....	10
Figure 115- 10.9 Generate Sales (by Product) Report .....	11
Figure 116- 10.10 Generate Sales (by Month) Report .....	12

Figure 117- 10.11 View Dashboard Overview.....	13
Figure 118 - 11.1 Add Supplier .....	14
Figure 119 - 11.2 Search Supplier.....	15
Figure 120 - 11.3 Update Supplier .....	16
Figure 121- 11.4 Delete Supplier.....	17
Figure 122- 11.5 Send Supplier Order.....	18
Figure 123- 12.1 View Deliveries.....	20
Figure 124- 12.2 View Previous Deliveries.....	21
Figure 125- 12.3 Confirm Deliveries.....	22
Figure 126- 13.1 Create VAT .....	23
Figure 127- 13.2 Search VAT .....	24
Figure 128- 13.3 Update VAT Details .....	25
Figure 129- 13.4 Delete VAT .....	26
Figure 130- 14.1 Update Reseller Credit Settlement Time .....	28
Figure 131- 15.1 Add Video.....	29
Figure 132- 15.2 Search Video .....	30
Figure 133- 15.3 Update Video .....	31
Figure 134- 15.4 Delete Video.....	32
Figure 135- 15.5 View Video .....	33
Figure 136- 16.1 View Help Document .....	34

## **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. Technical Primitive Level Diagrams

### Introduction

This section of the iteration comprises of the technical primitive diagrams for the ByteXpress' chosen use cases. The primitive diagrams illustrate the various information flow throughout our proposed system

## 2.1. User Management Subsystem

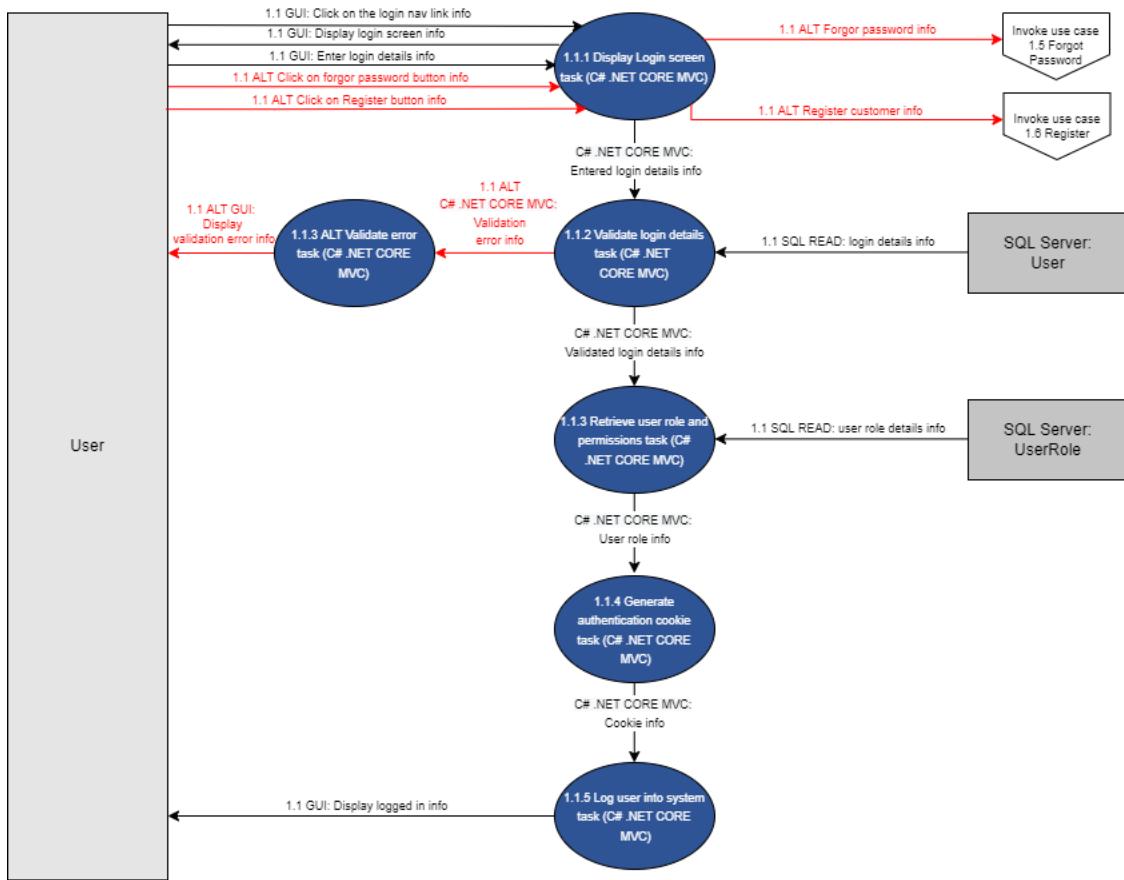


Figure 1- 1.1 Login



Figure 2- 1.2 Logout

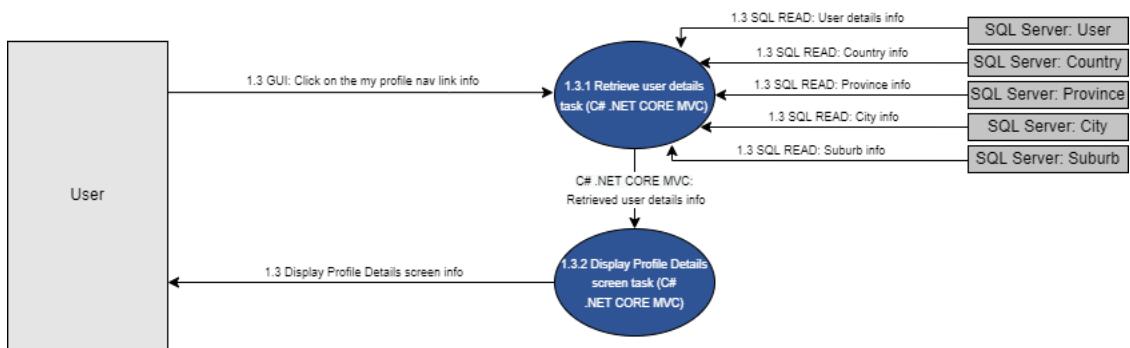


Figure 3- 1 .3 View Profile Details

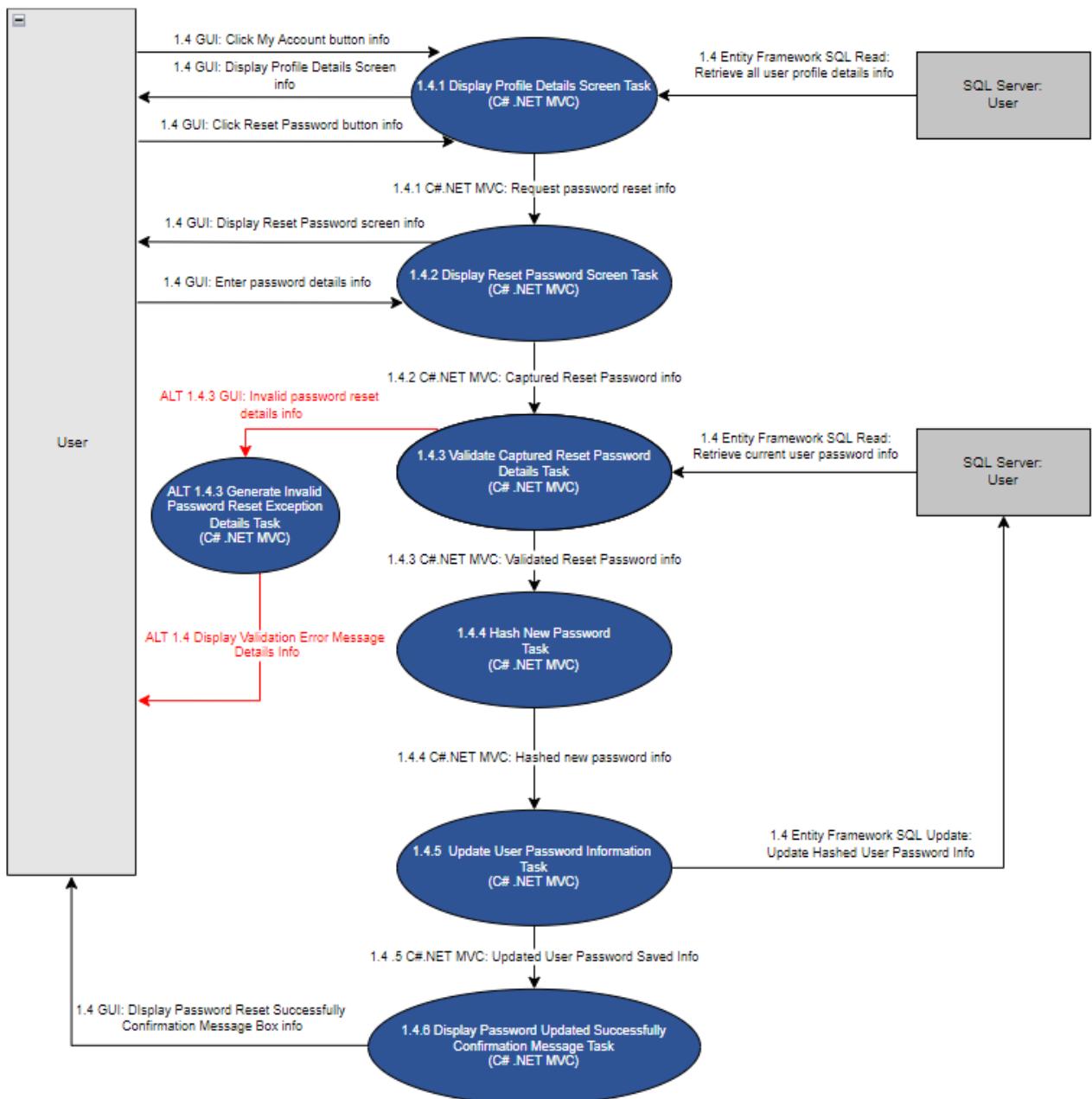


Figure 4- 1.4 Reset Password

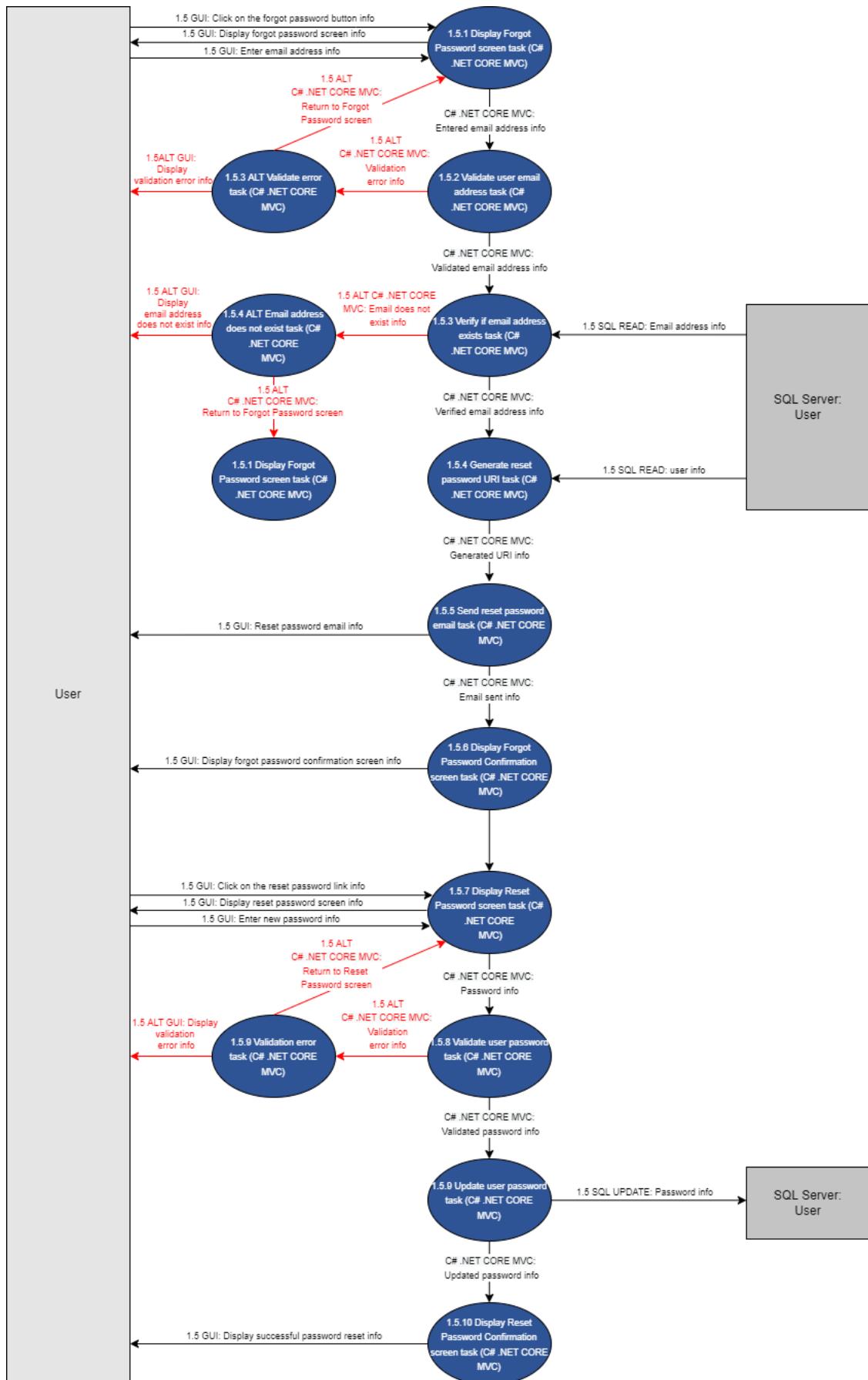


Figure 5- 1.5 Forget Password

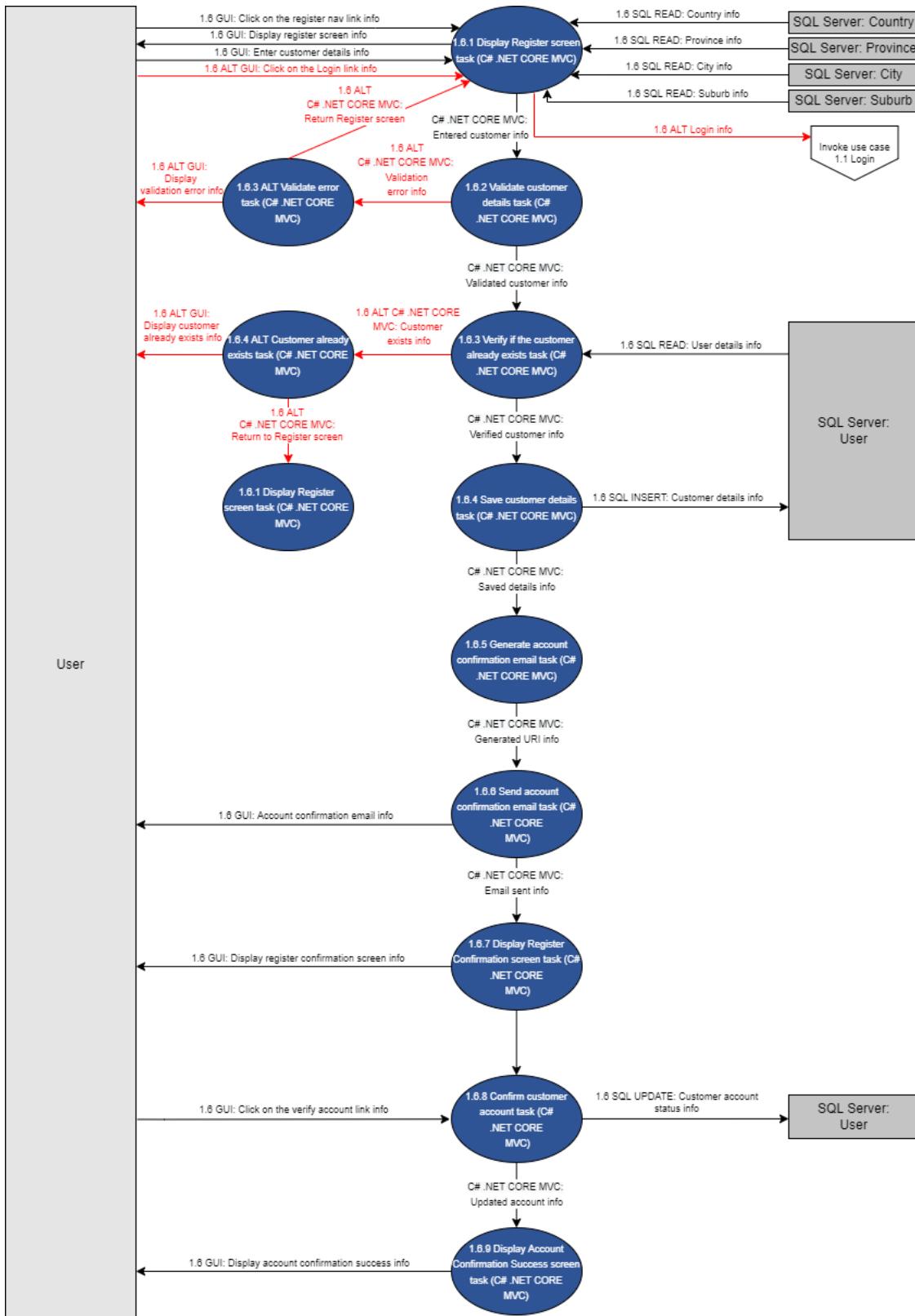


Figure 6- 1.6 Register Customer

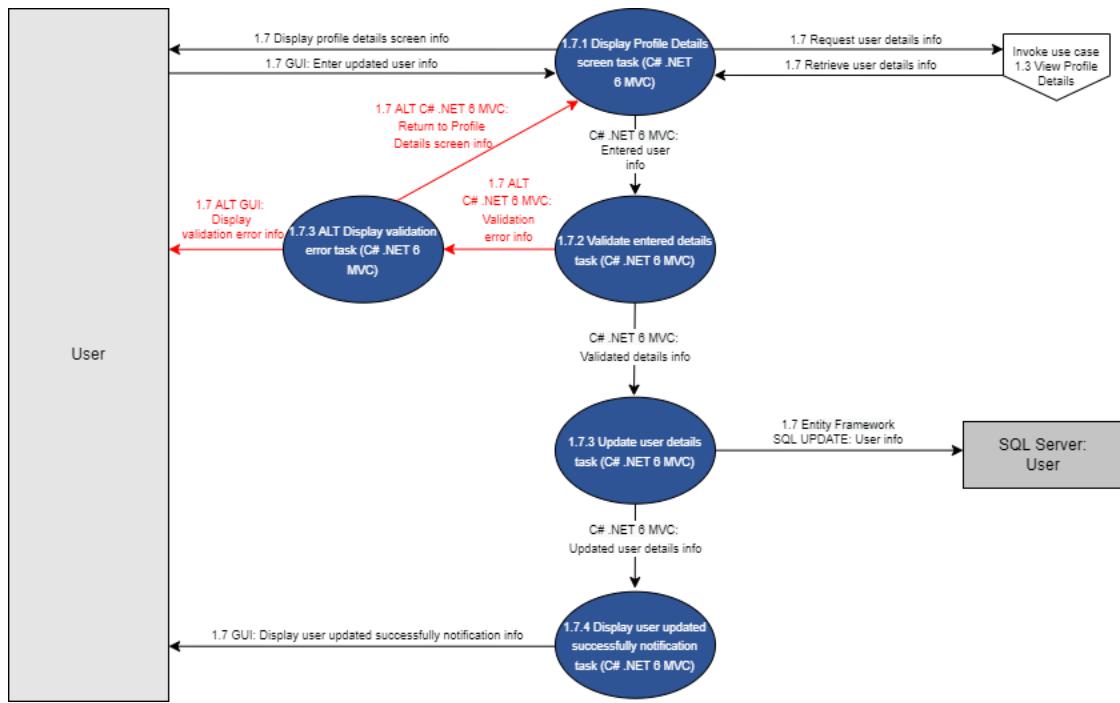


Figure 7- 1.7 Update Customer Details

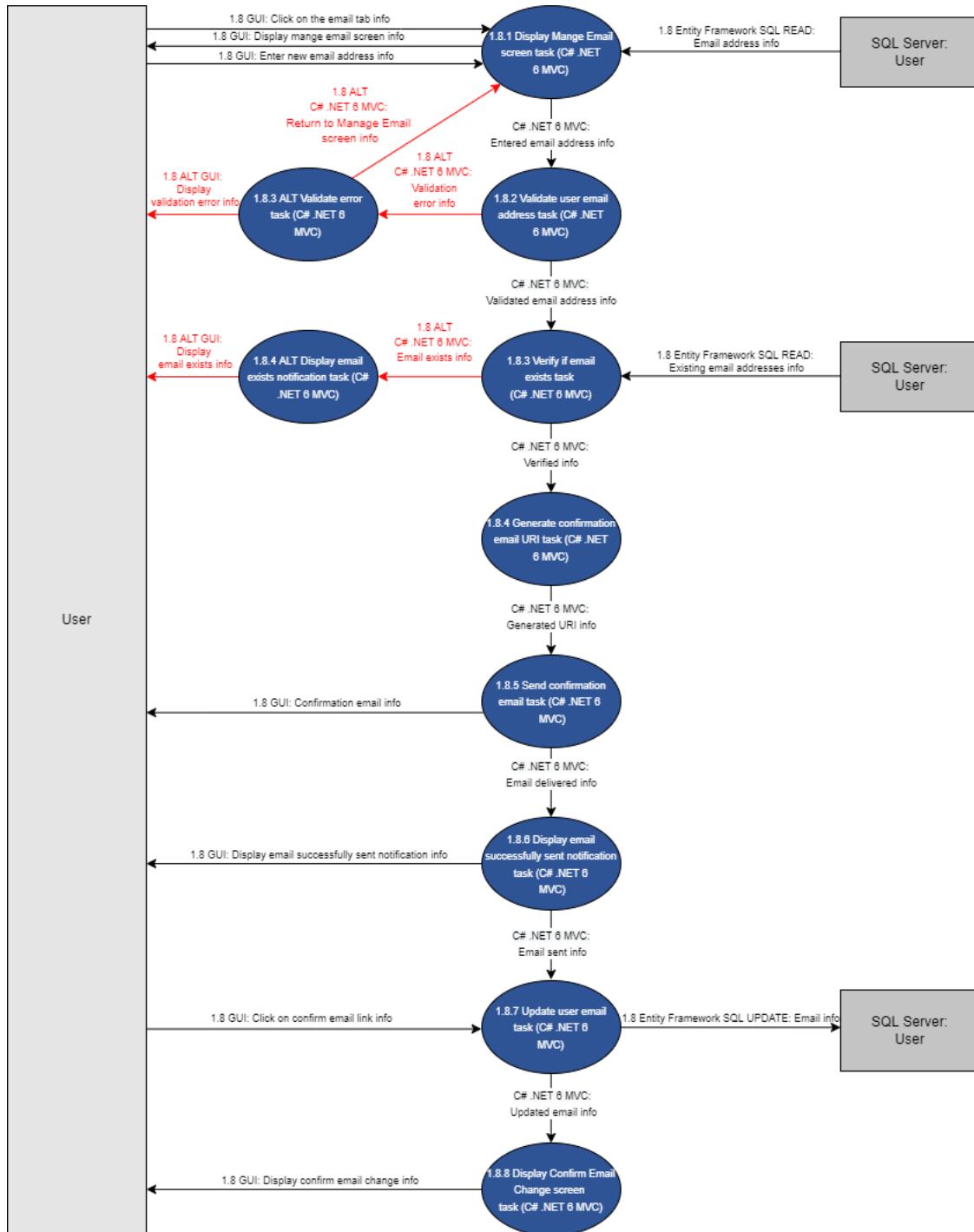


Figure 8- 1.8 update Email Address

## 2.2. Administrative Subsystem

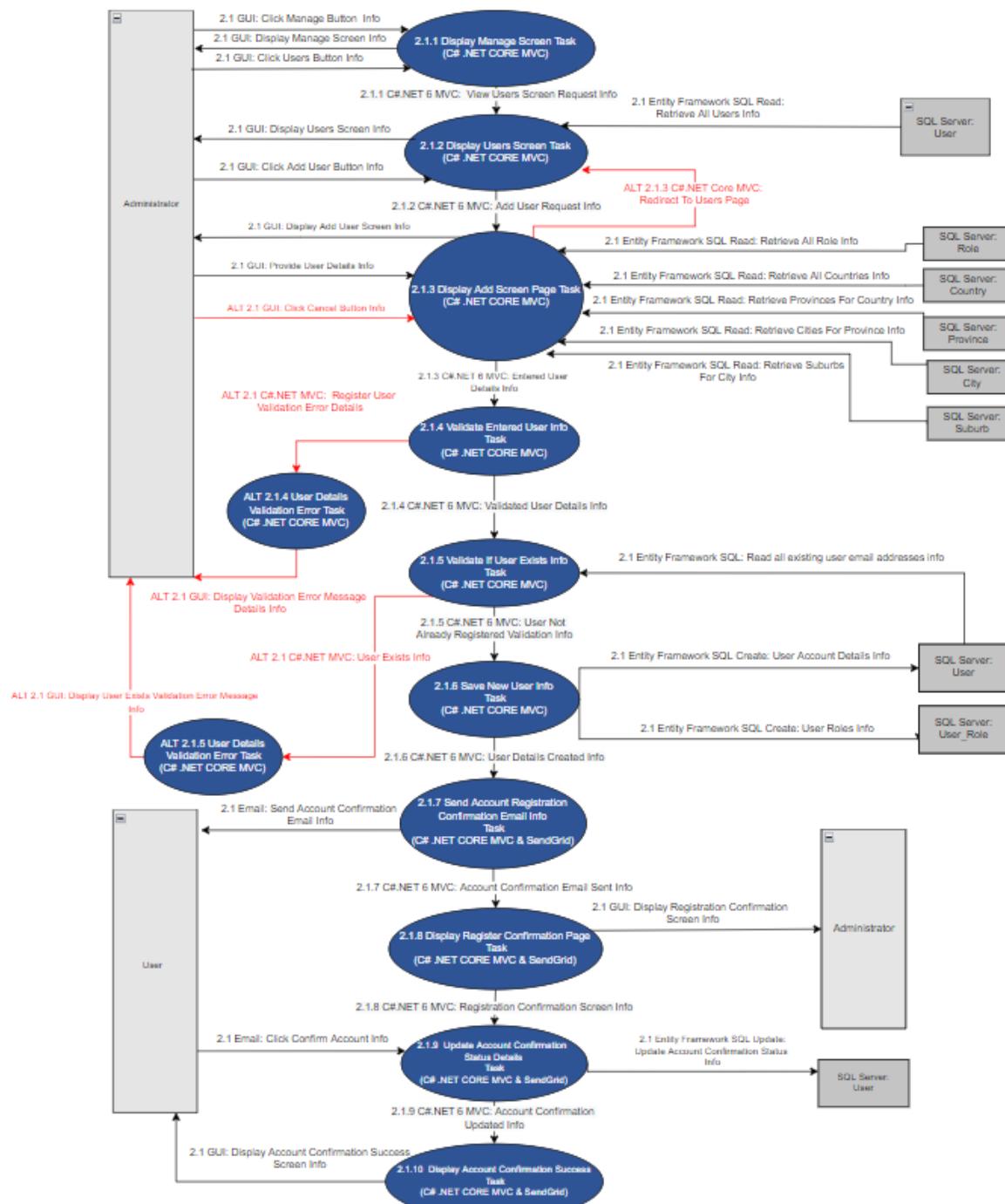


Figure 9 - 2.1 Register User

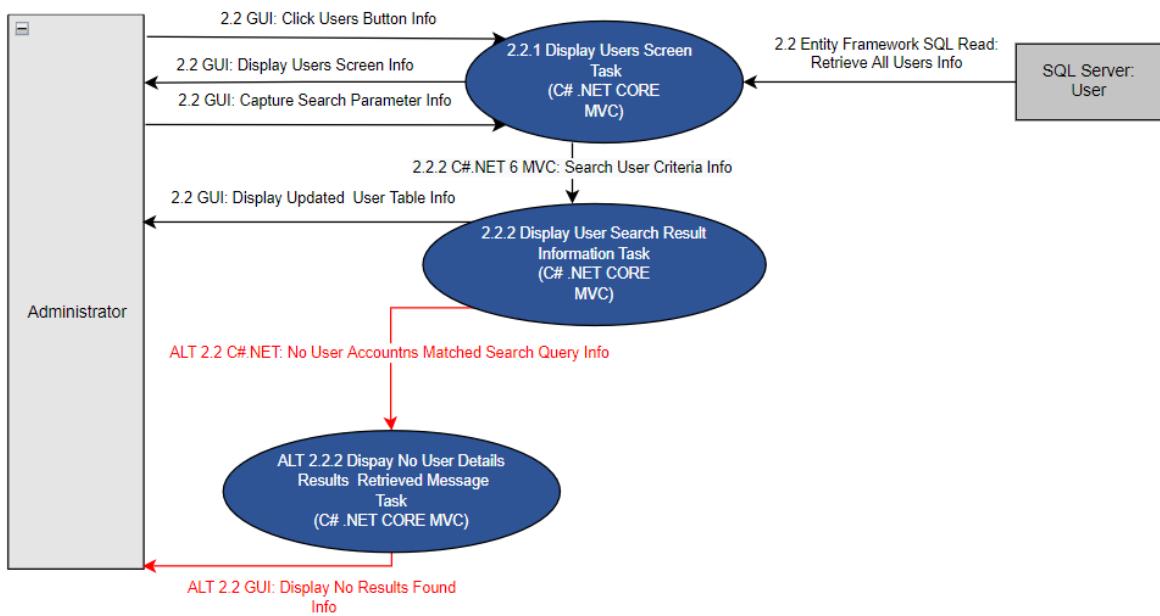


Figure 10 - 2.2 Search User

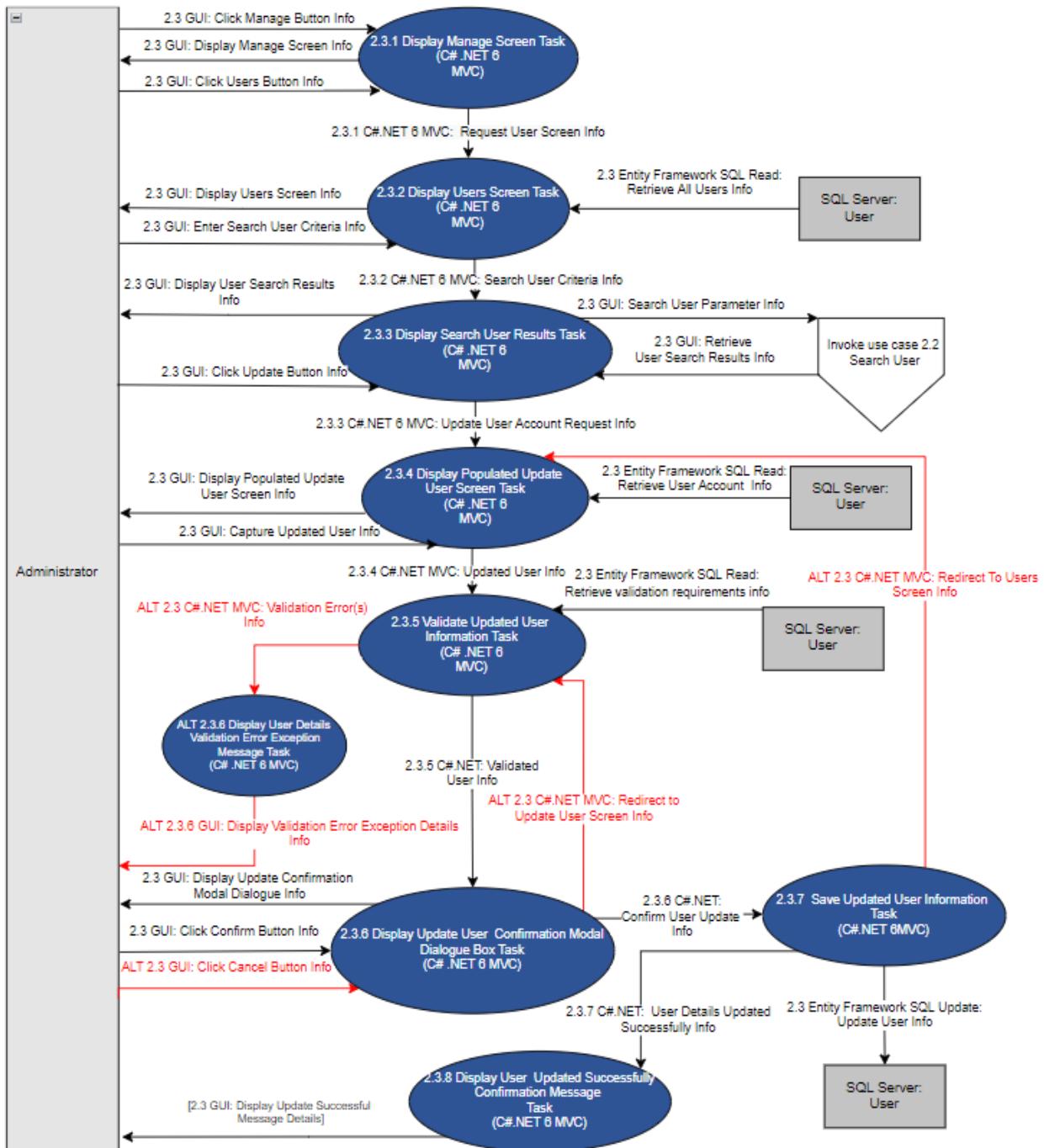


Figure 11 - 2.3 Update User

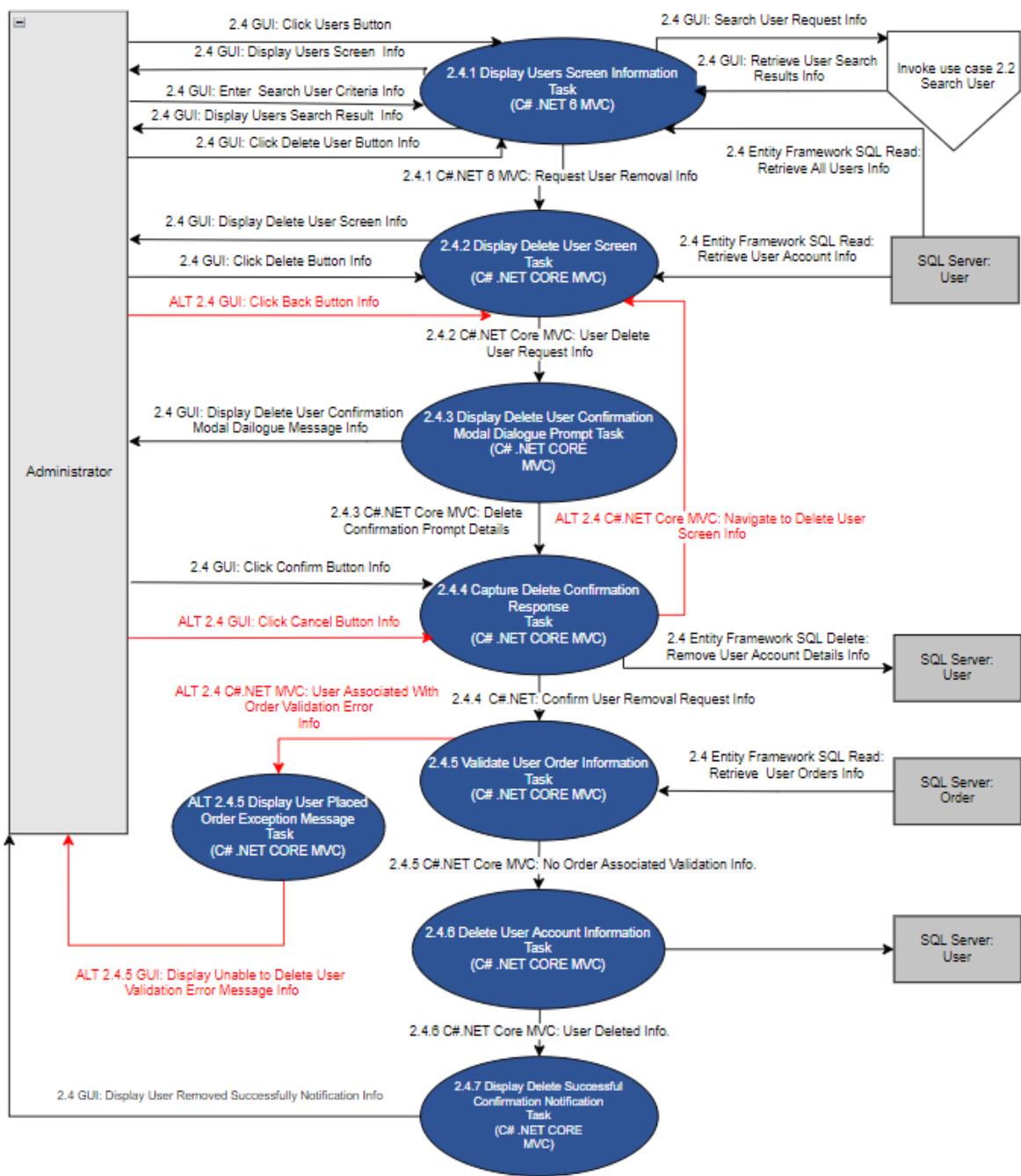


Figure 12- 2.4 Delete User



## 2.3. Reseller Subsystem

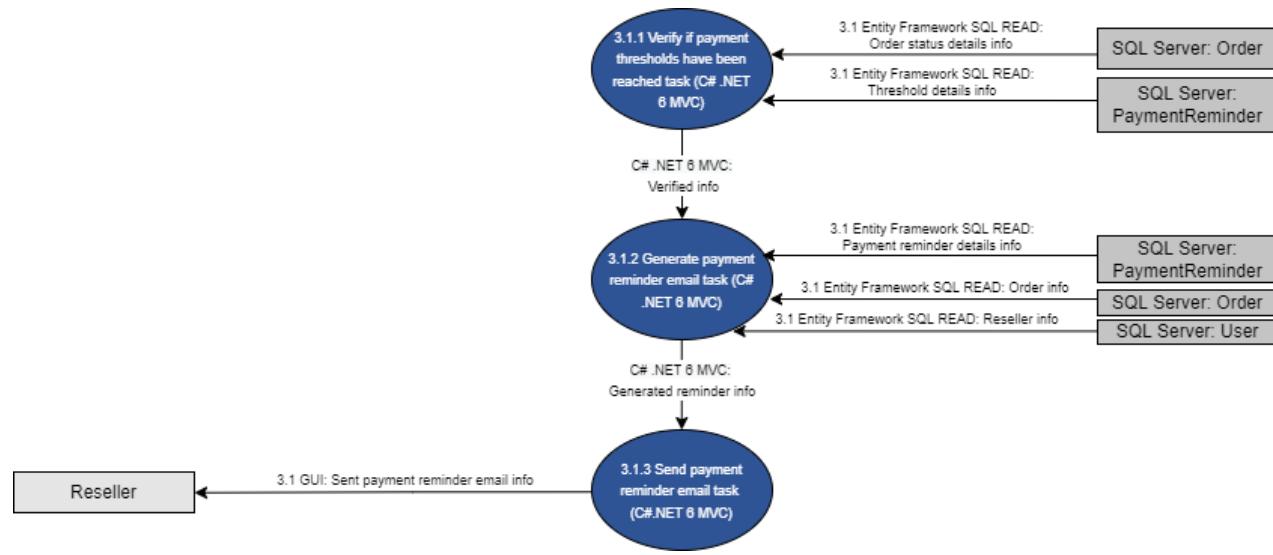


Figure 13- 3.1 Send Payment Reminder

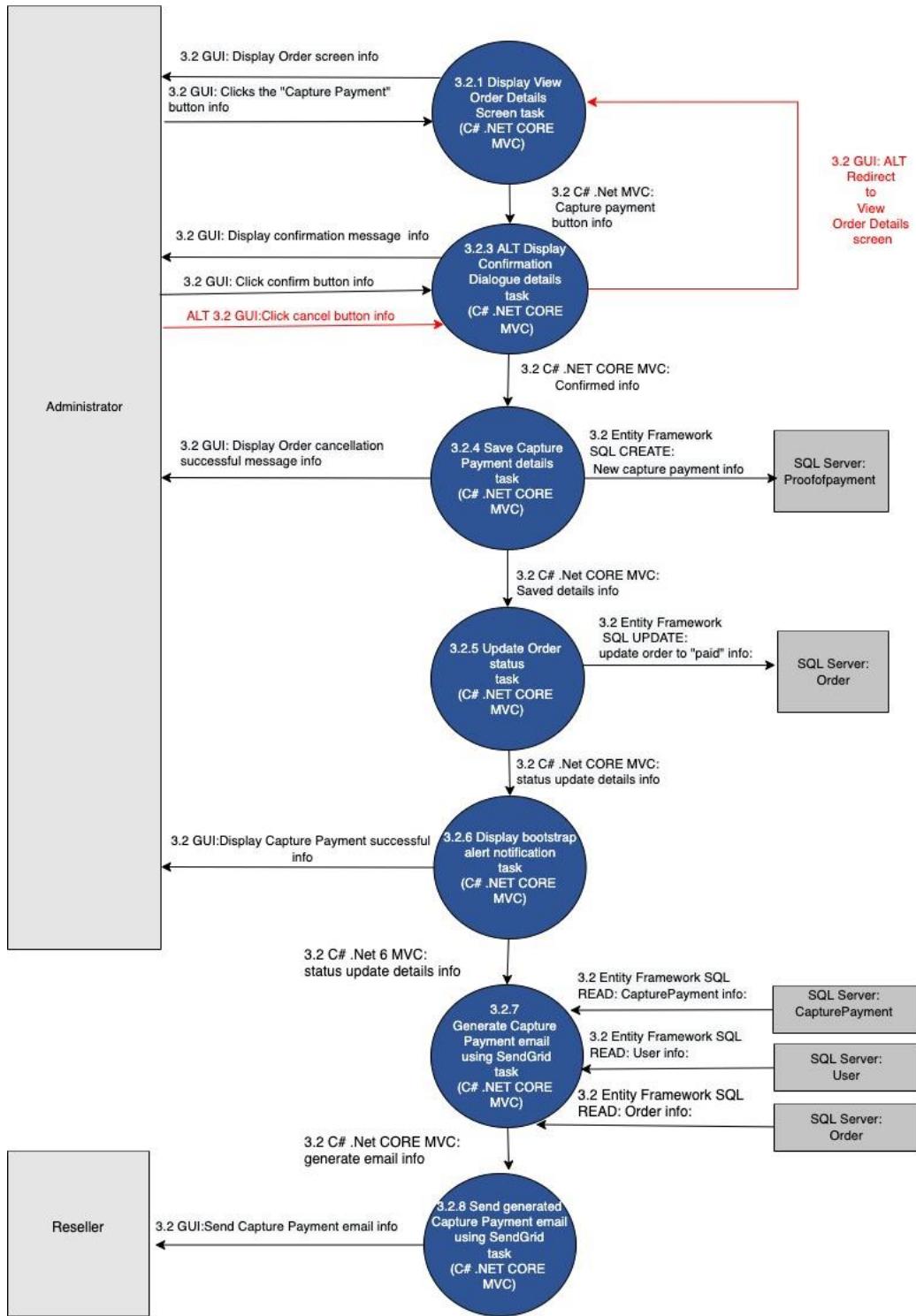


Figure 14 - 3.2 Capture Payment

## 2.4. Product Subsystem

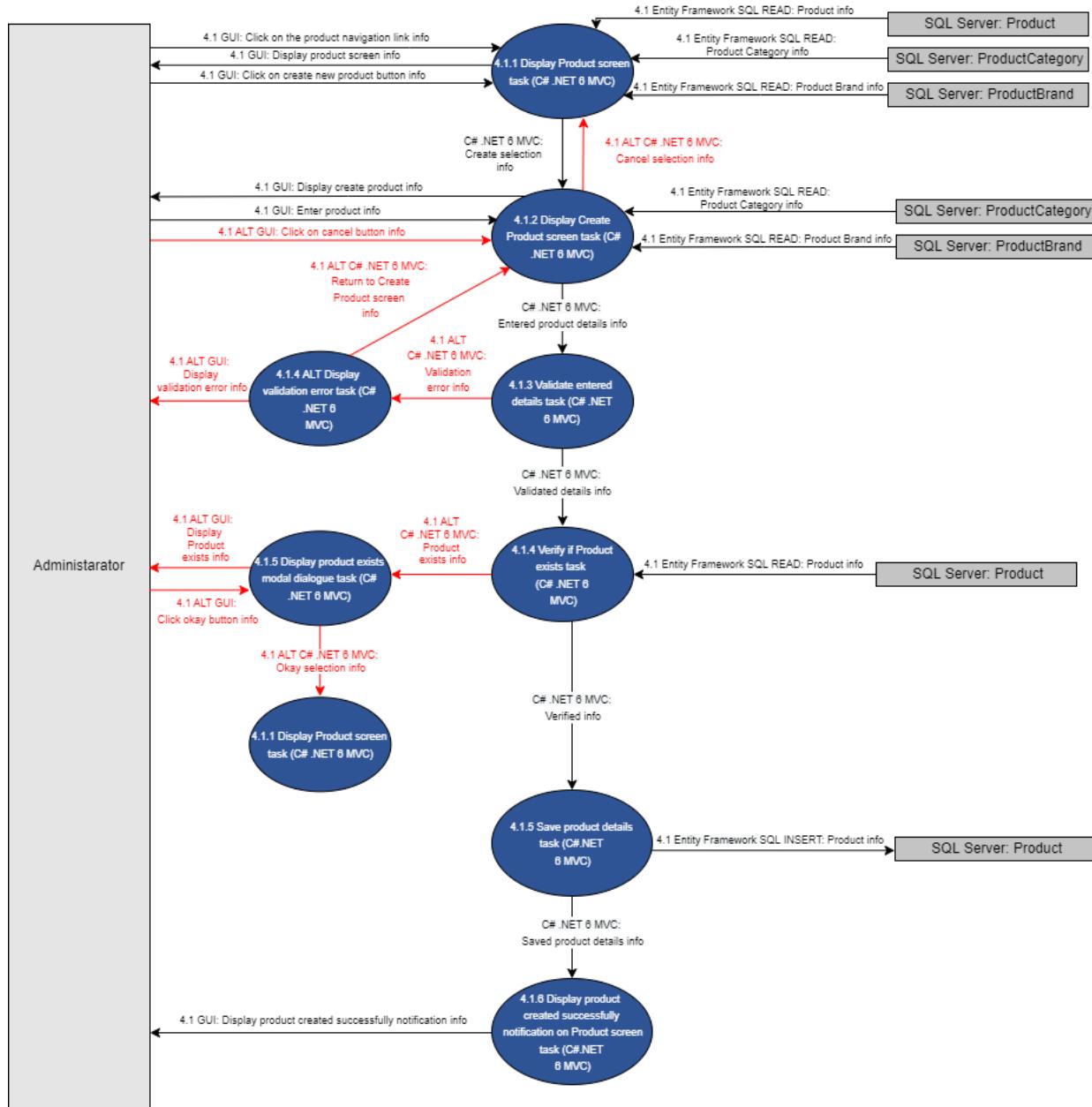


Figure 15- 4.1 Add Product

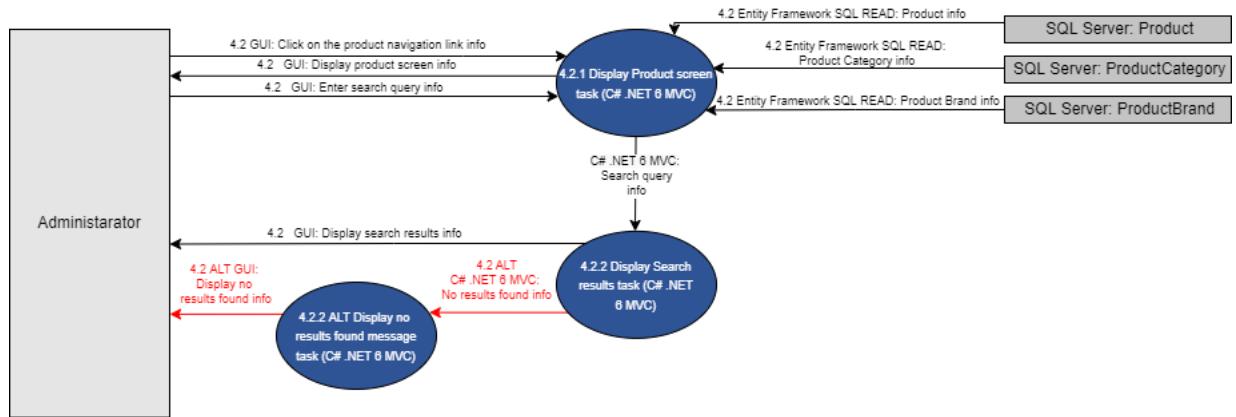


Figure 16- 4.2 Search Product

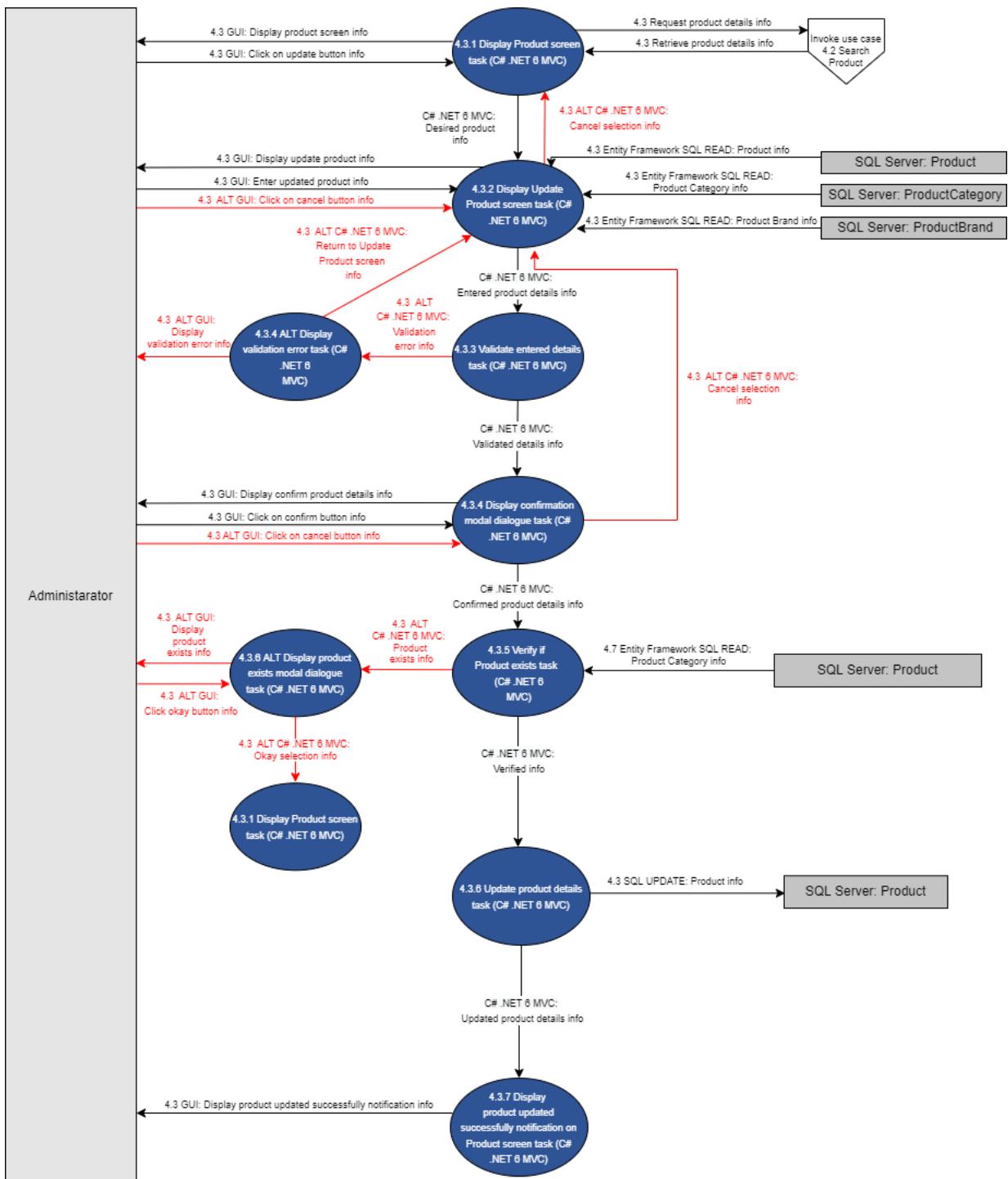


Figure 17- 4.3Update Product Details

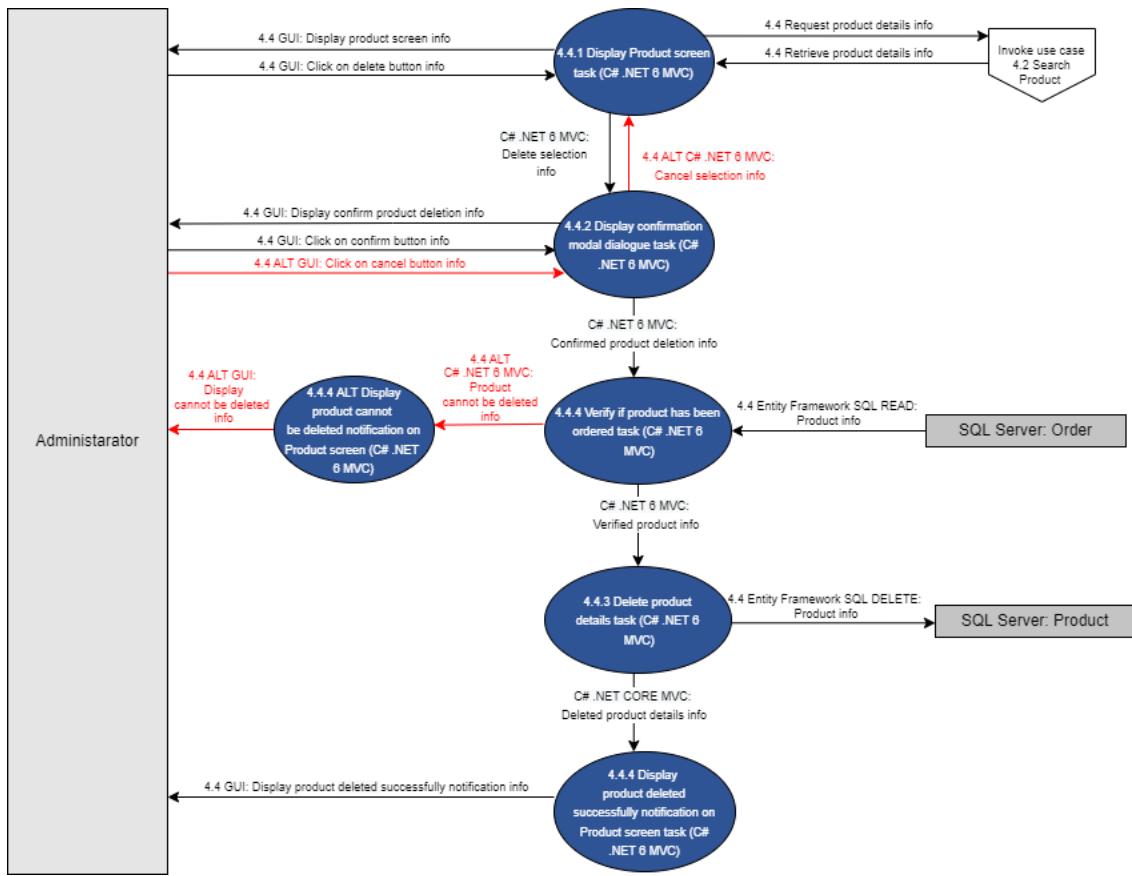


Figure 18- 4.4 Delete Product

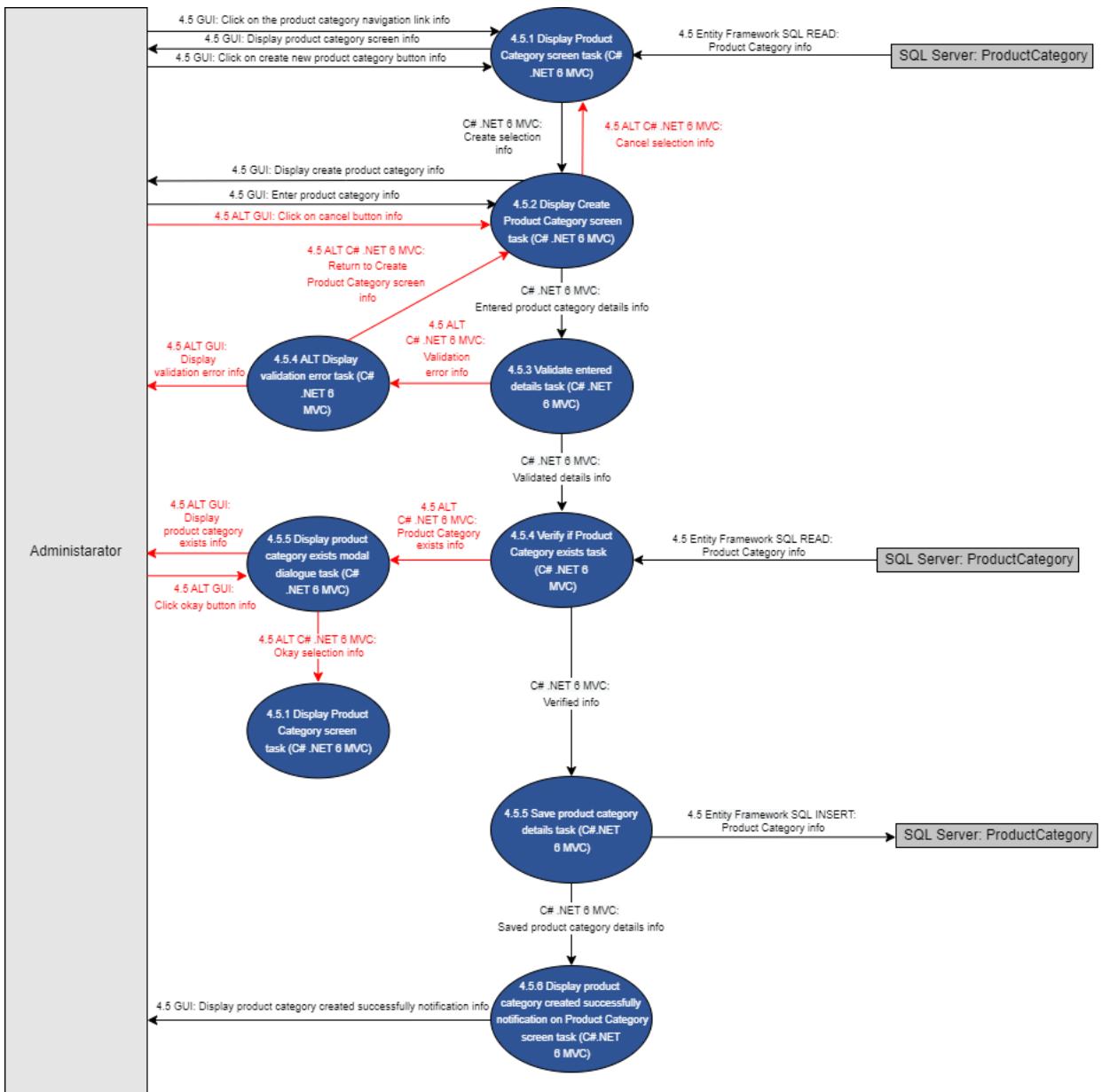


Figure 19- 4.5 Add Product Category

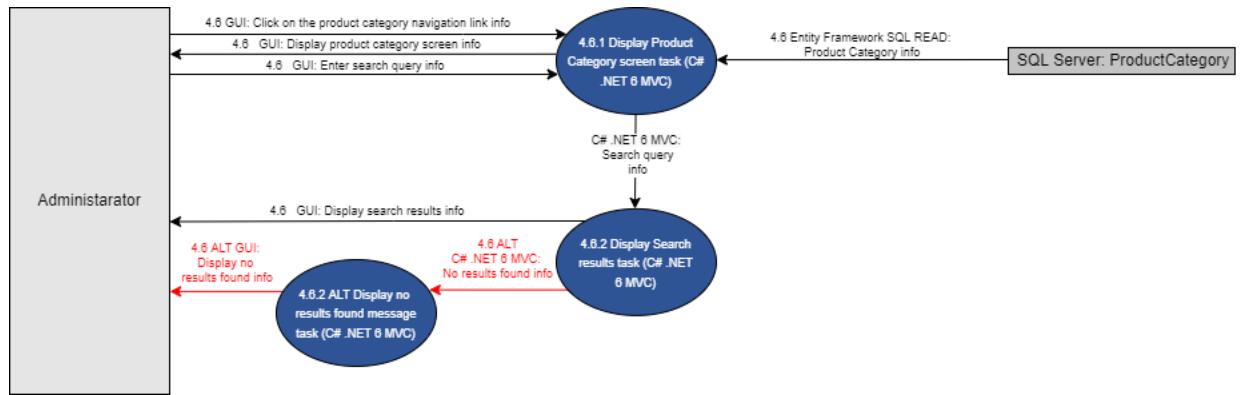


Figure 20- 4.6 Search Product category

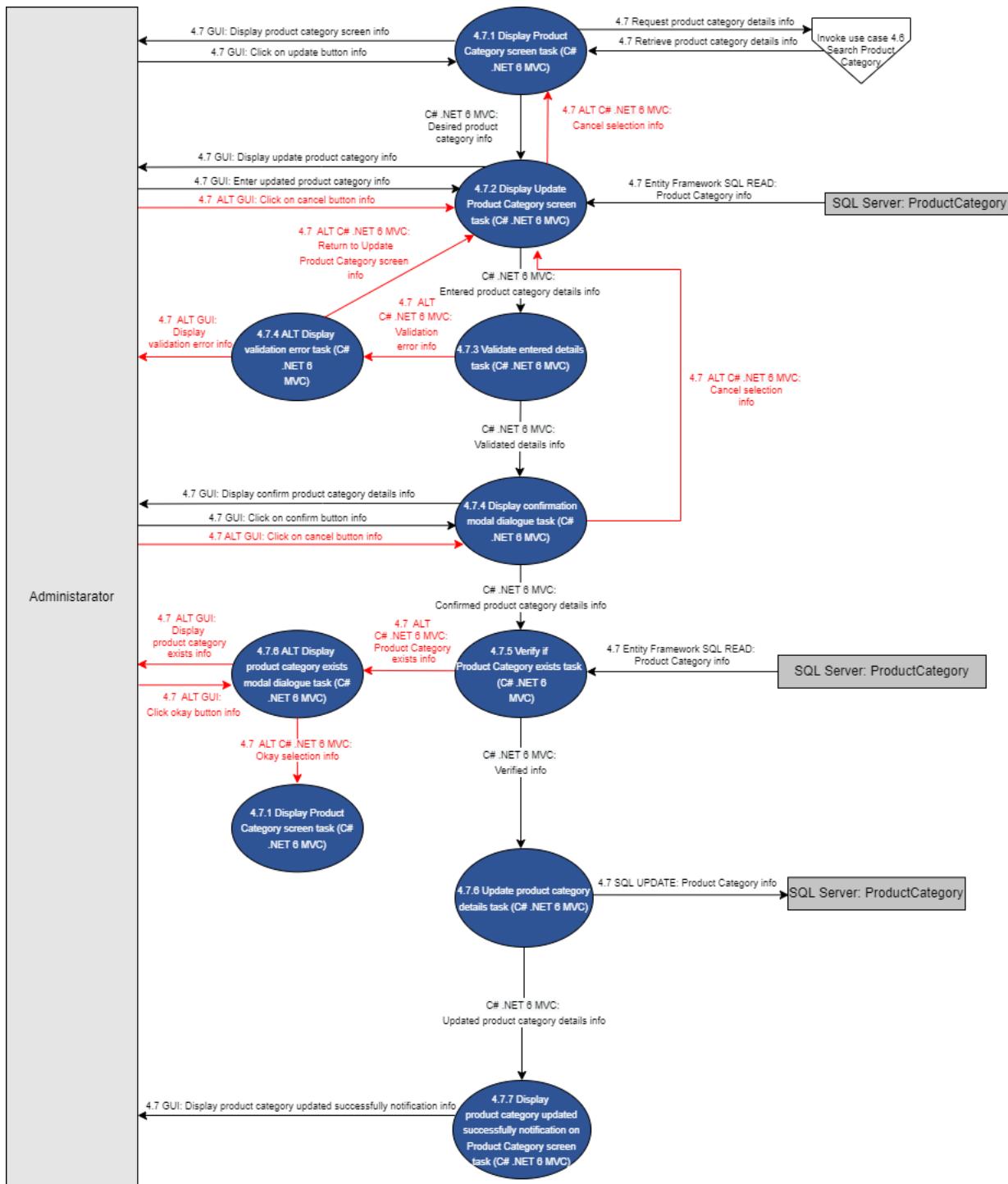


Figure 21- 4.7 Update Product Category

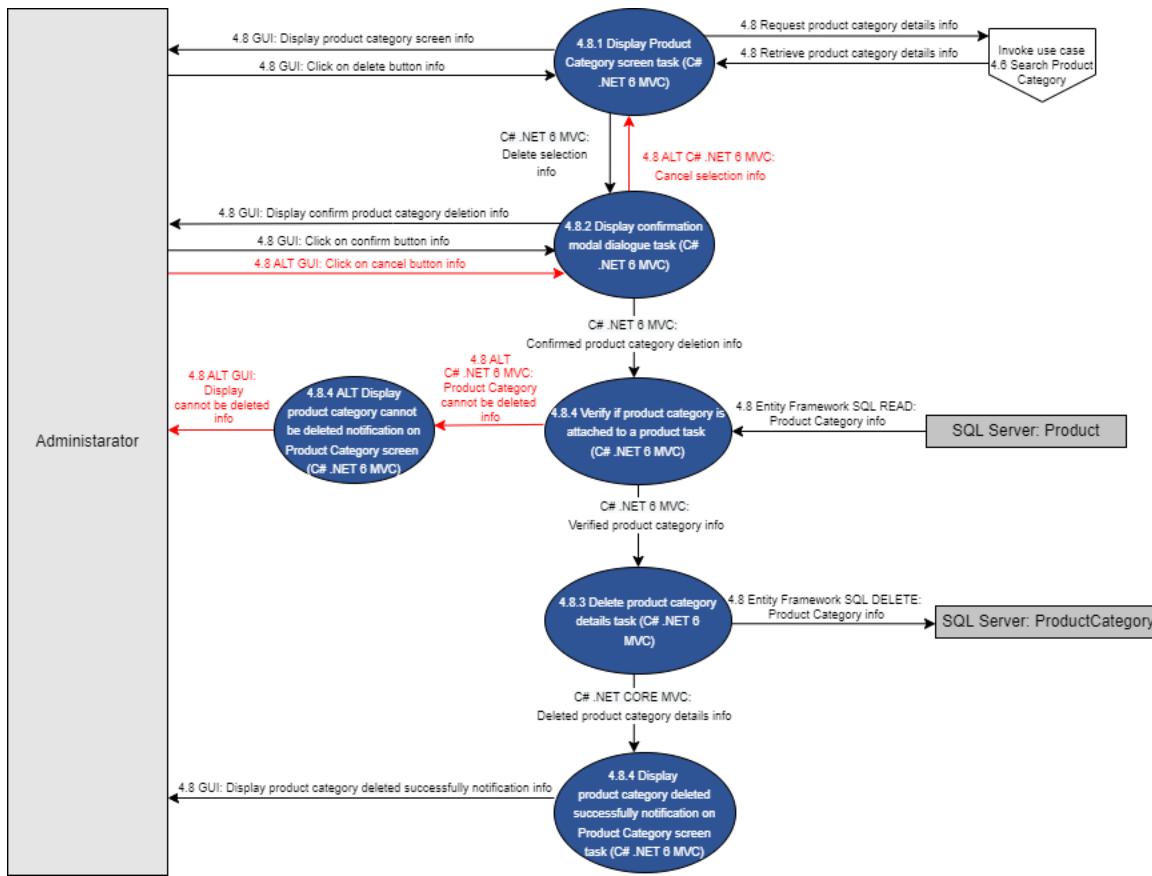


Figure 22- 4.8 Delete Product

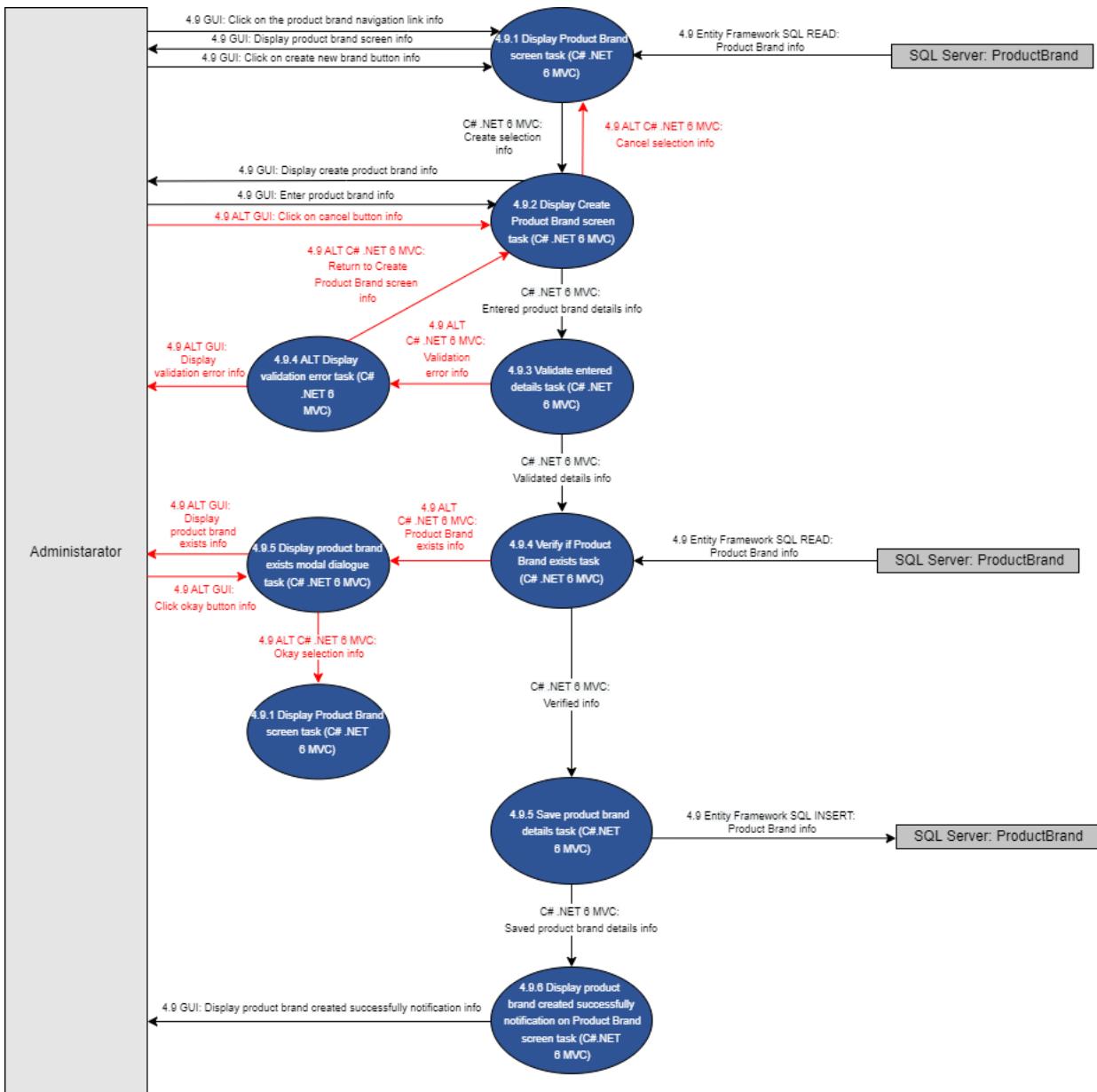


Figure 23- 4.9 Add Product brand

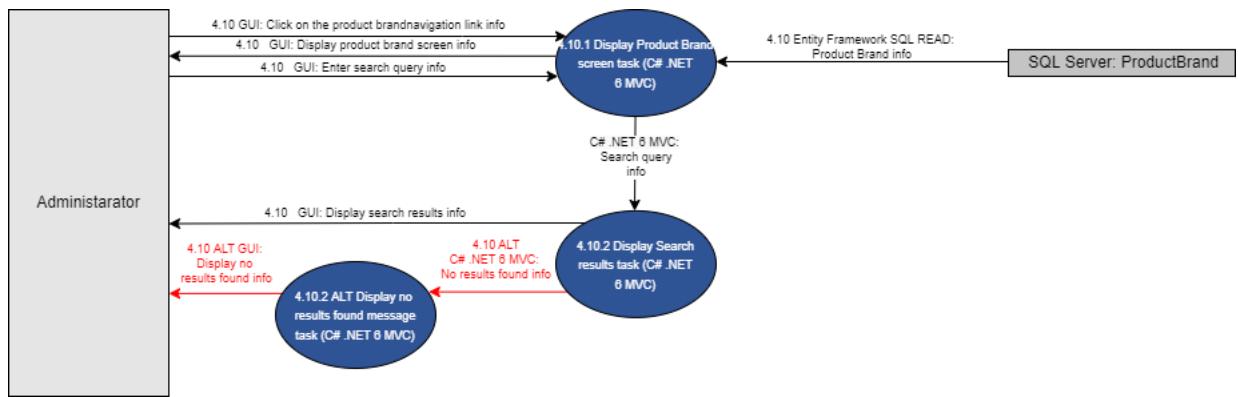


Figure 24- 4.10 Search Product brand

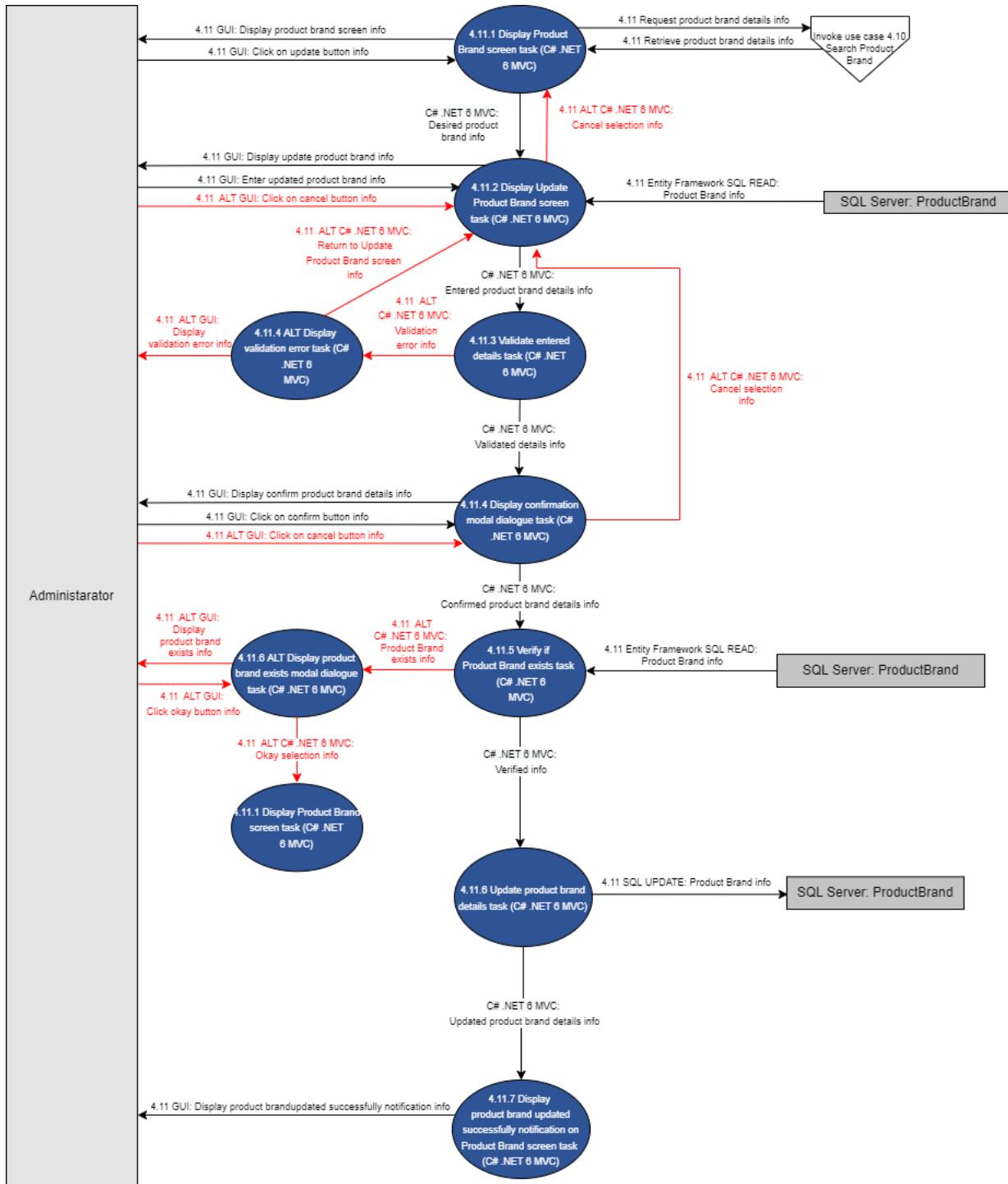


Figure 25- 4.11 Update Product brand

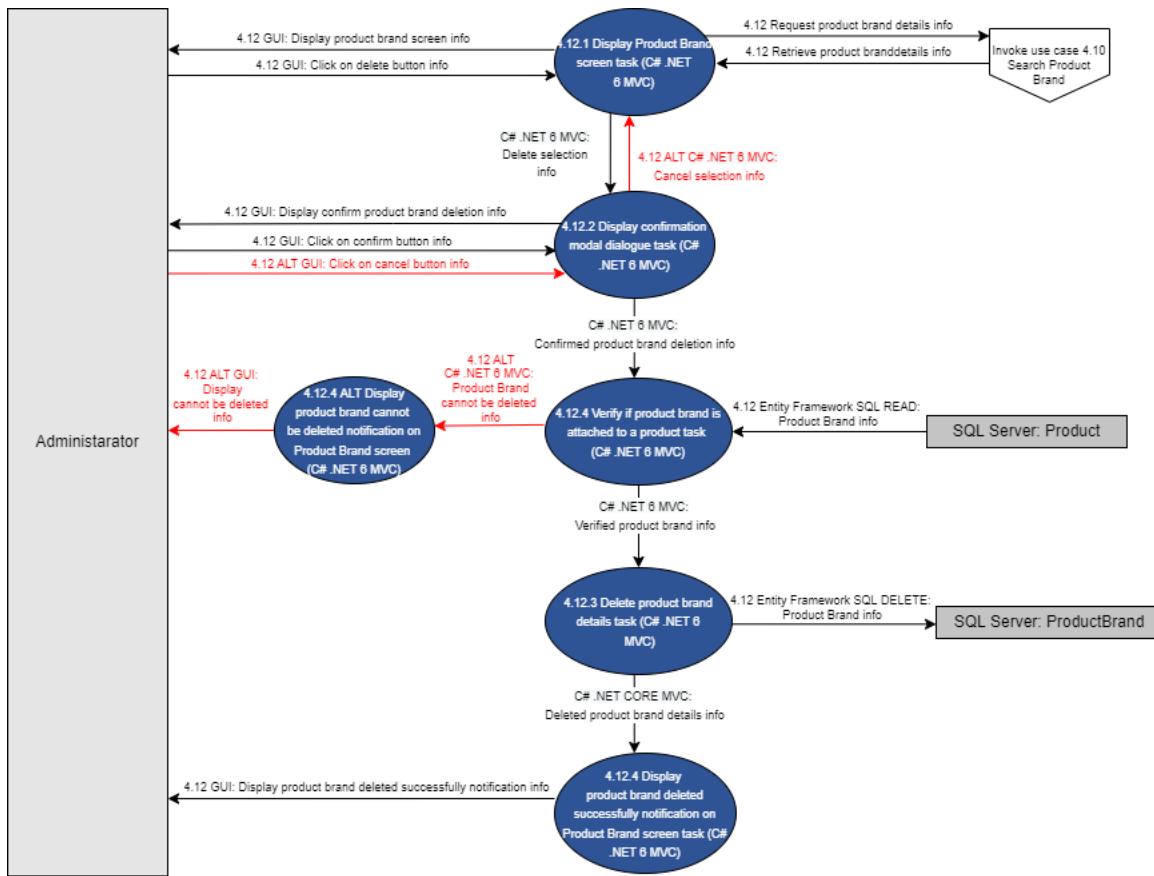


Figure 26- 4.12 Delete Product brand

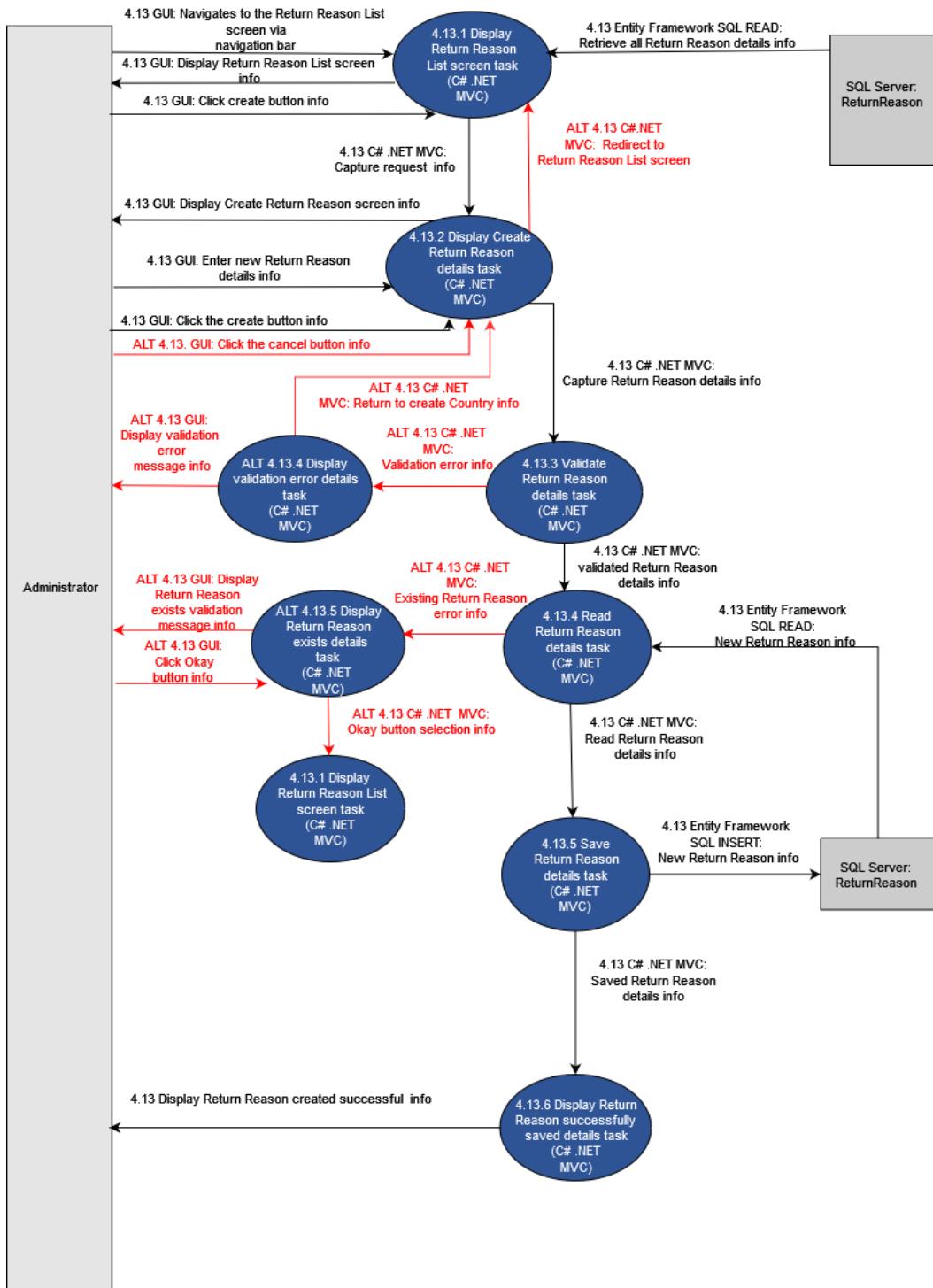


Figure 27- 4.13 Create Return Reason

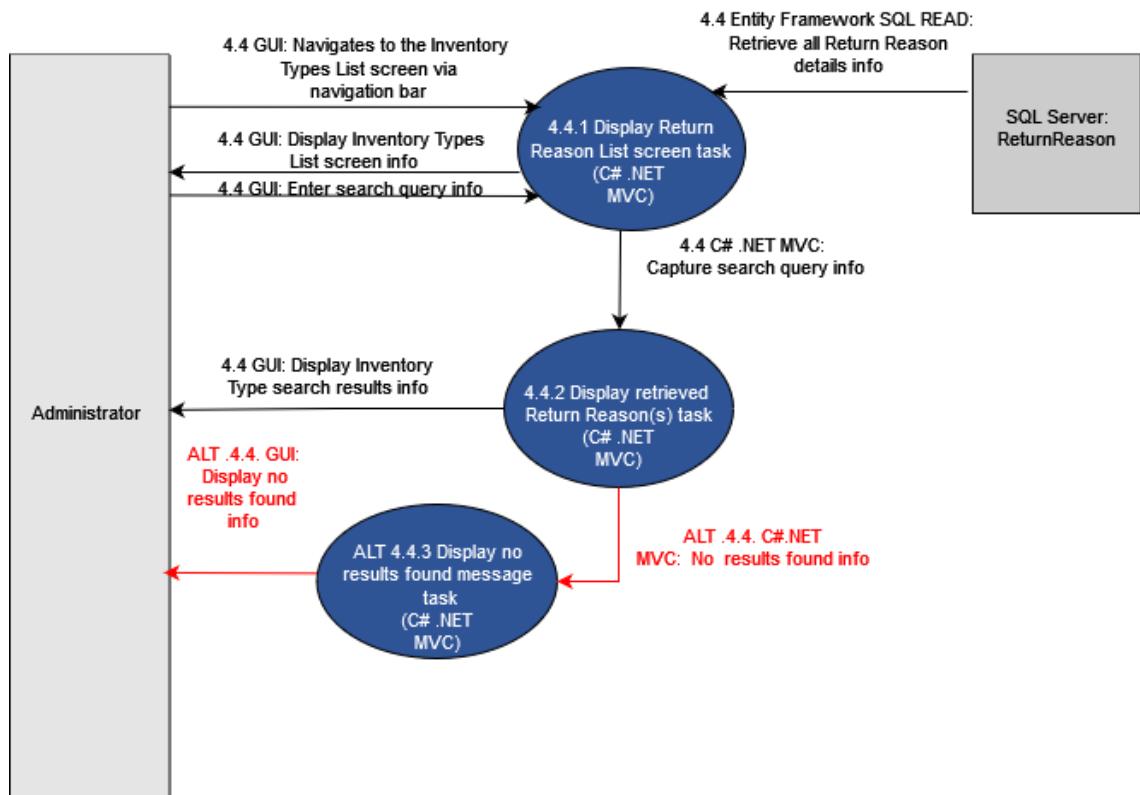


Figure 28- 4.14 Search Return Reason

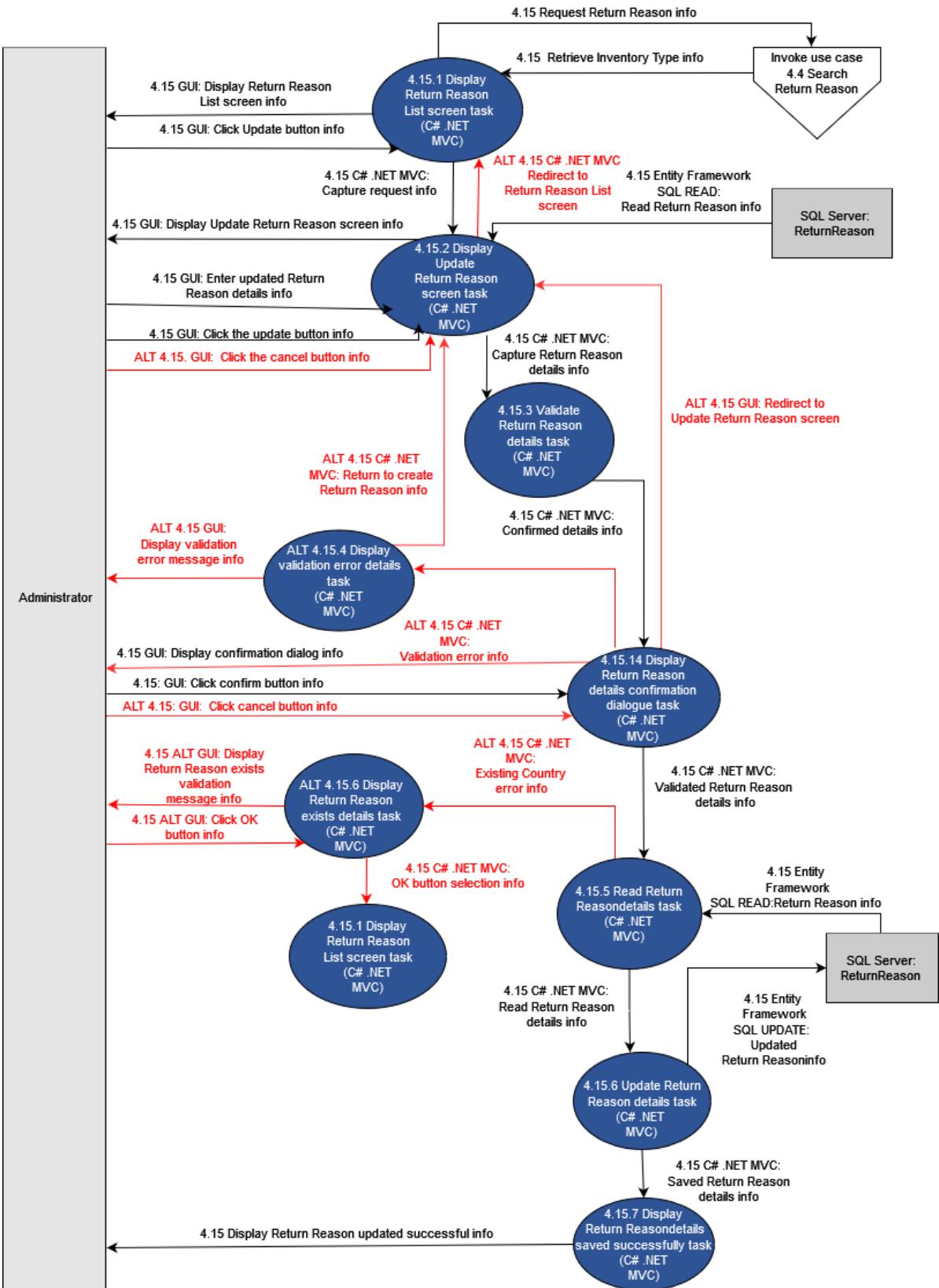


Figure 29- 4.15 Update Return Reason

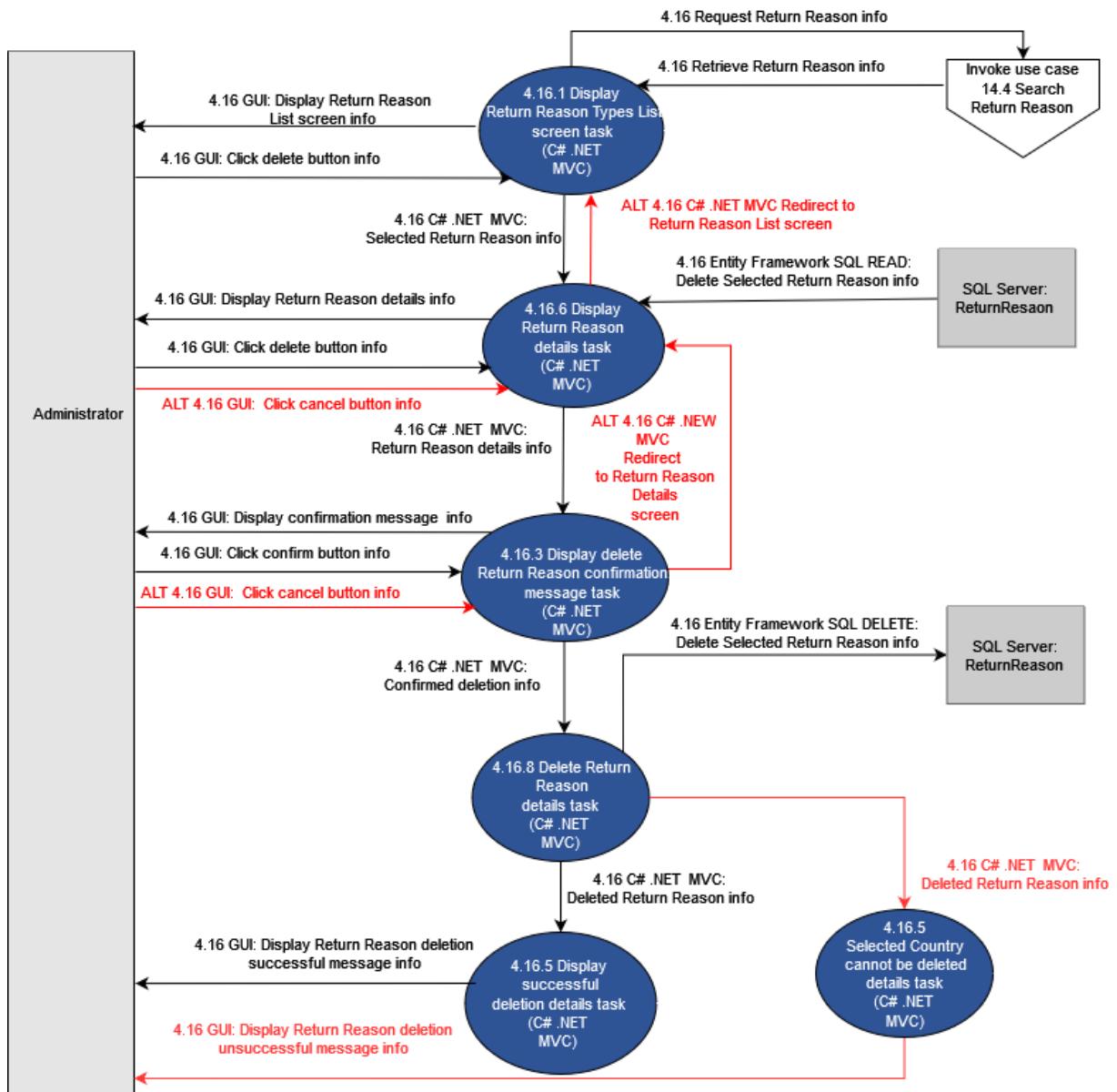


Figure 30- 4.16 Delete Return Reason

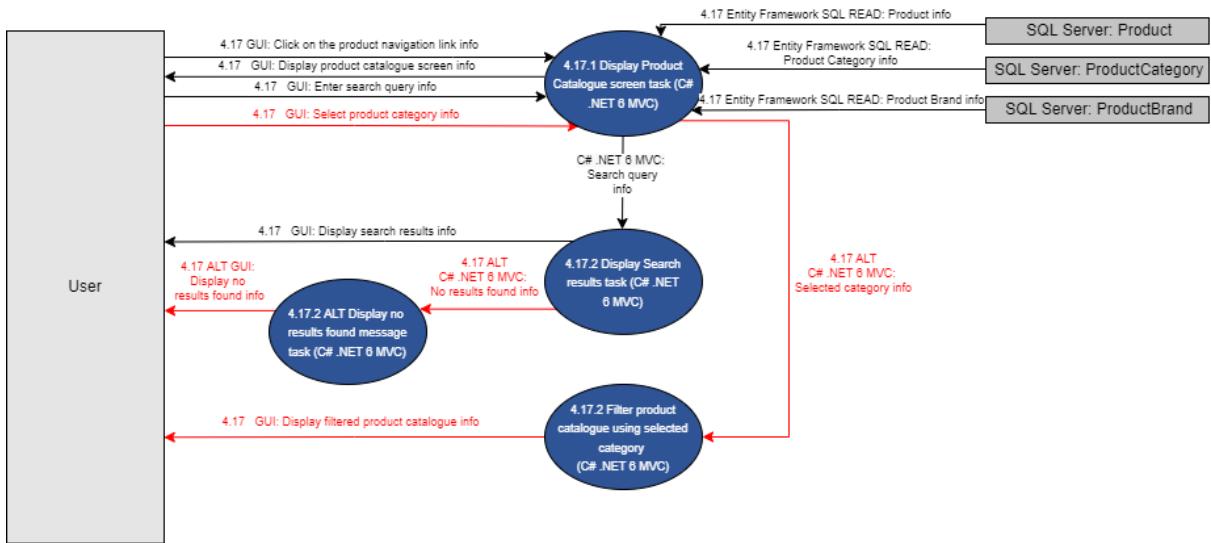


Figure 31- 4.17 Browse Product Catalogue

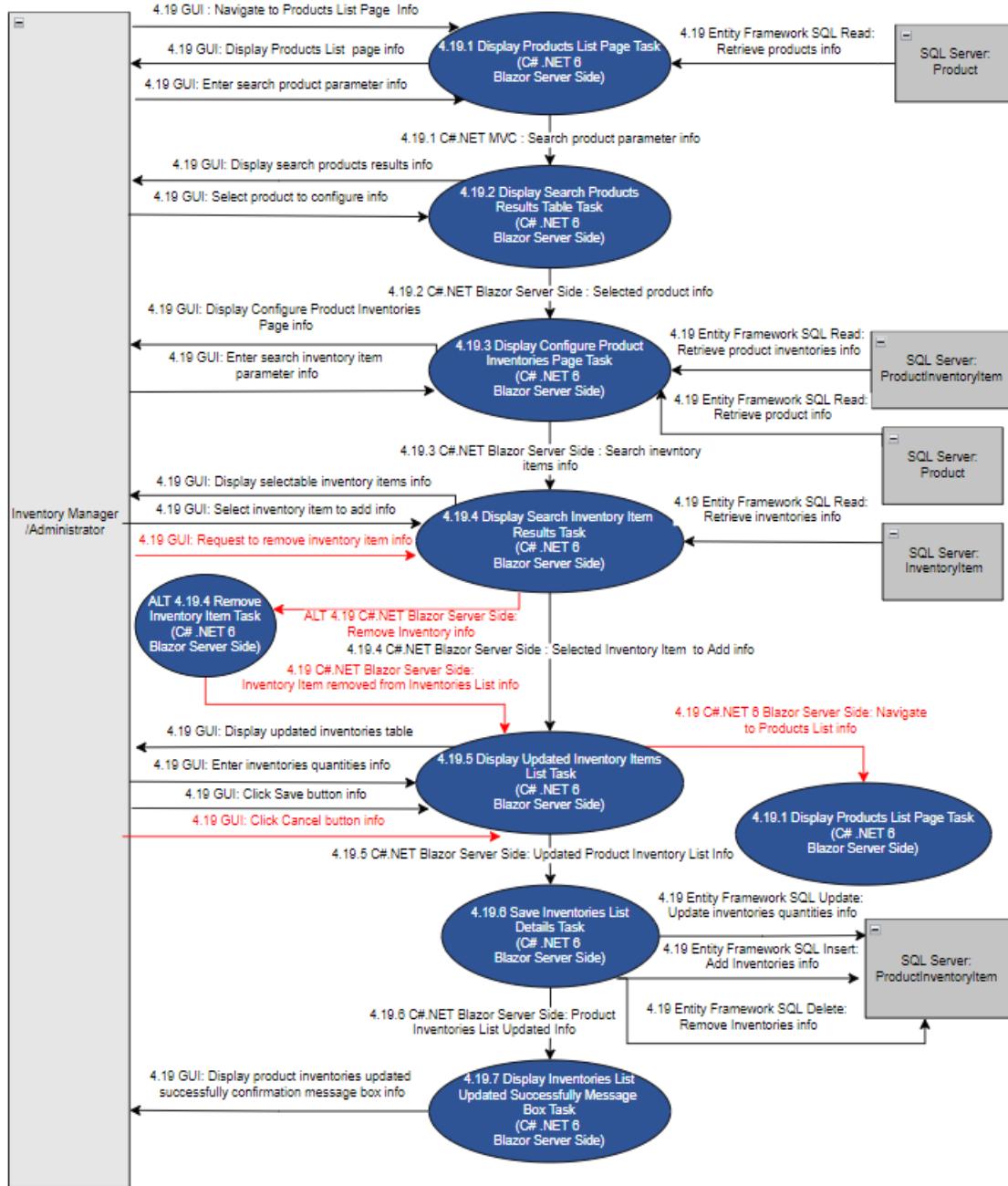


Figure 32- 4.18 Configure Product

## 2.5. Order Subsystem

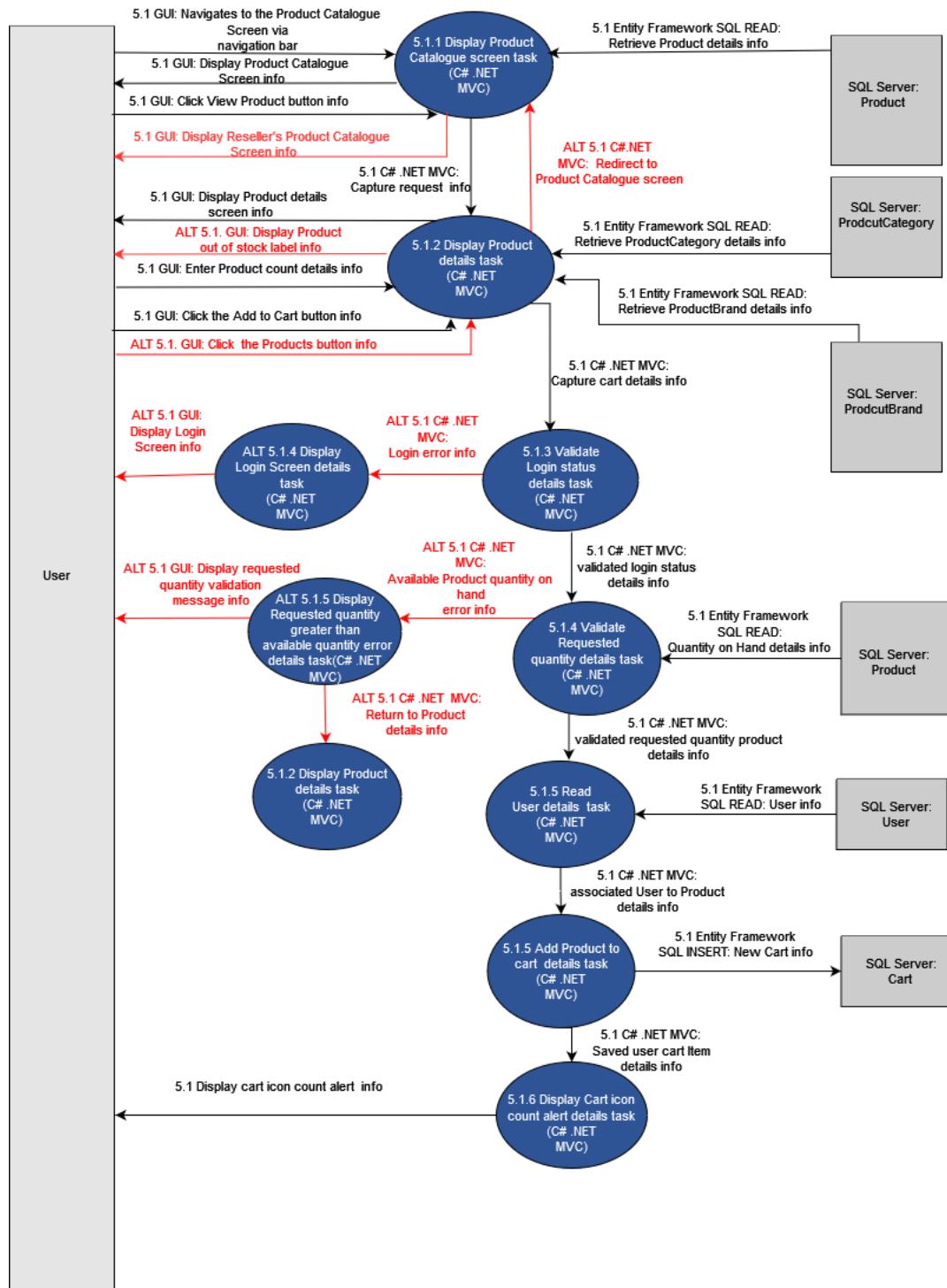


Figure 33 -5.1 Add Item(s) to Cart

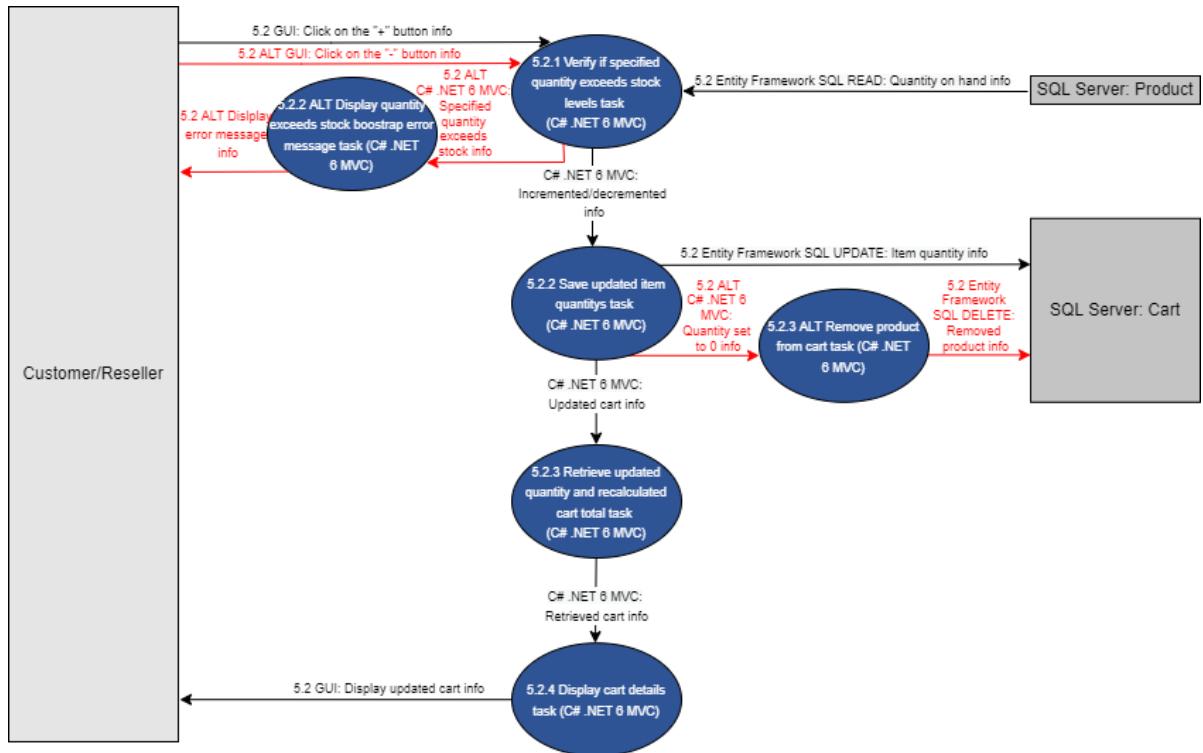


Figure 34 - 5.2 Update Cart

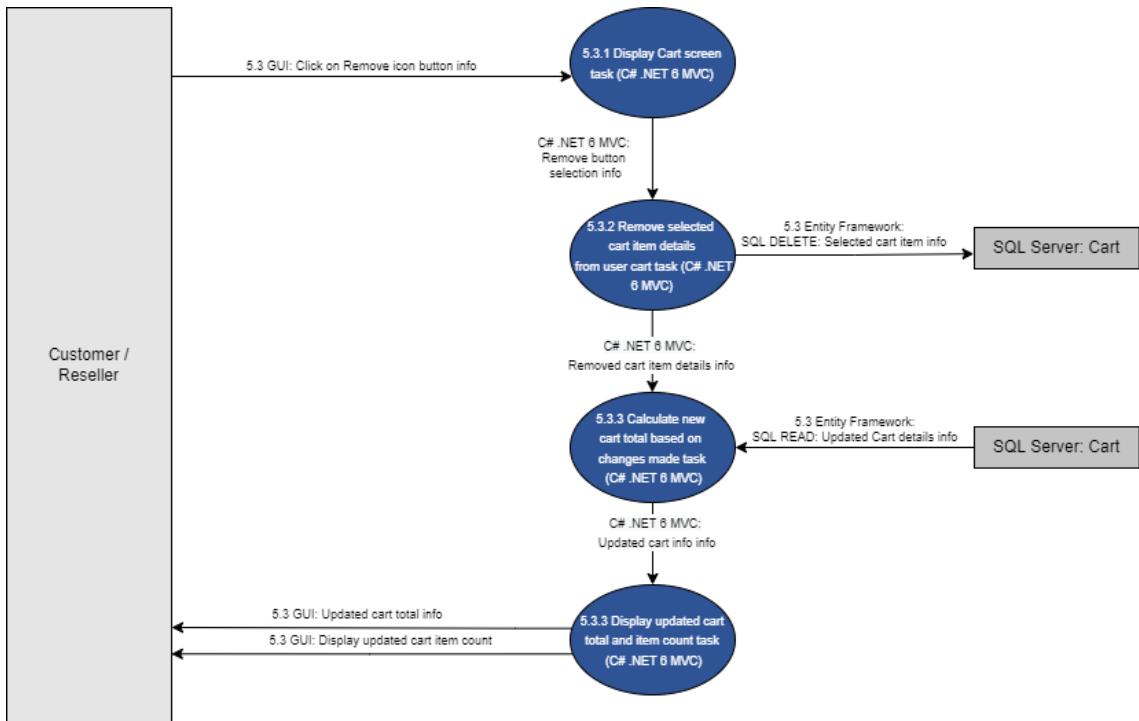


Figure 35 - 5.3 Remove Item(s) from Cart

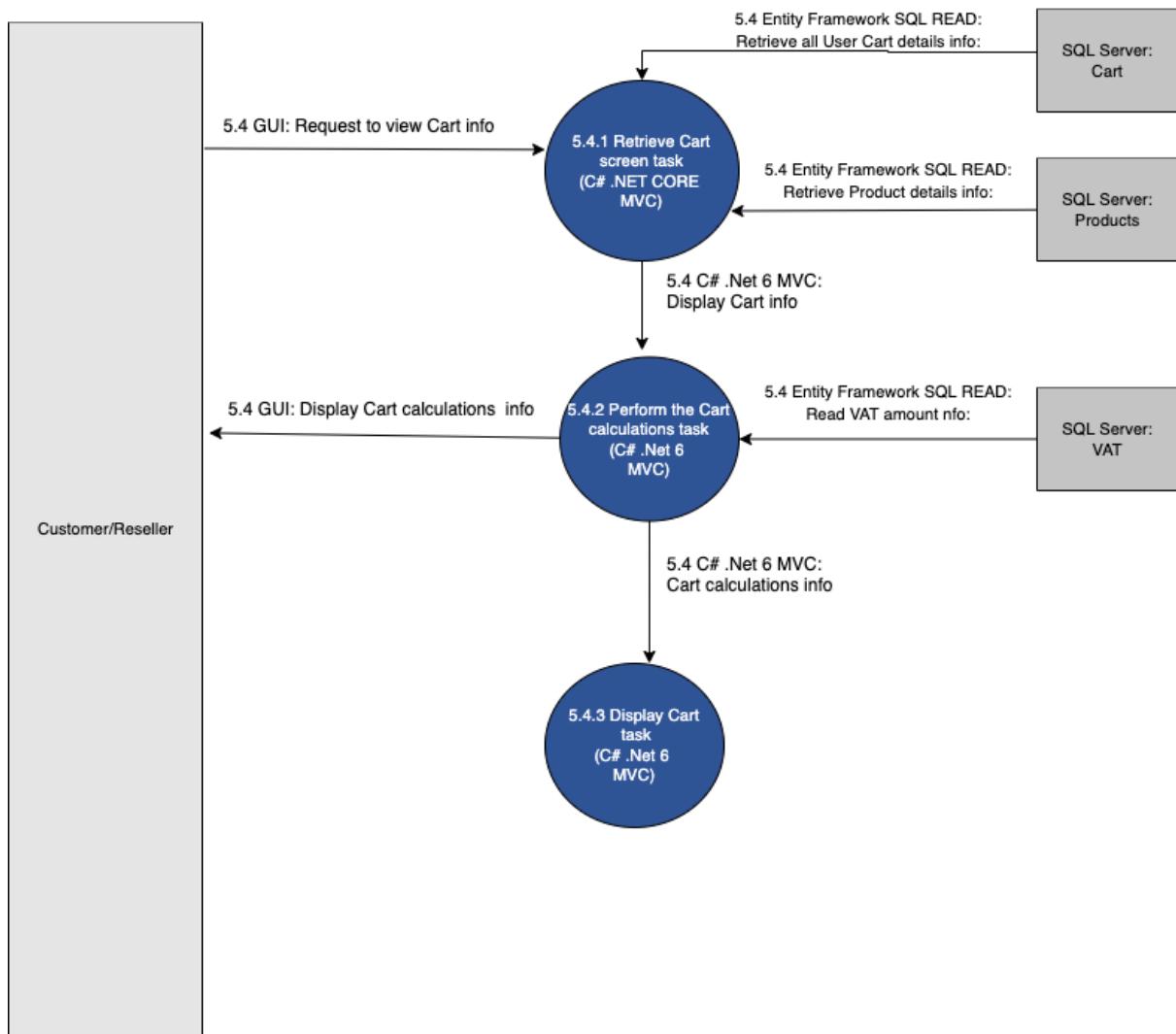


Figure 36- 5.4 View Cart

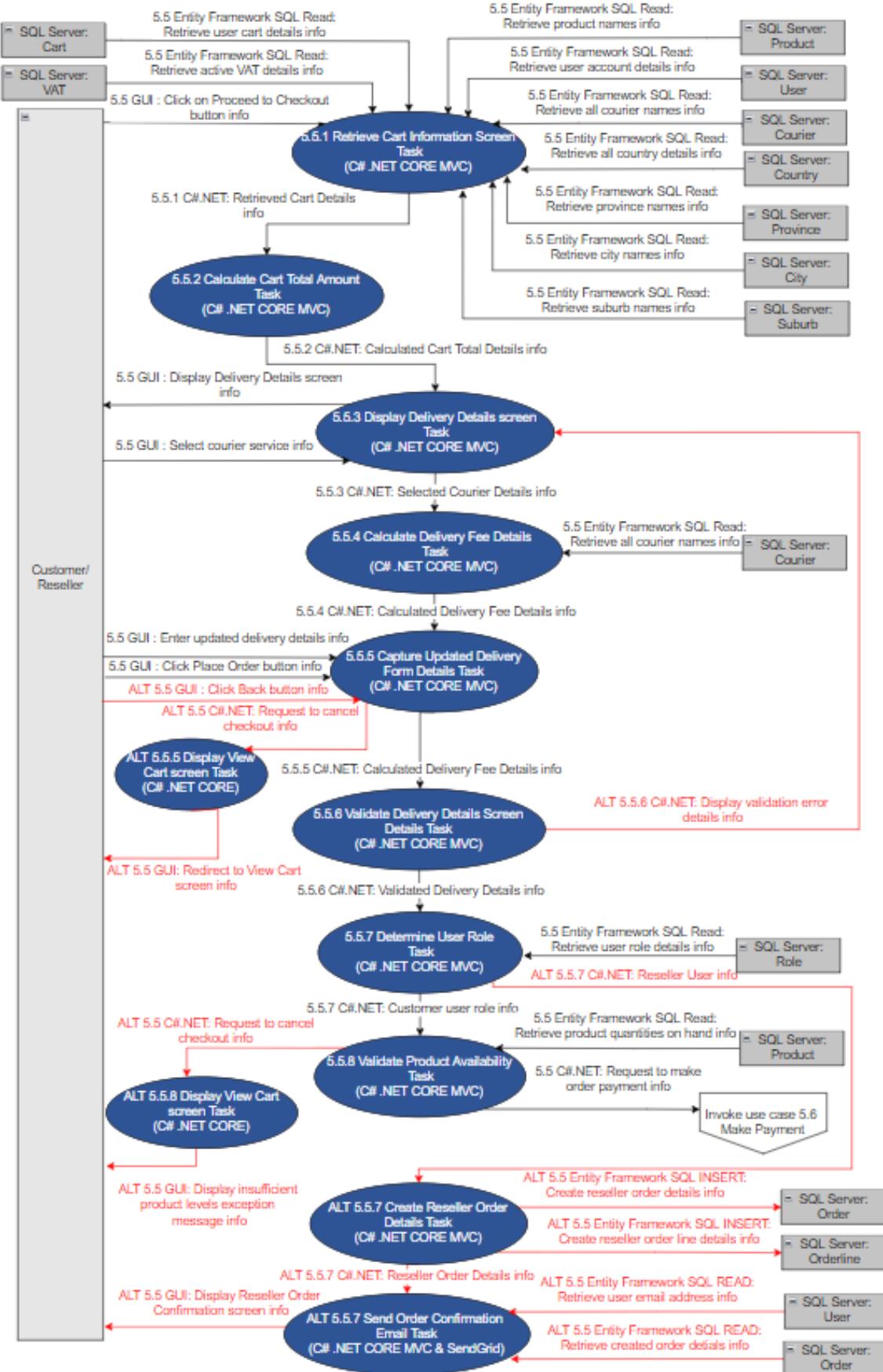


Figure 37 - 5.5 Checkout Cart

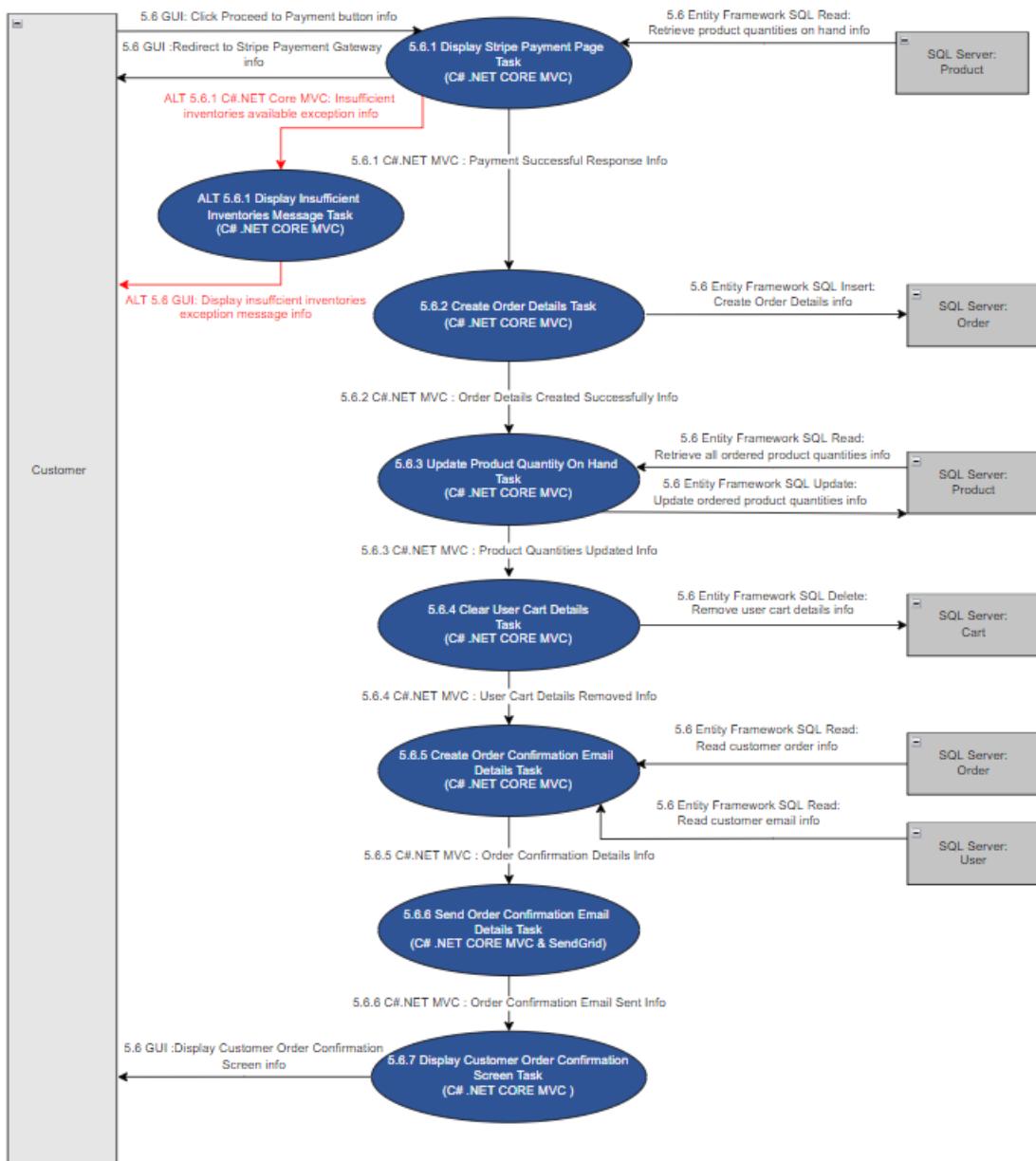


Figure 38- 5.6 Make Payment

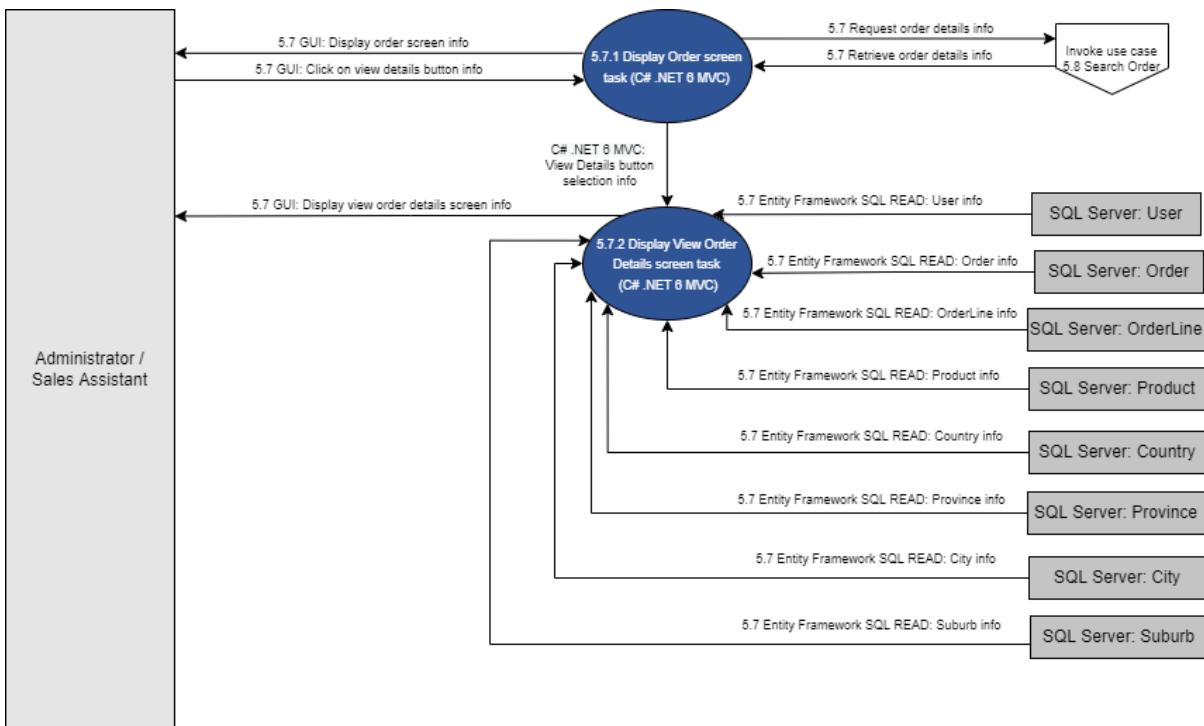


Figure 39- 5.7 View Orders Overview

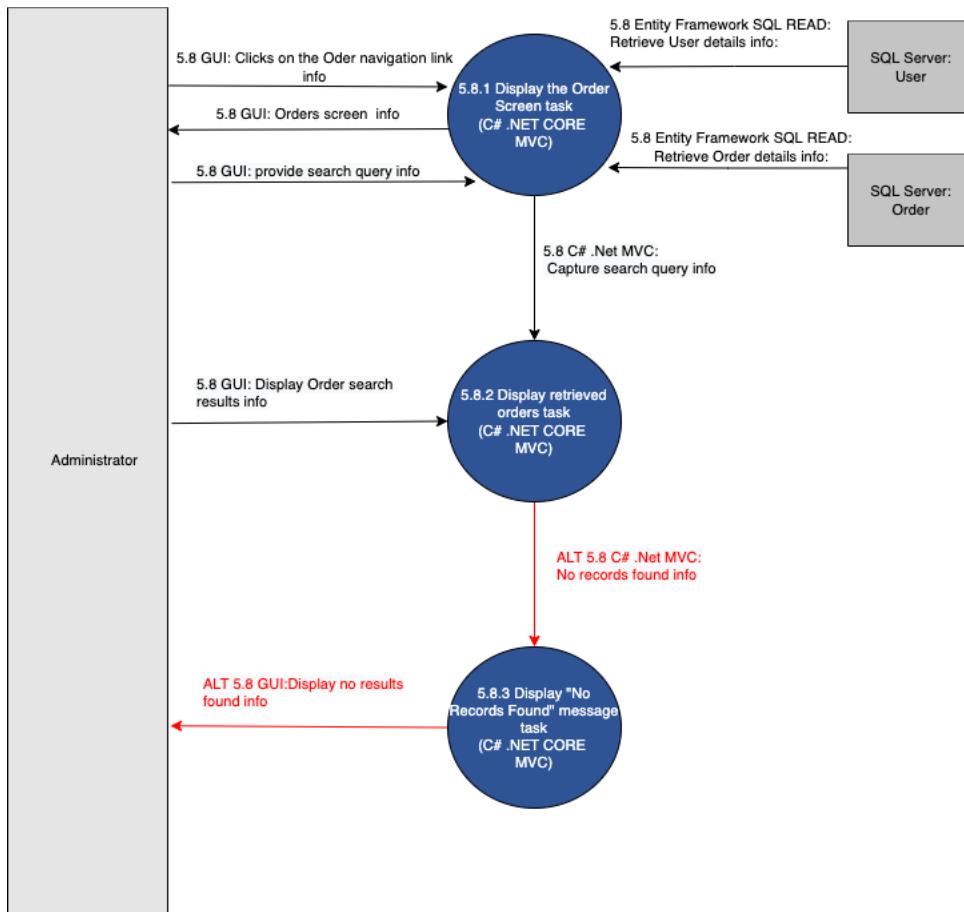


Figure 40- 5.8 Search Order

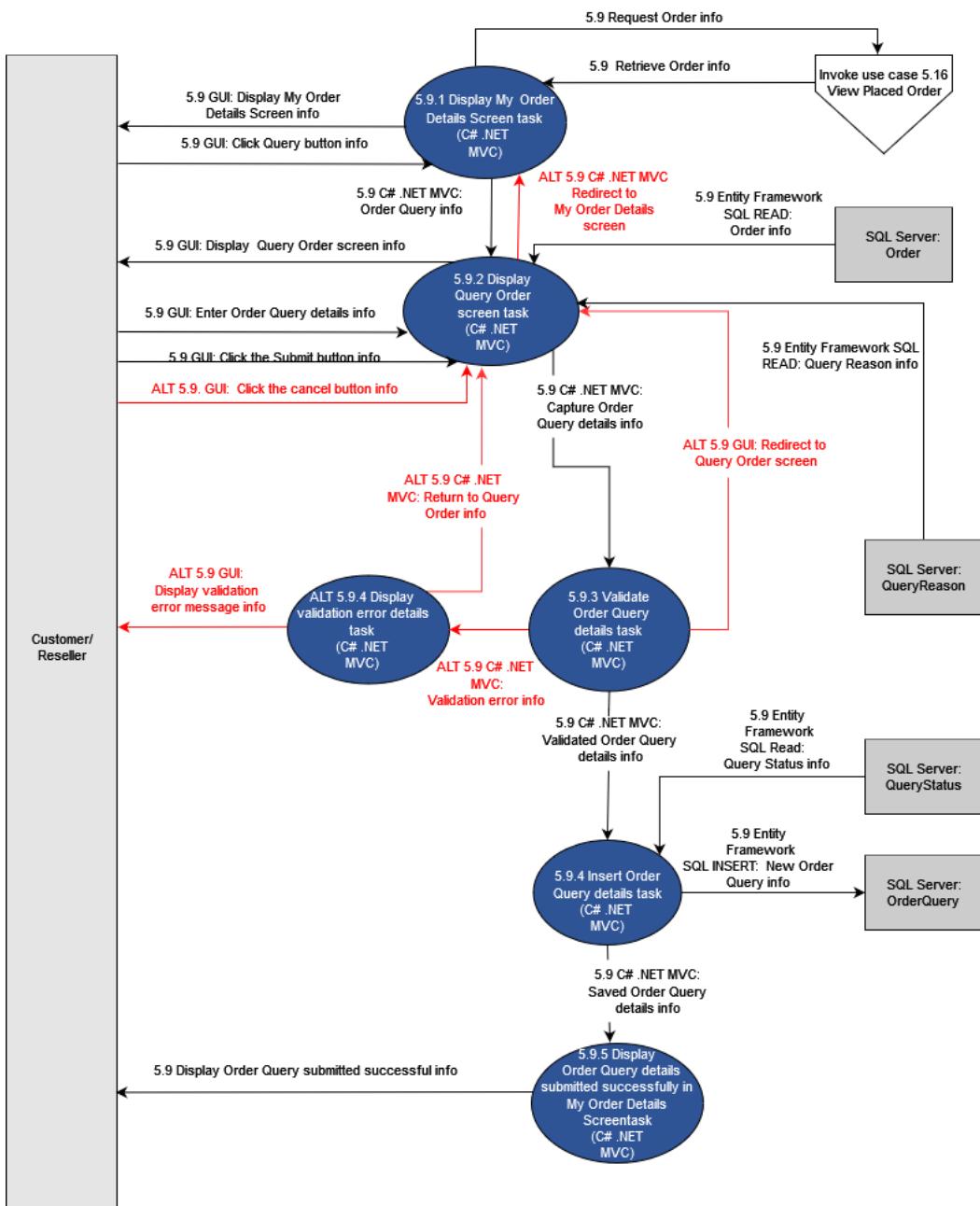


Figure 41- 5.9 Query Order

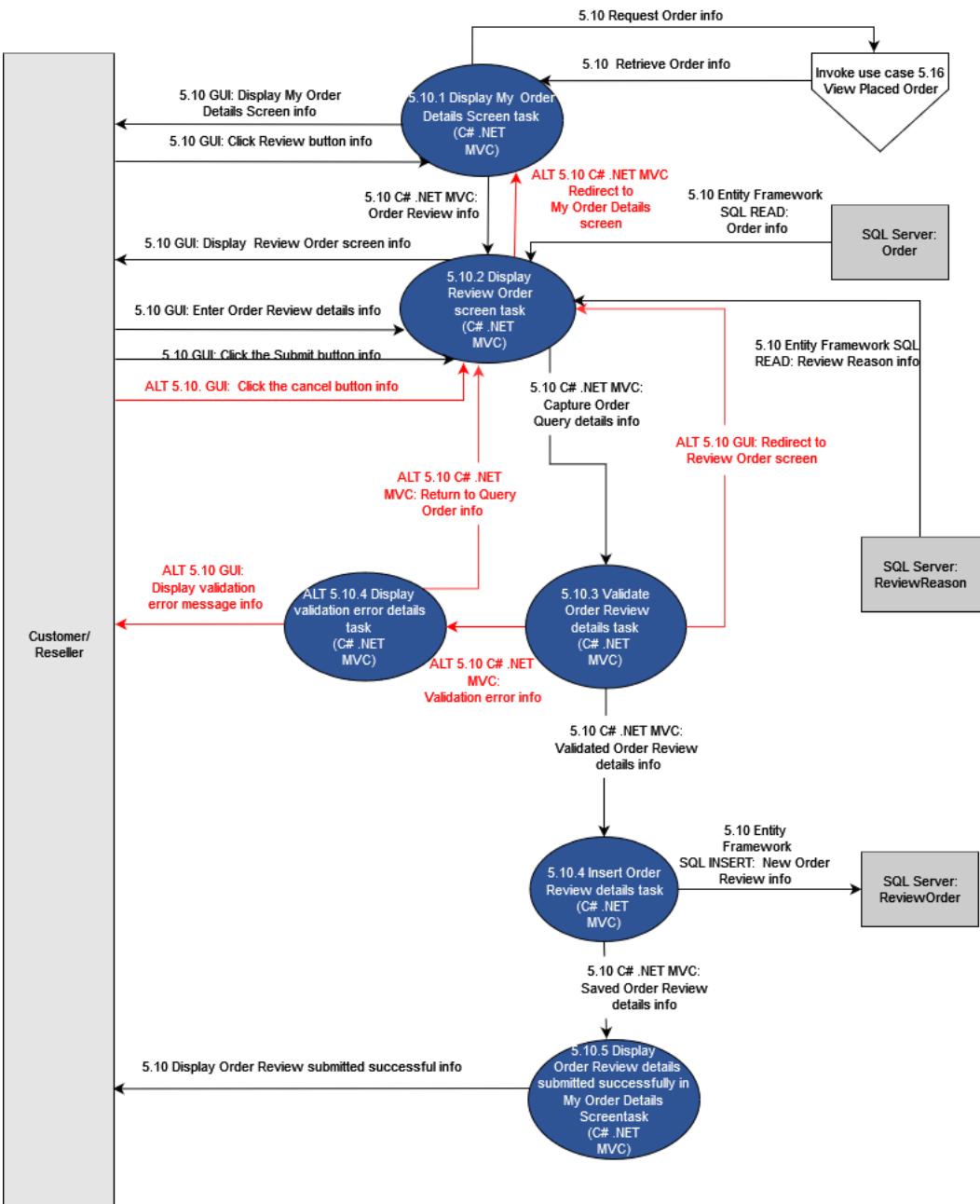


Figure 42 - 5.10 Review Order

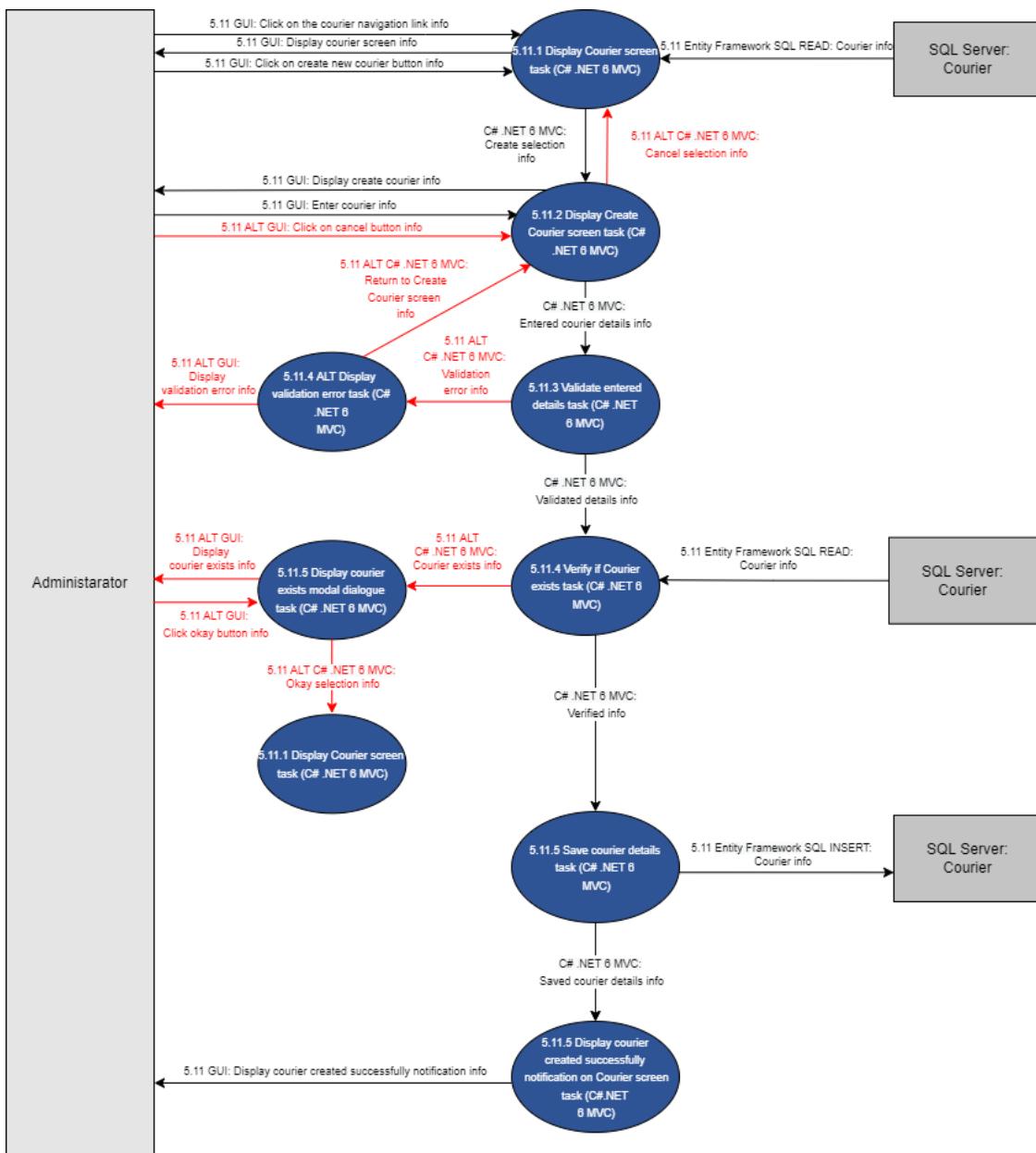


Figure 43 - 5.11 Create Courier

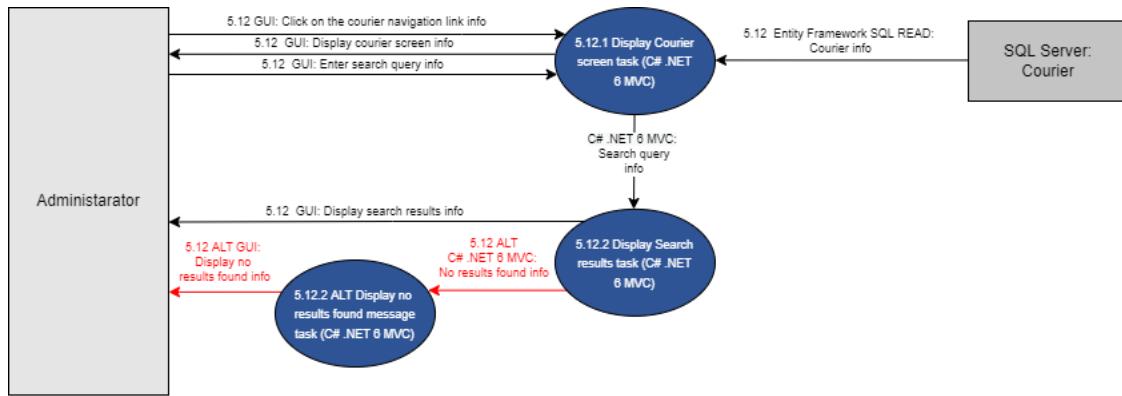


Figure 44 - 5.12 Search Courier

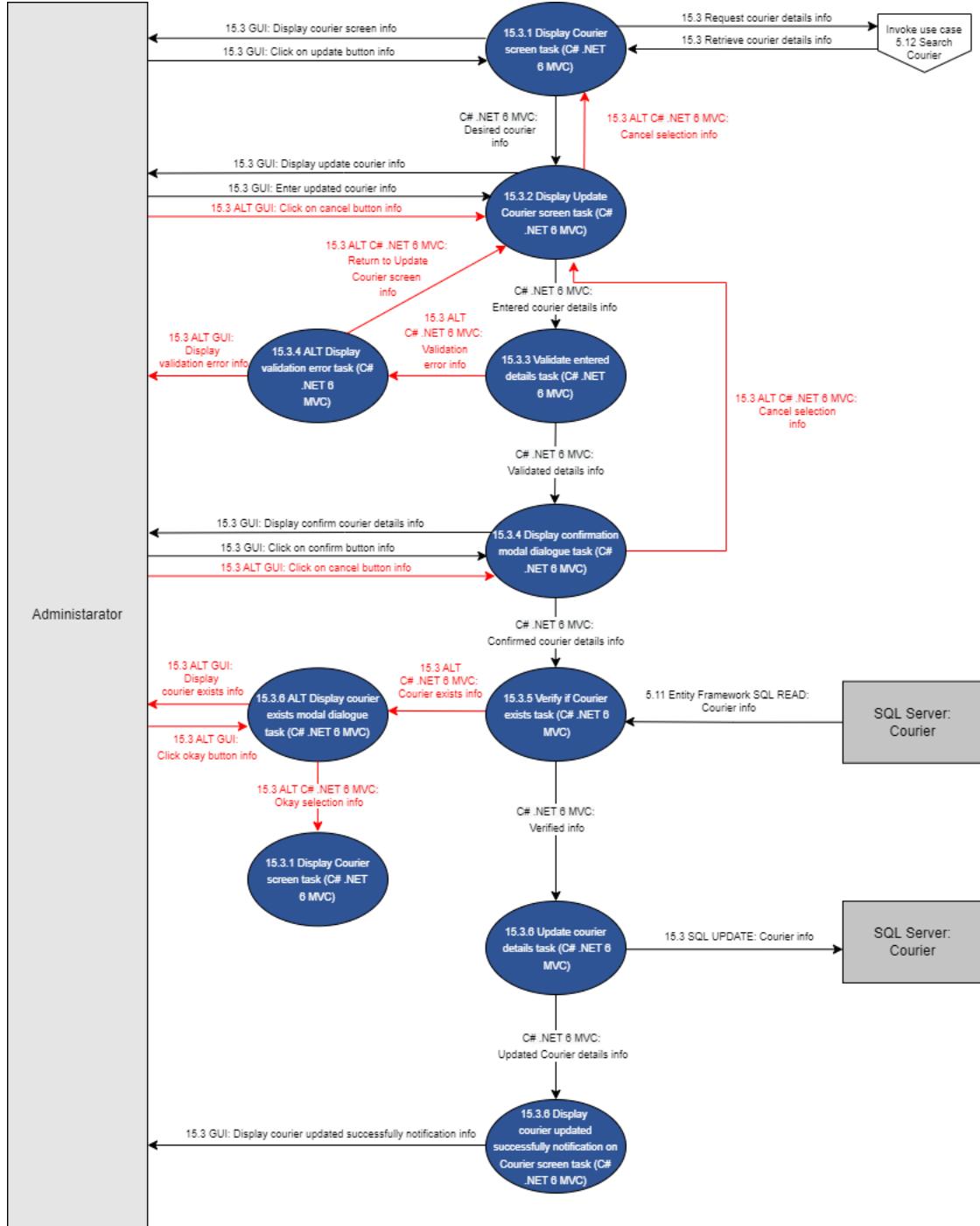


Figure 45 - 5.13 Update Courier

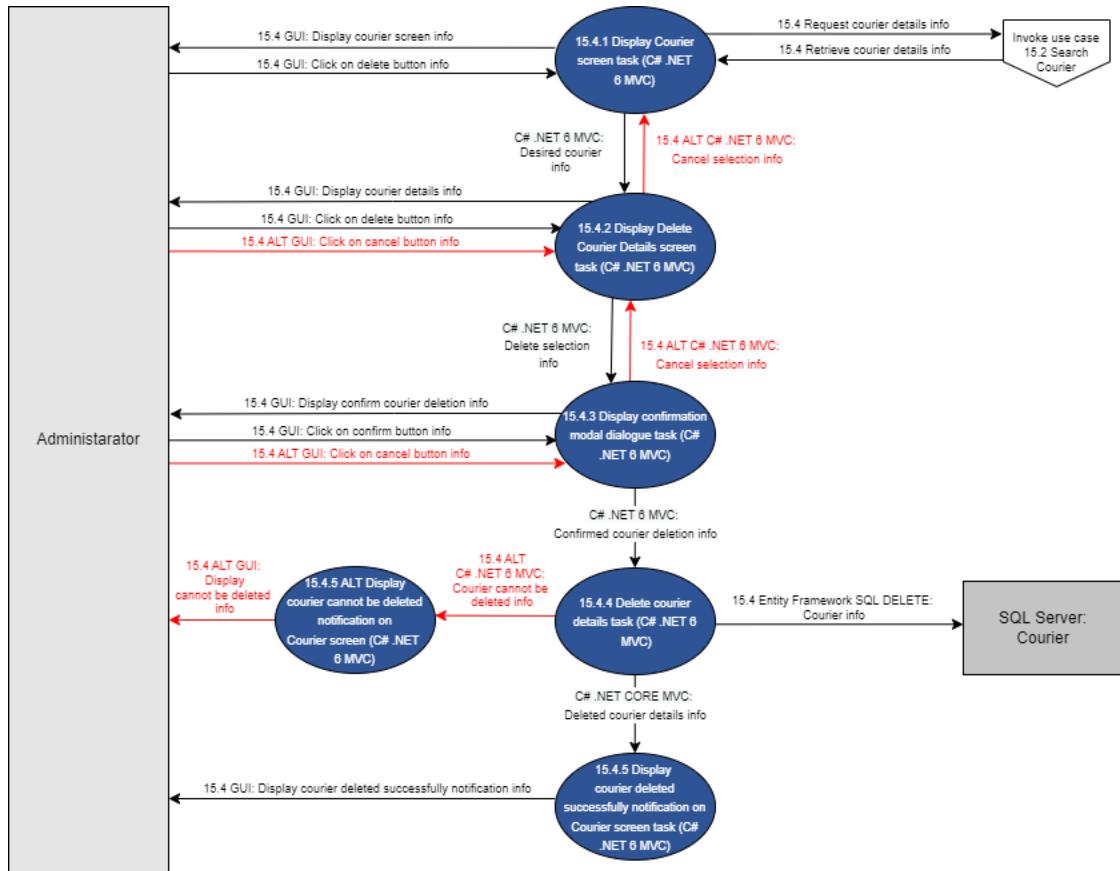


Figure 46 - 5.14 Delete Courier

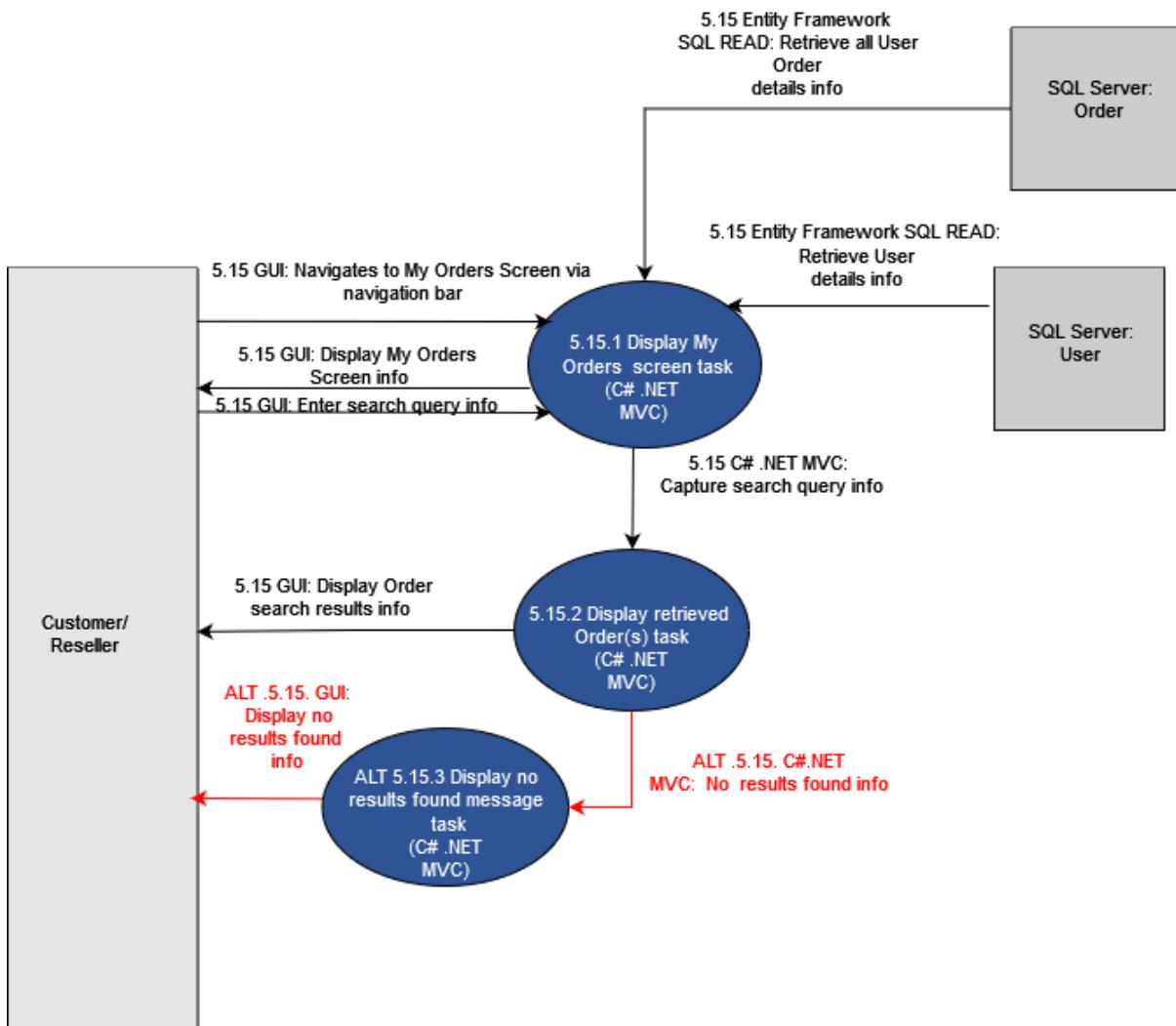


Figure 47- 5.15 Search Placed Order

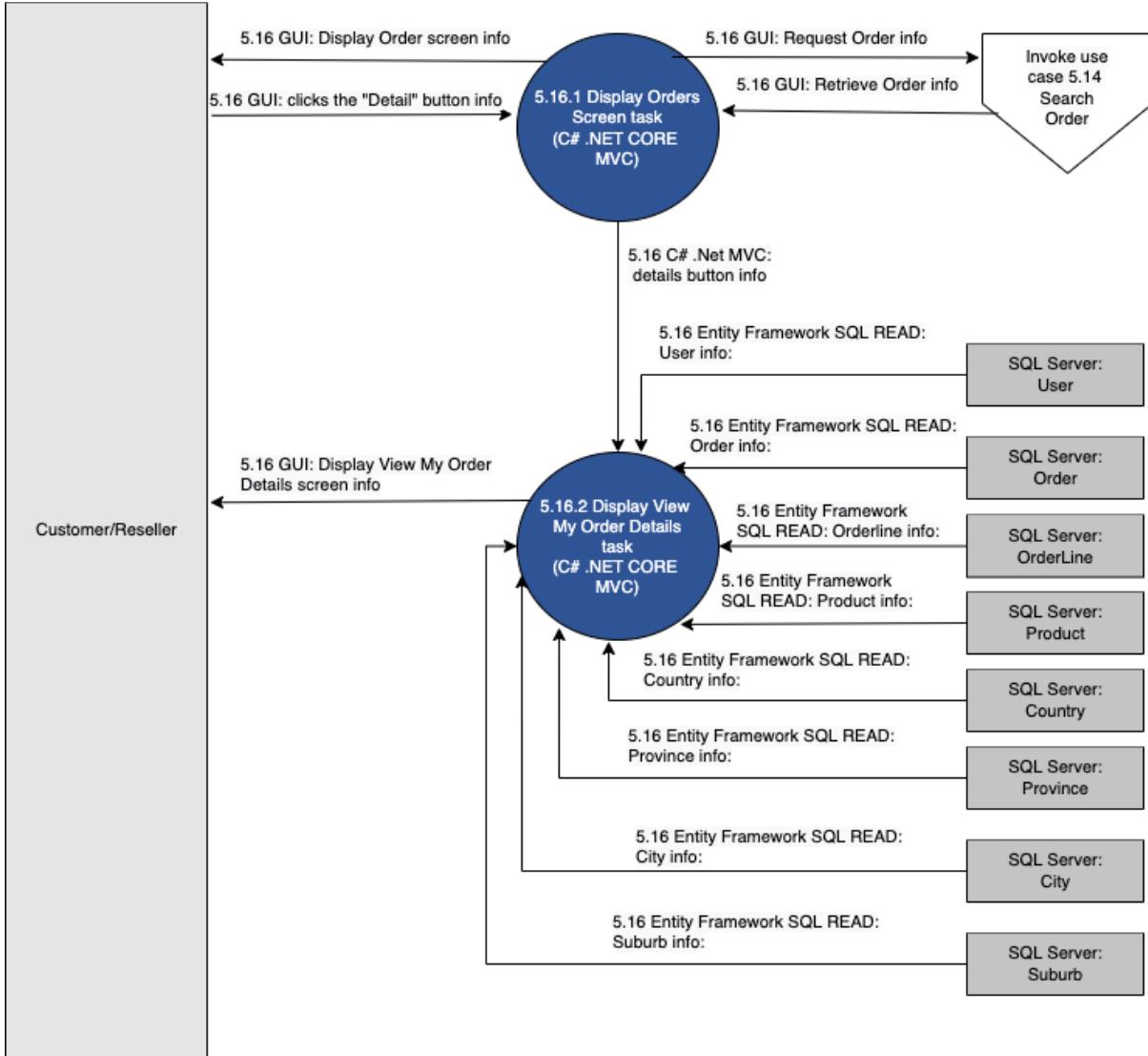


Figure 48 - 5.16 View Placed Order

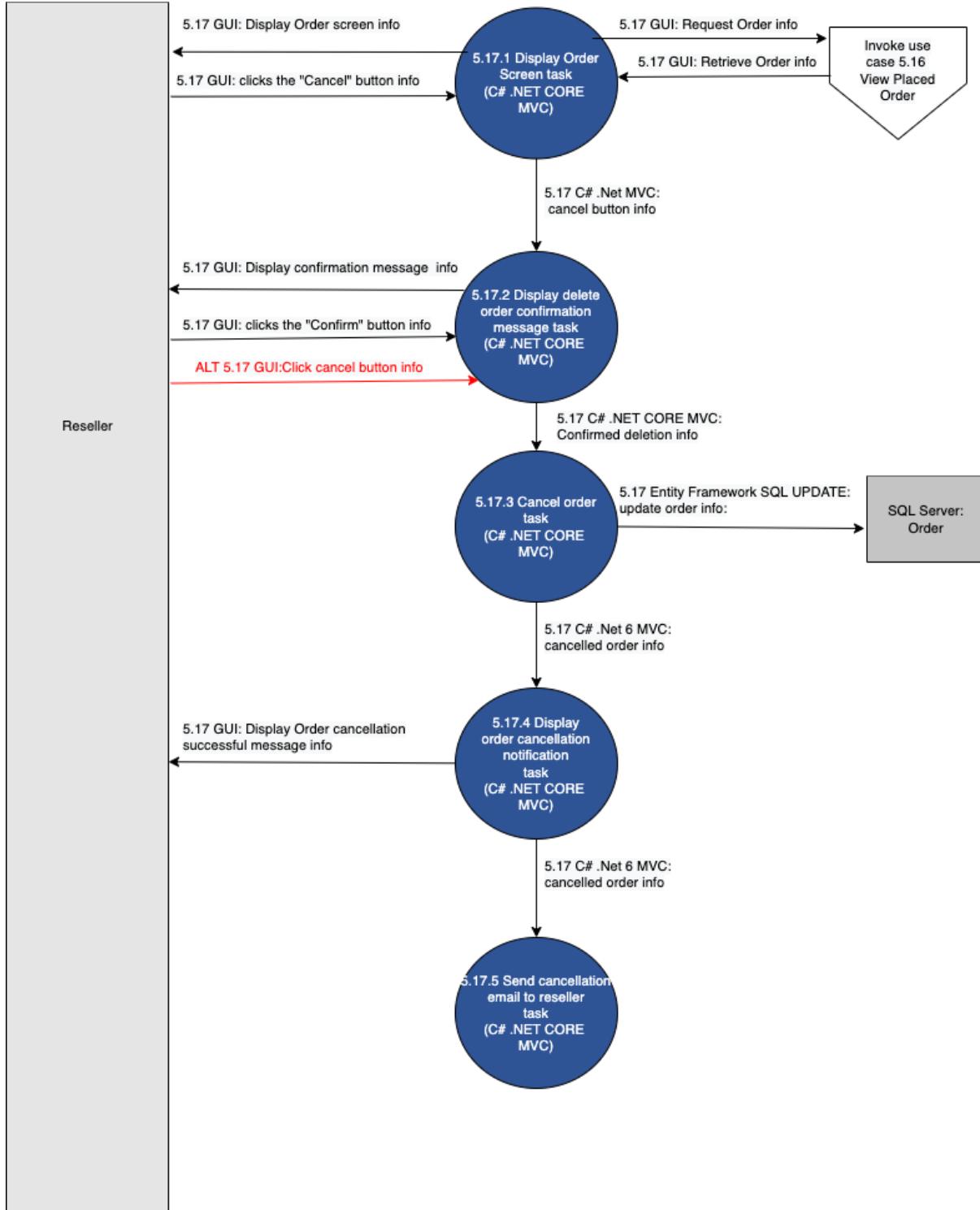


Figure 49- 5.17 Cancel Placed Order

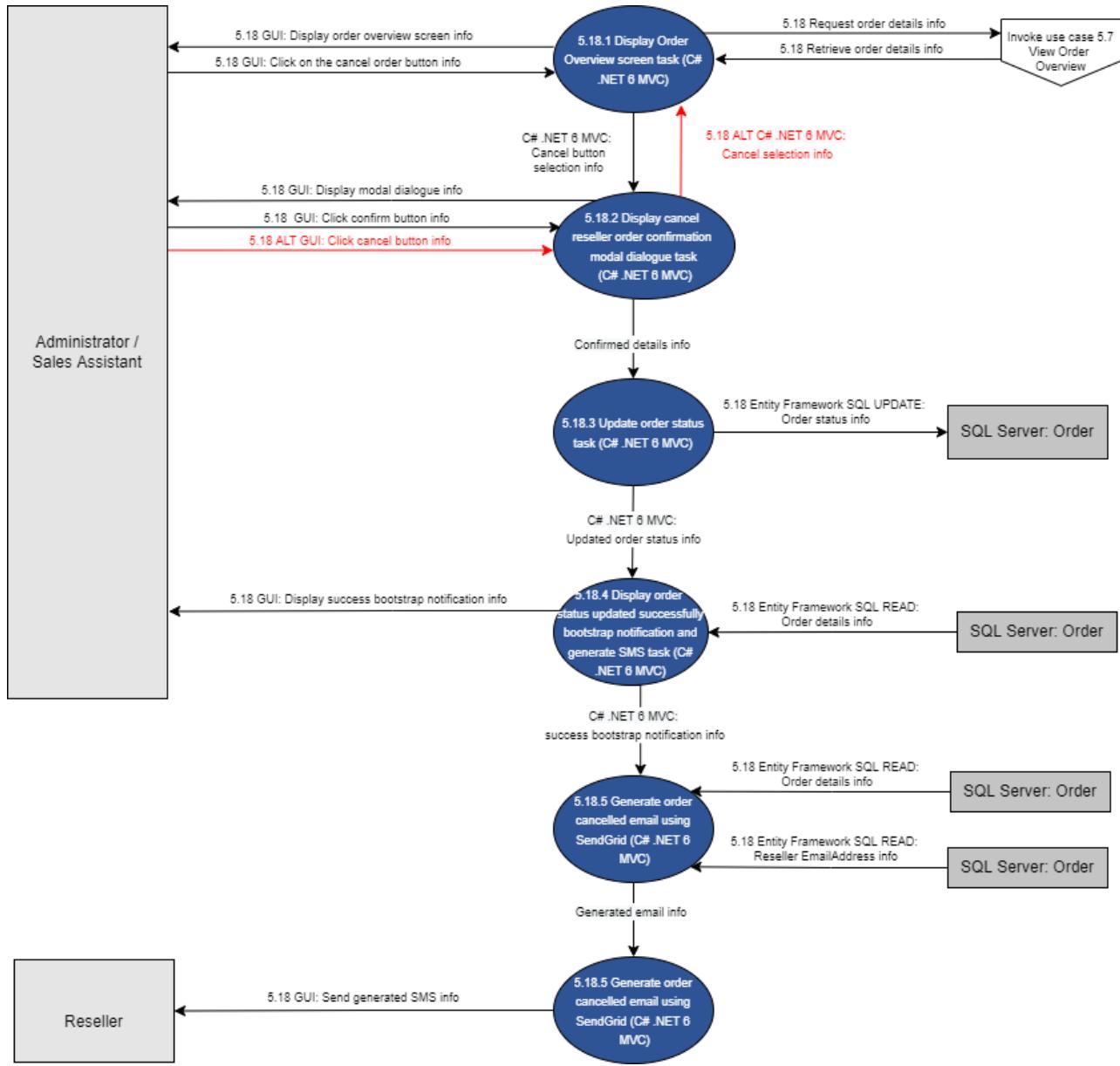


Figure 50- 5.18 Cancel Reseller Order

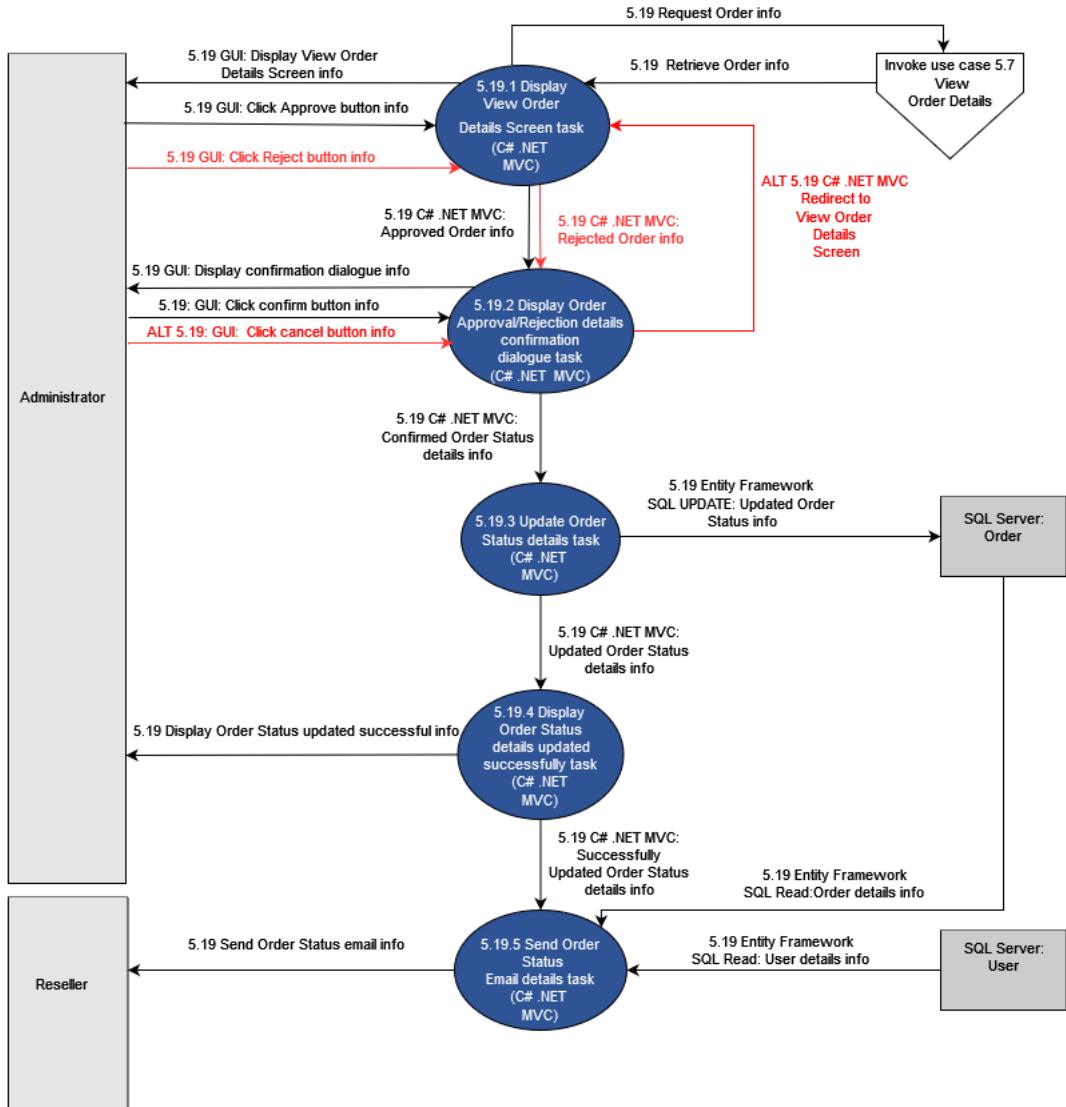


Figure 51- 5.19 Approve/Reject Reseller Order

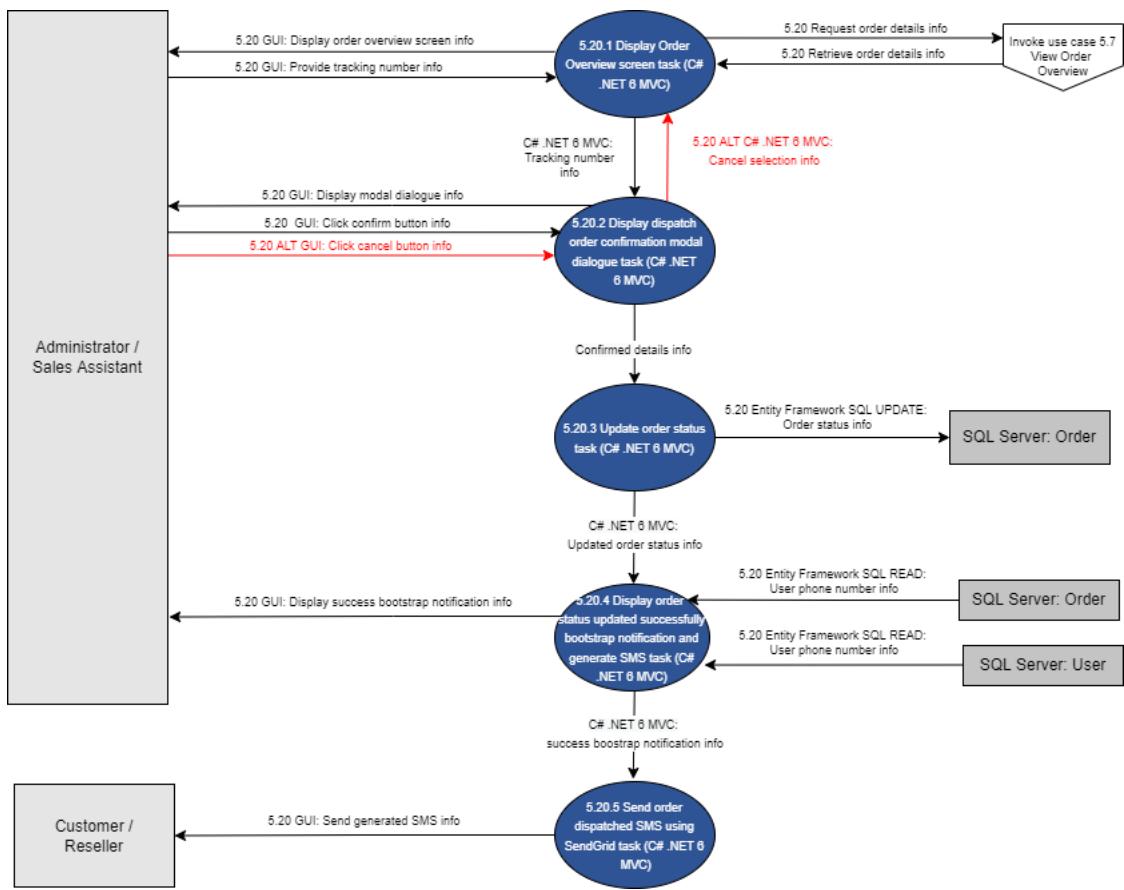


Figure 52 - 5.20 Dispatch Order

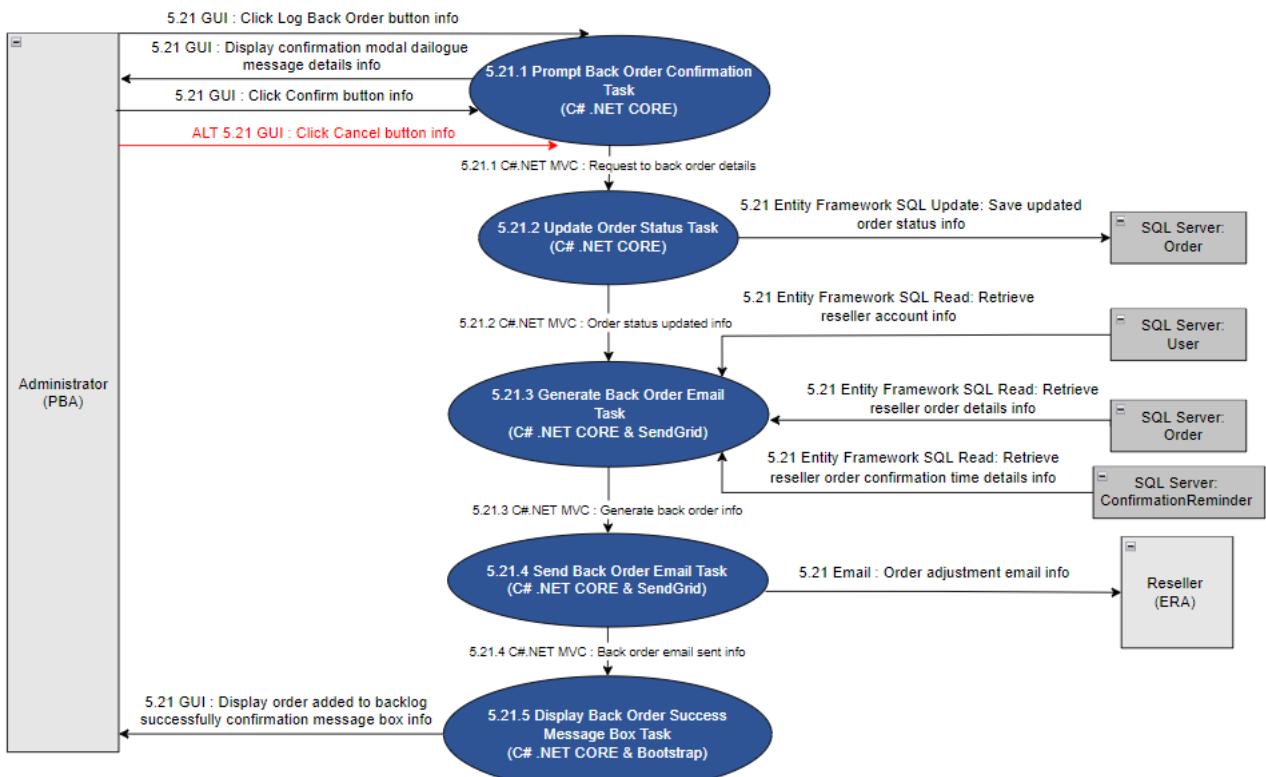


Figure 53- 5.21 Log Back Order

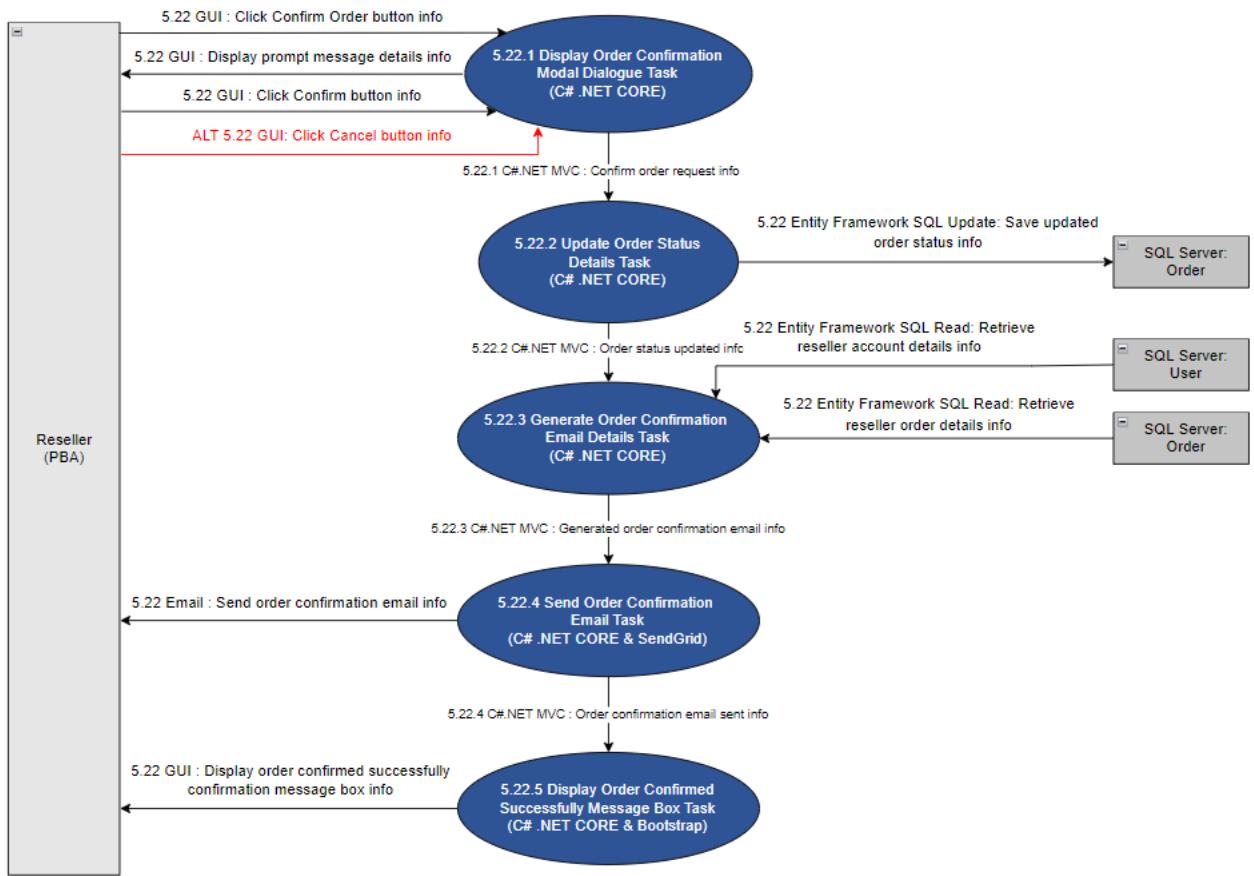


Figure 54- 5.22 Confirm Order

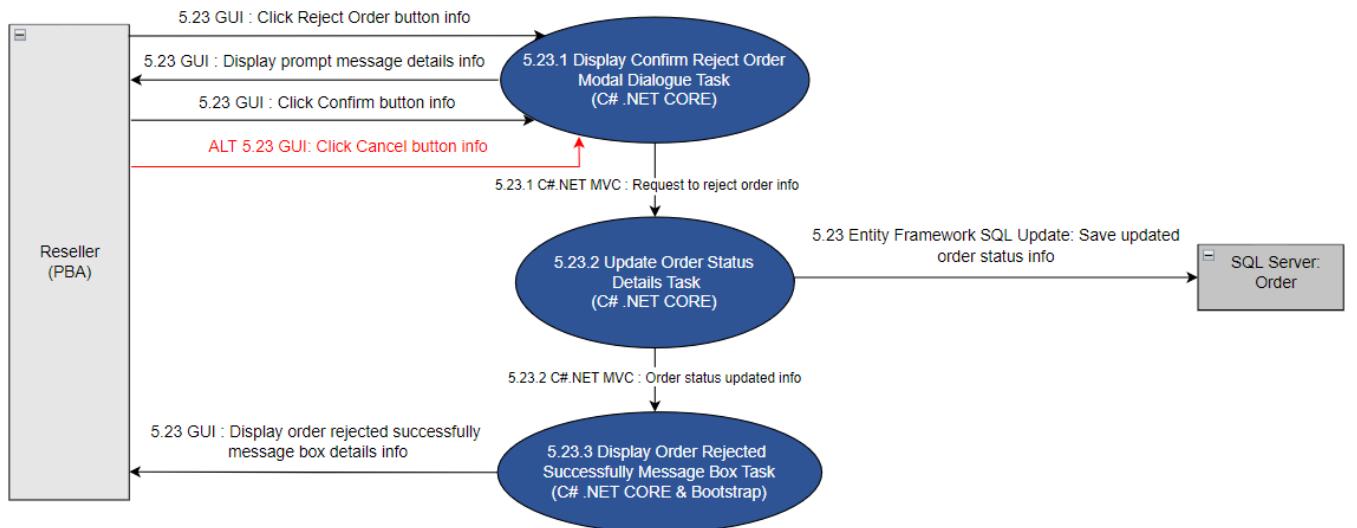


Figure 55- 5.23 Reject Order

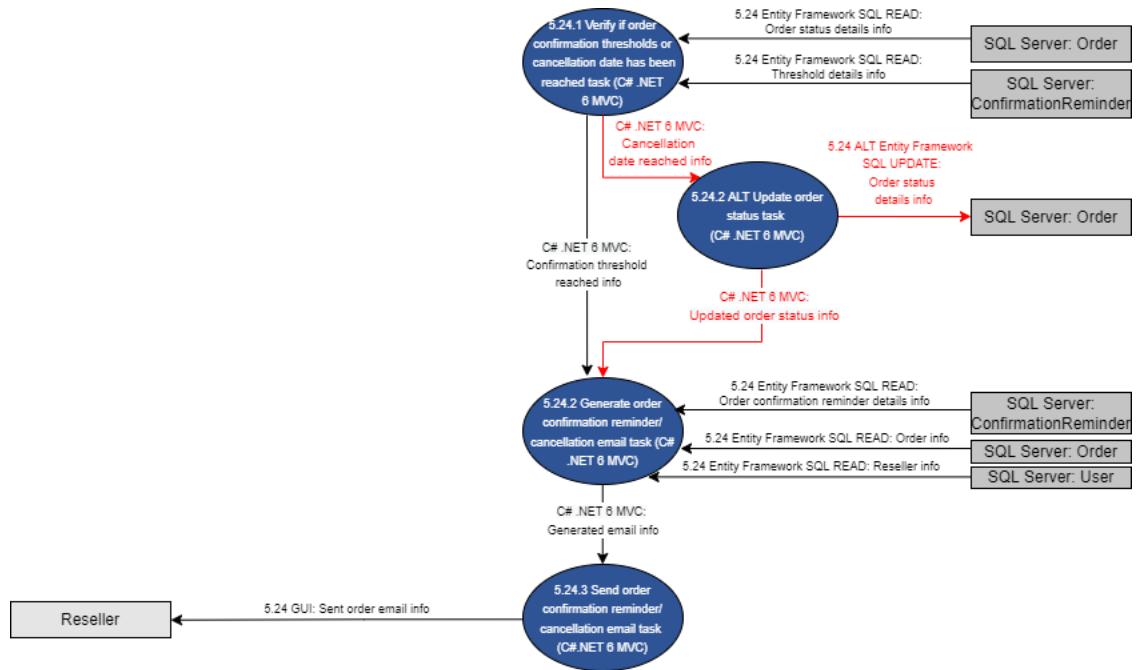


Figure 56- 5.24 Send Order Confirmation Reminder

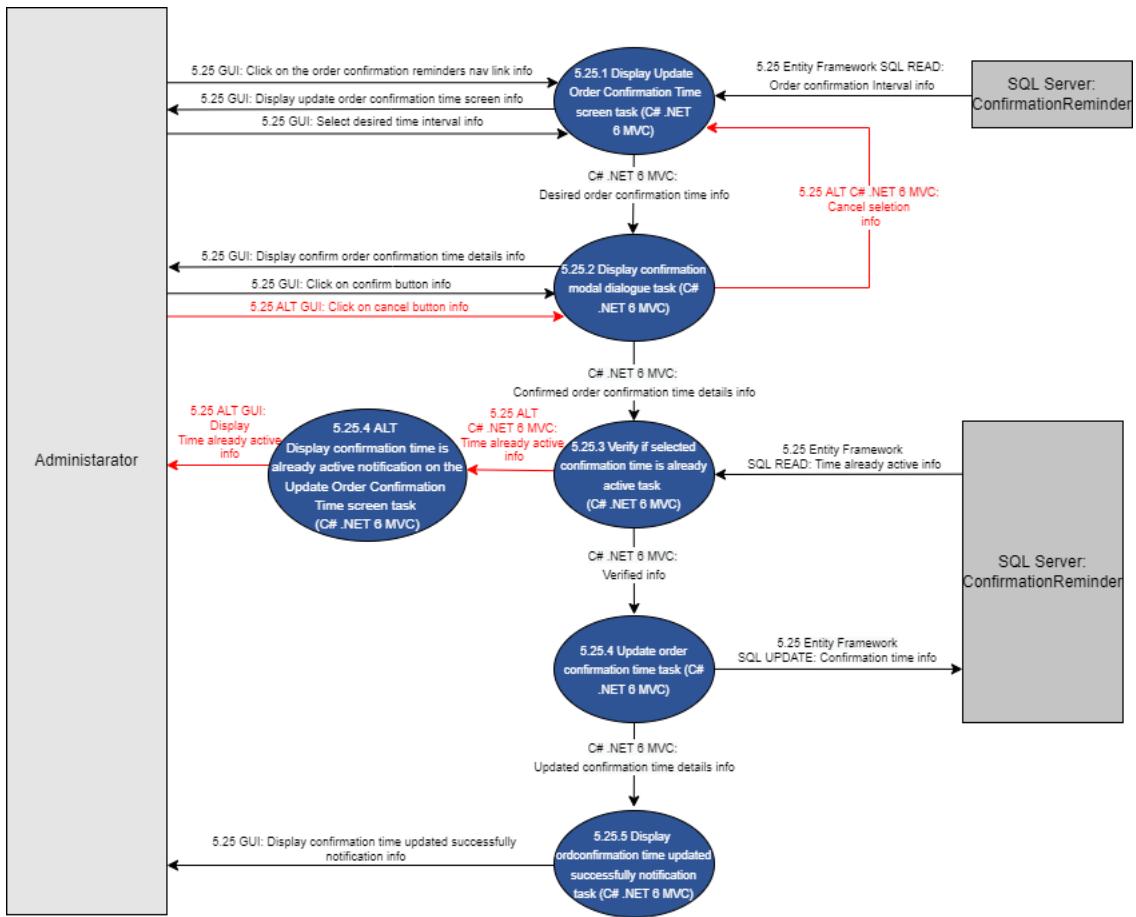
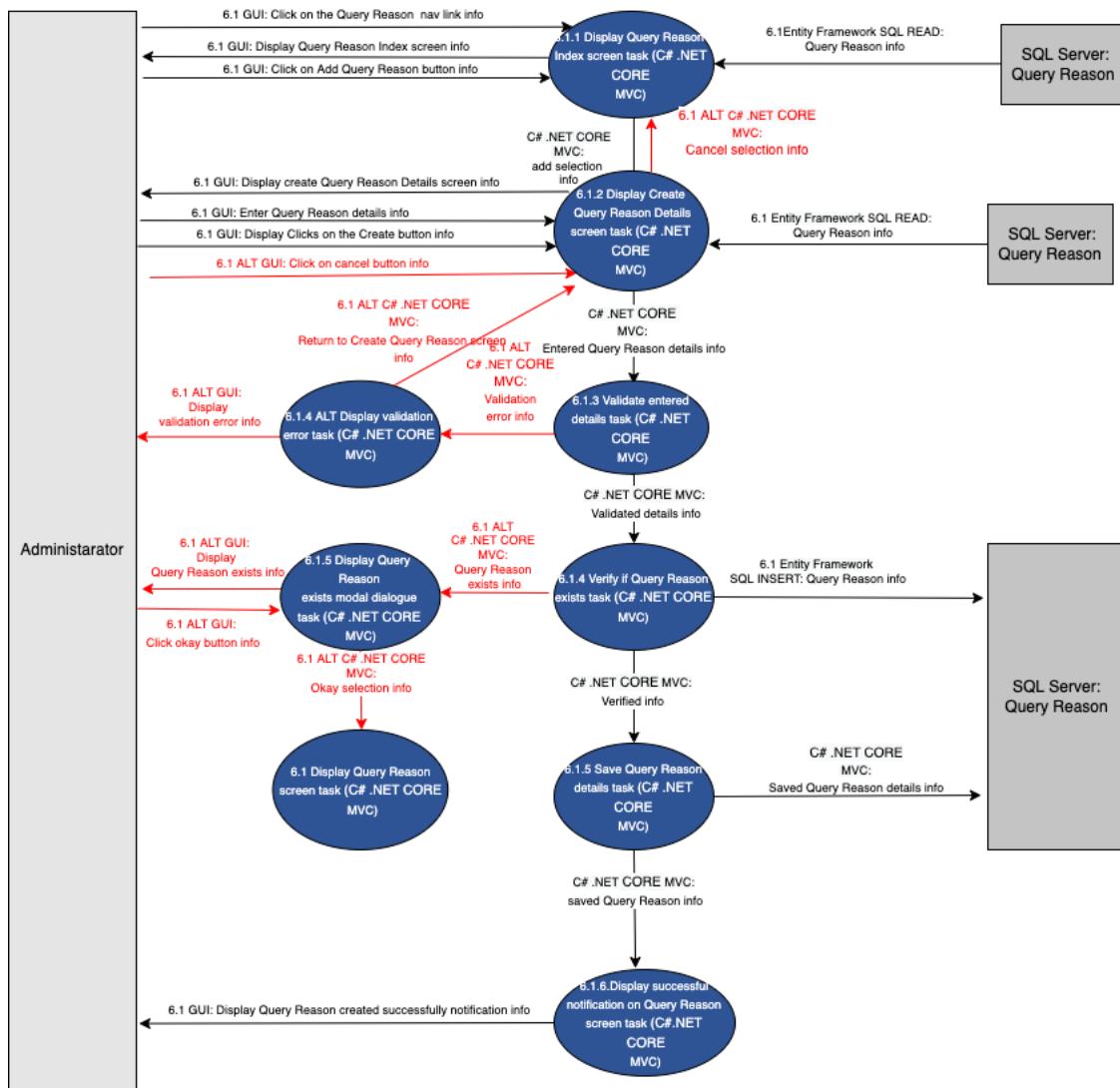


Figure 57- 5.25 Update Order Confirmation Time

## 2.6. Query Reason Subsystem



*Figure 58 - 6.1 Create Query Reason*

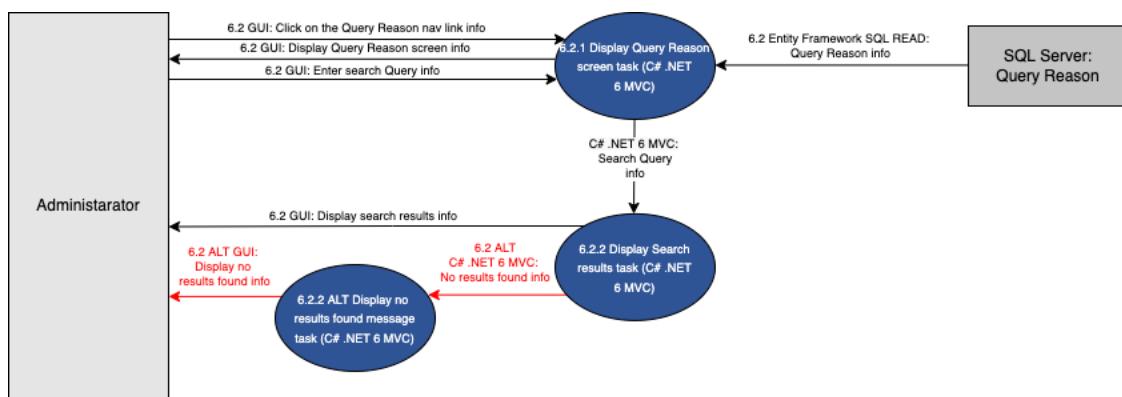


Figure 59 - 6.2 Search Query Reason

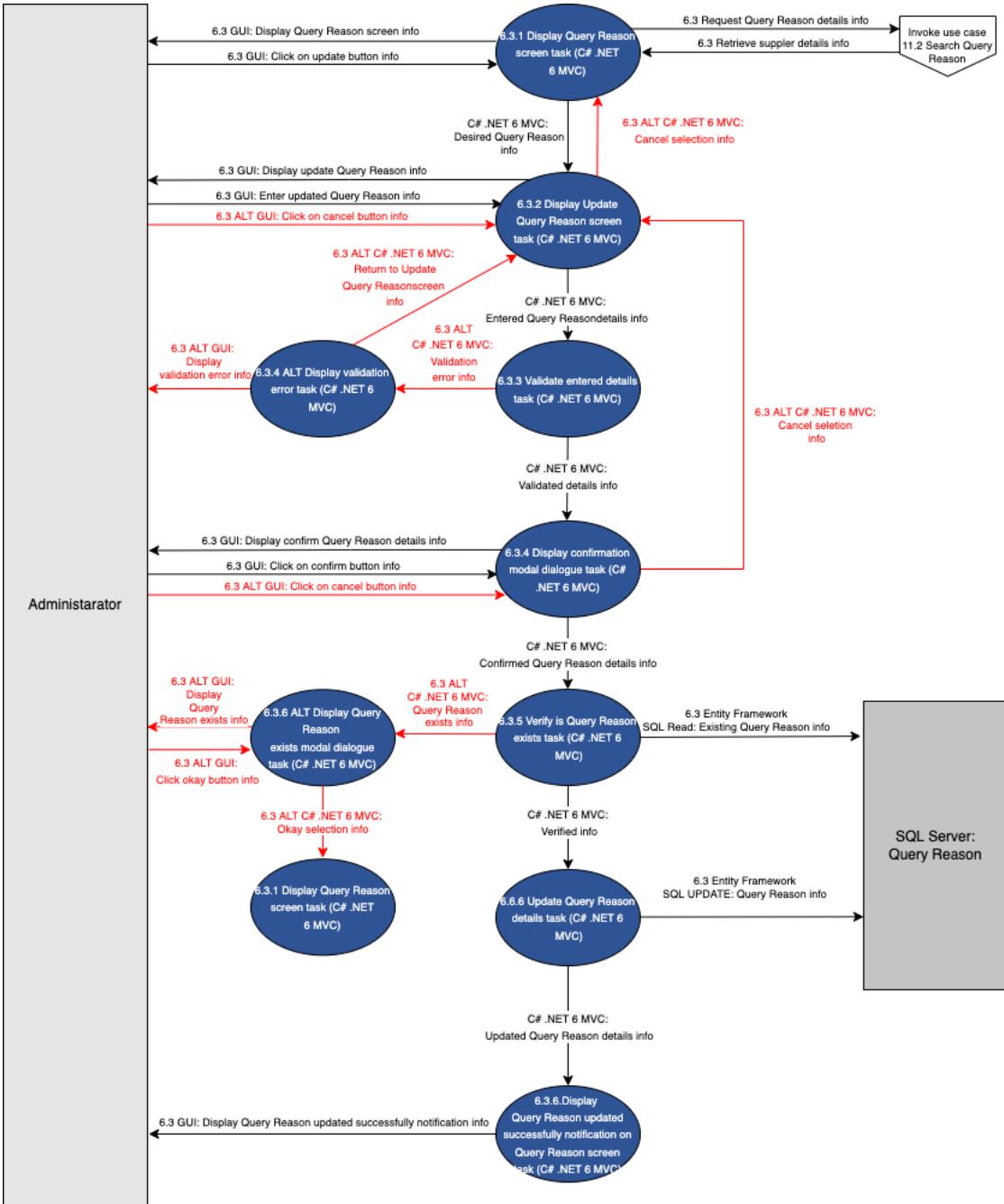


Figure 60 - 6.3 Update Query Reason

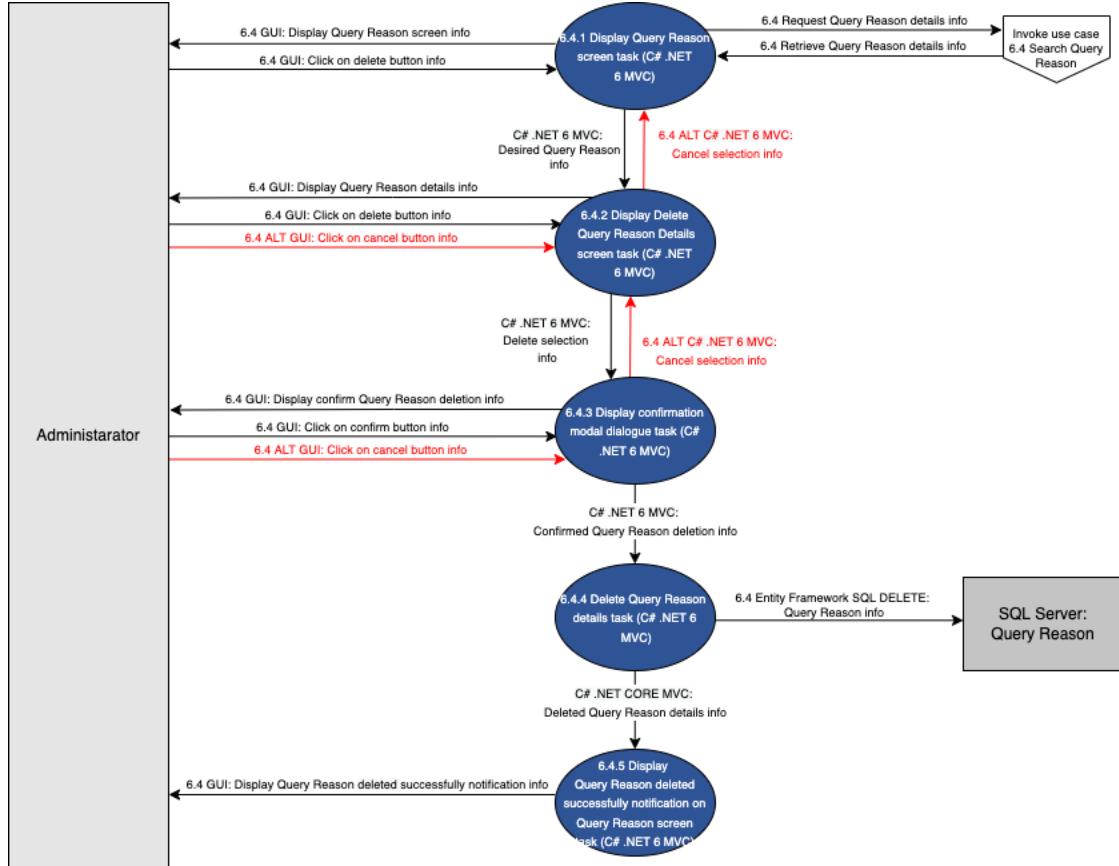


Figure 61- 6.4 Delete Query Reason

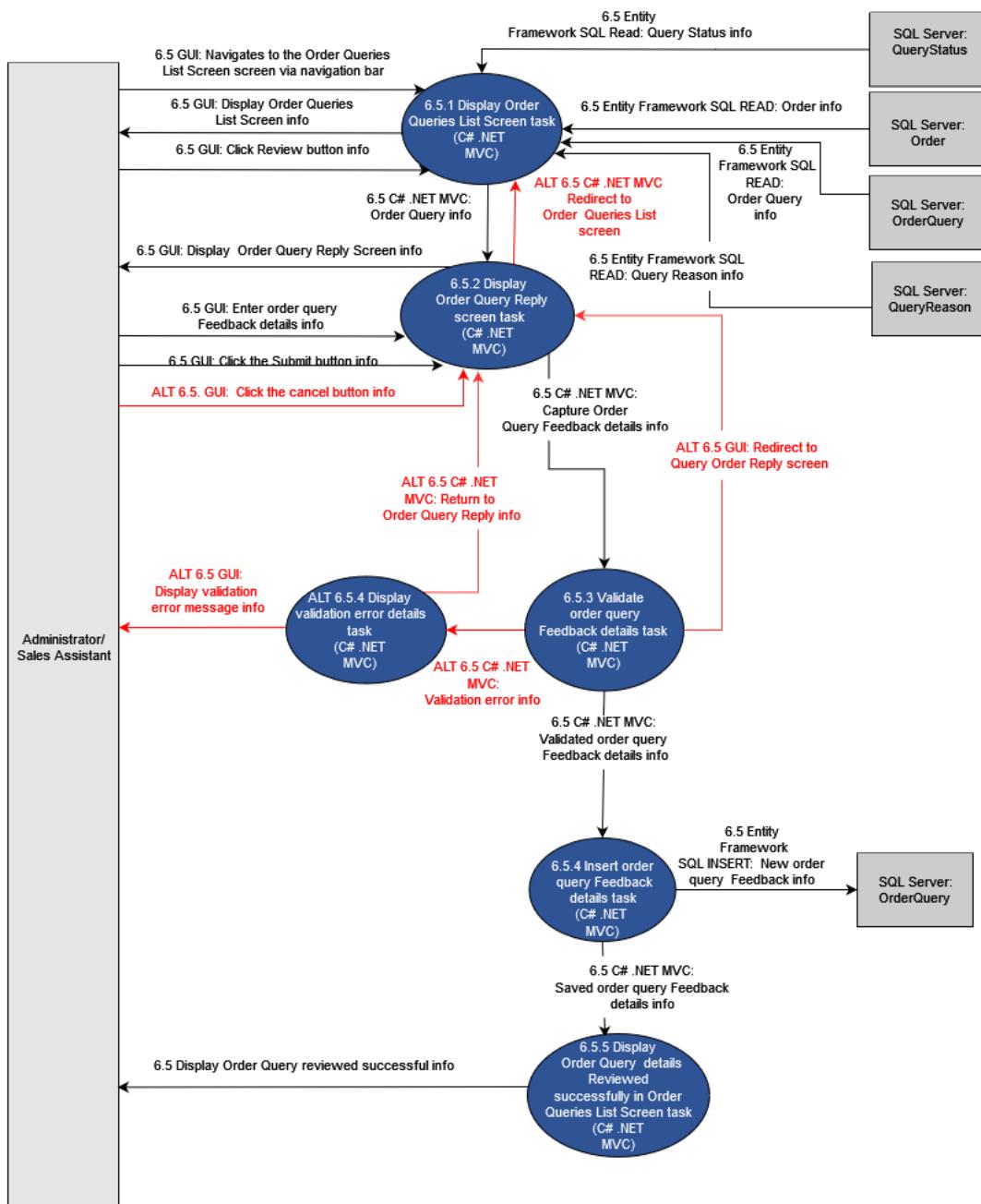


Figure 62- 6.5 Review Order Query

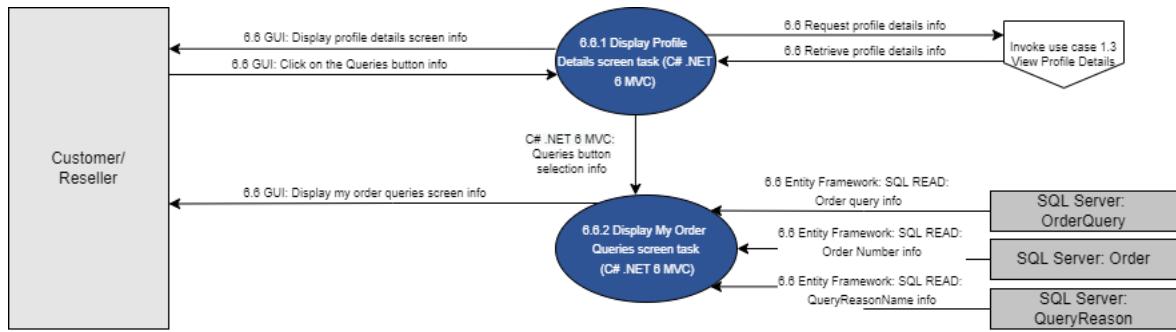


Figure 63- 6.6 View Order Query Feedback

## 2.7. Review Subsystem

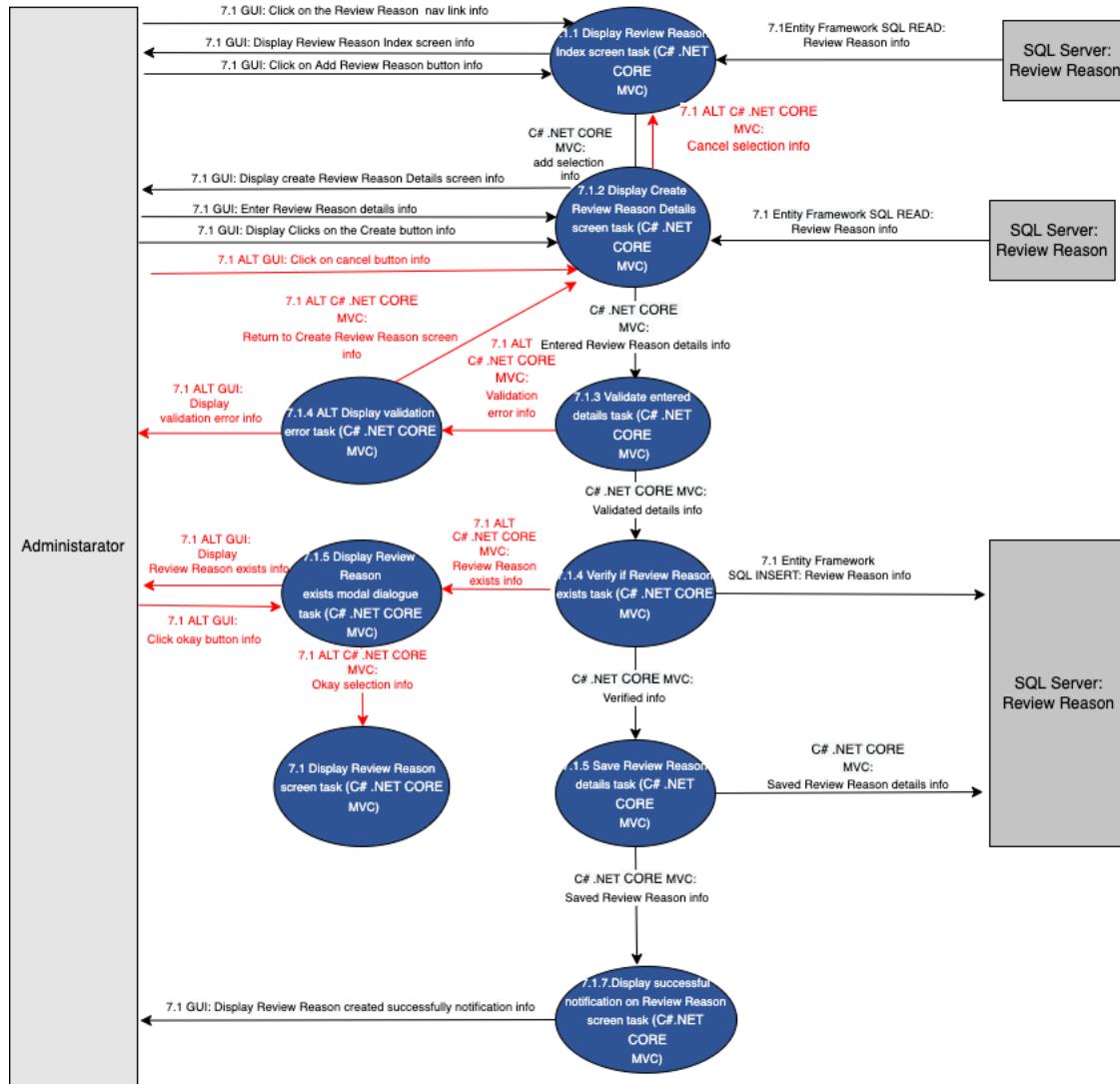


Figure 64 - 7.1 Create Review Reason

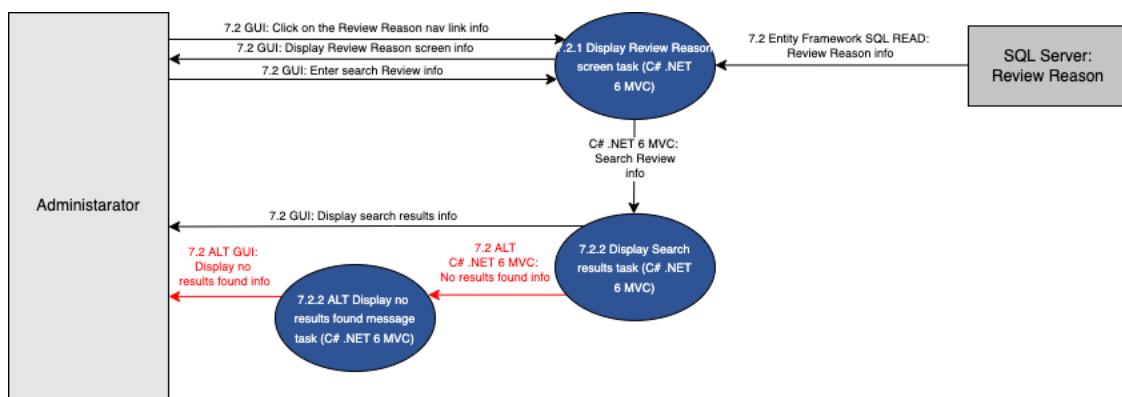


Figure 65 - 7.2 Search Review Reason

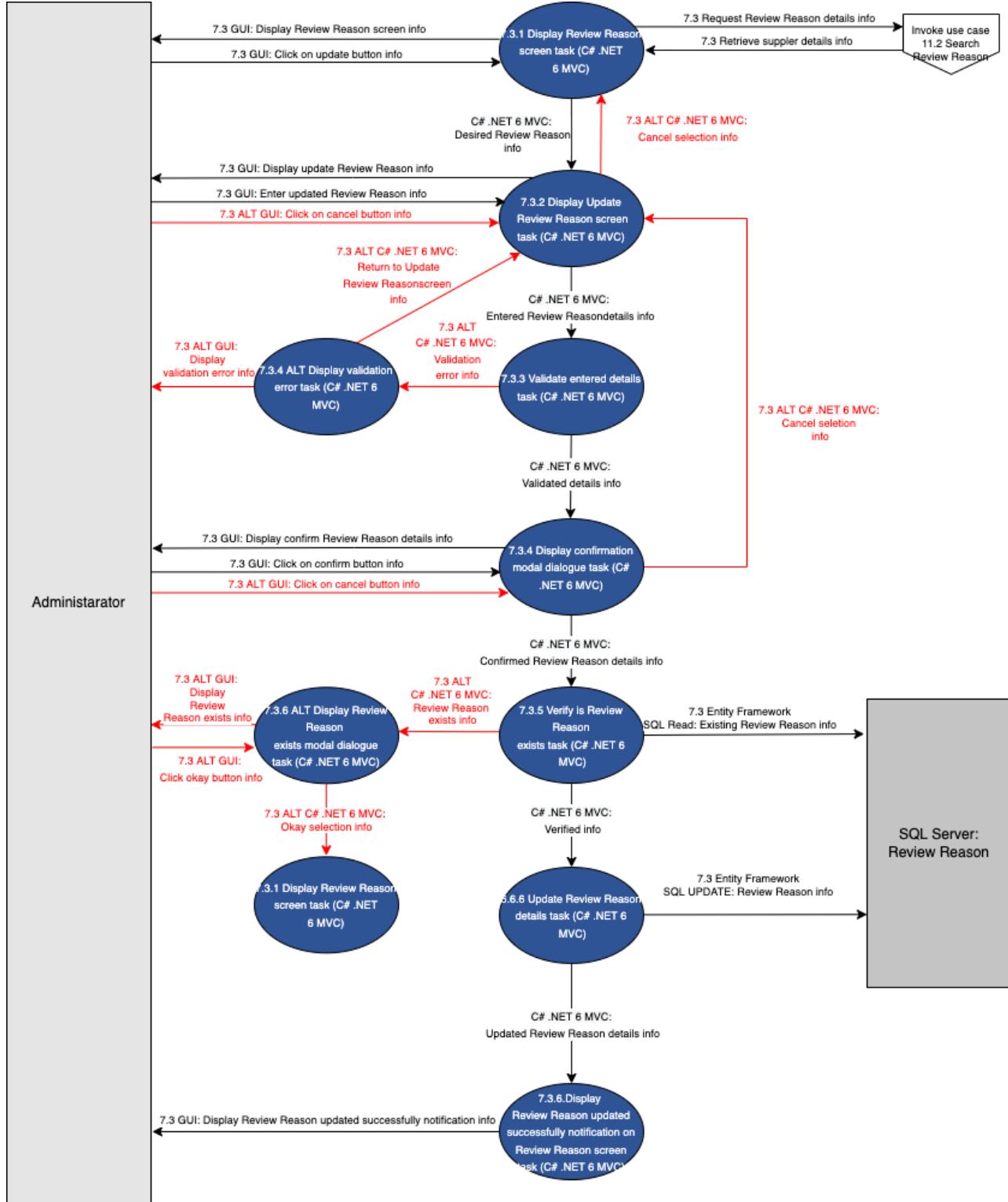


Figure 66 - 7.3 Update Review Reason

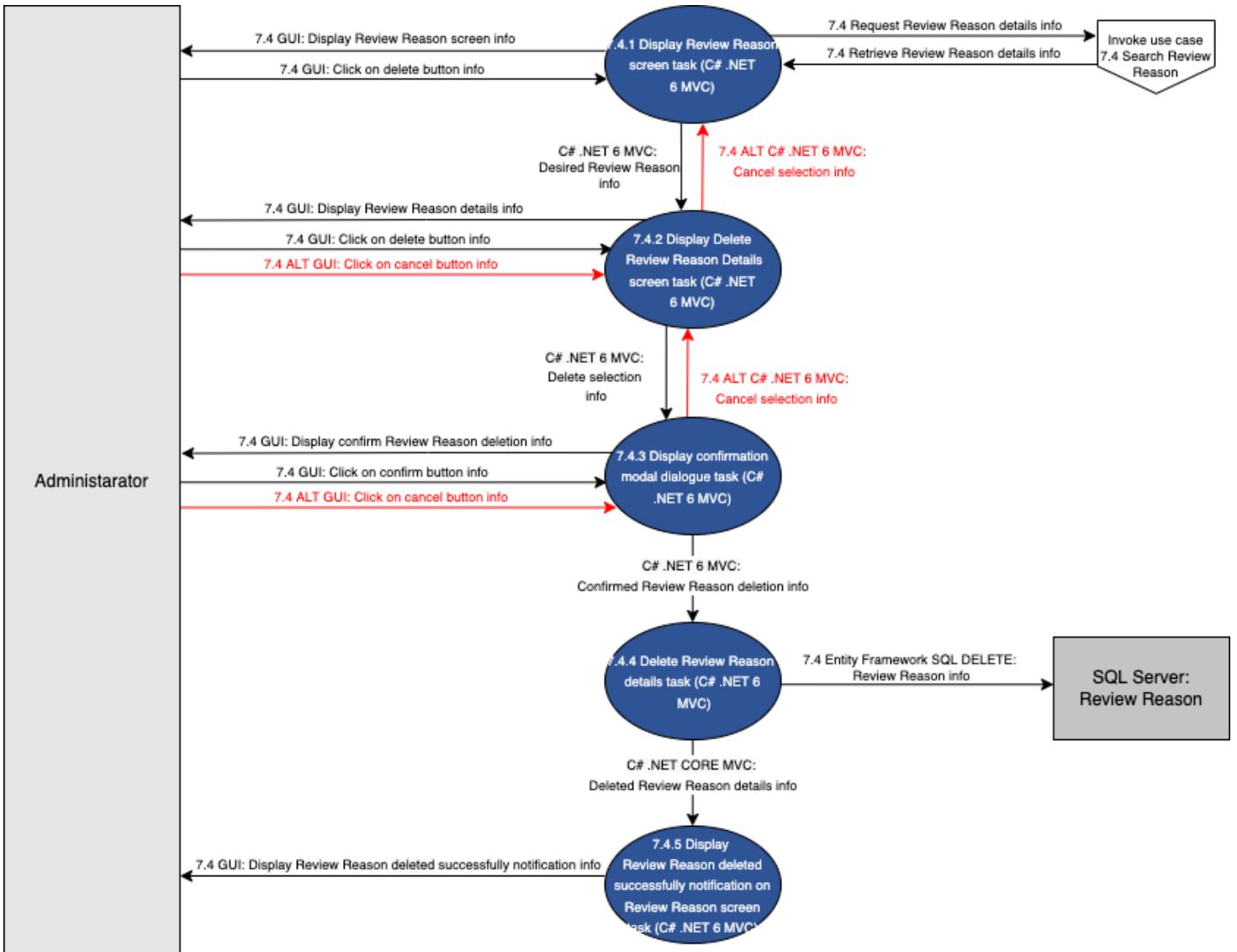


Figure 67- 7.4 Delete Review Reason

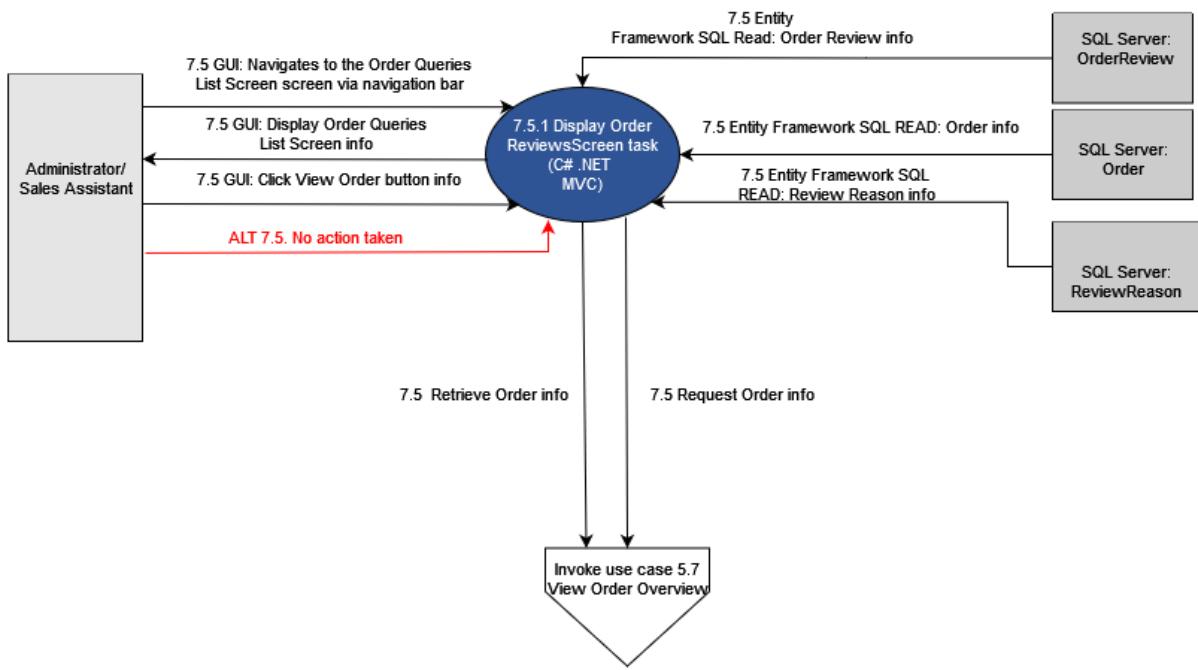


Figure 68- 7.5 View Order Review

## 2.8. Inventory Management Subsystem

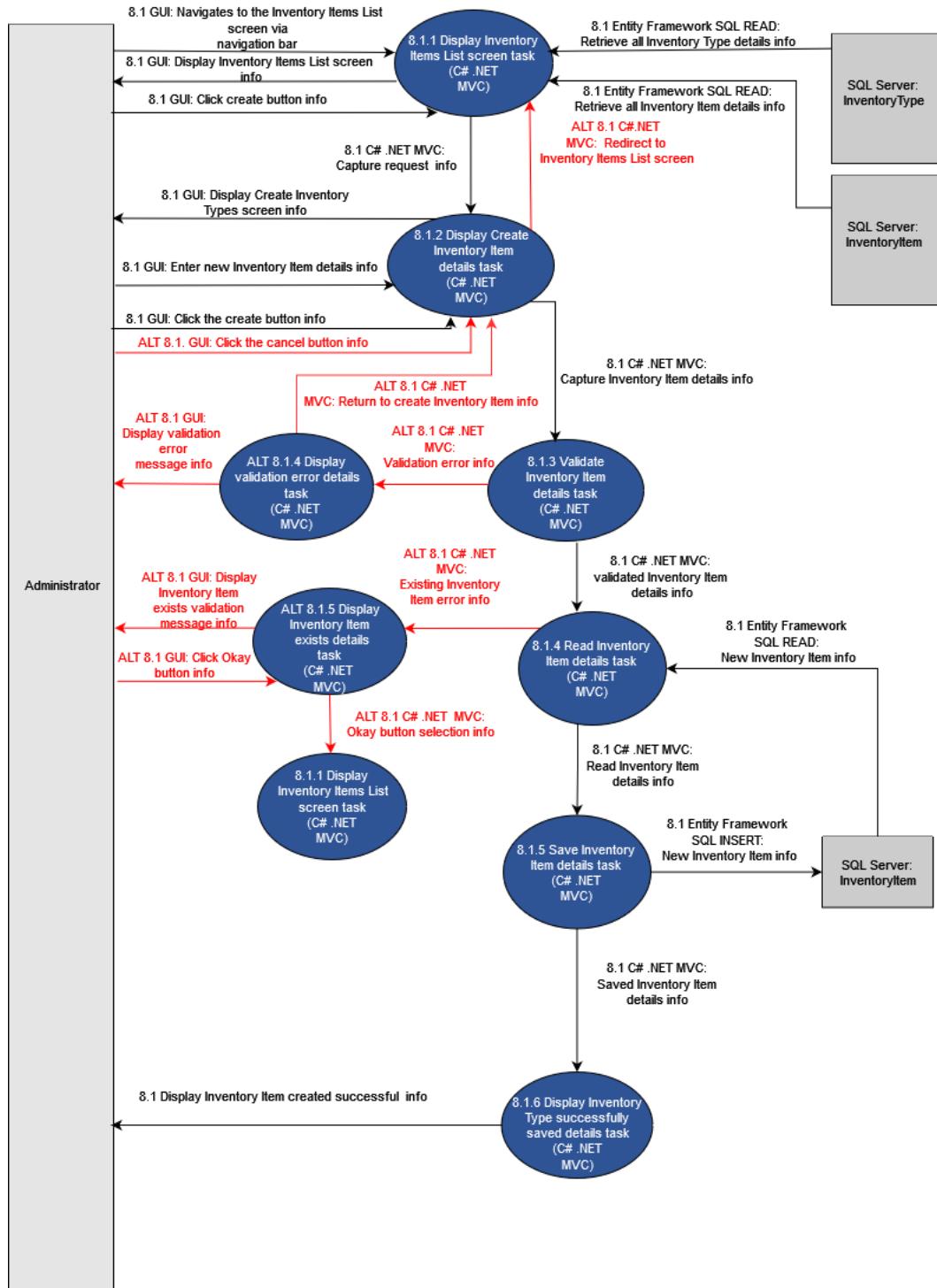


Figure 69 -8.1 Add Inventory Item

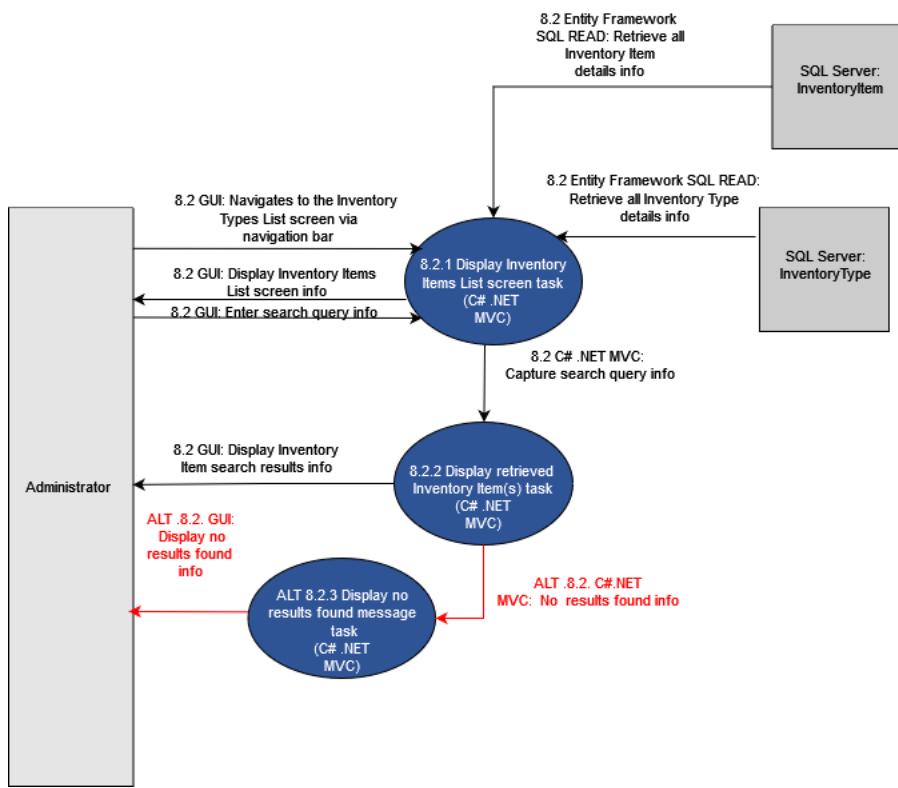


Figure 70 - 8.2 Search Inventory Item

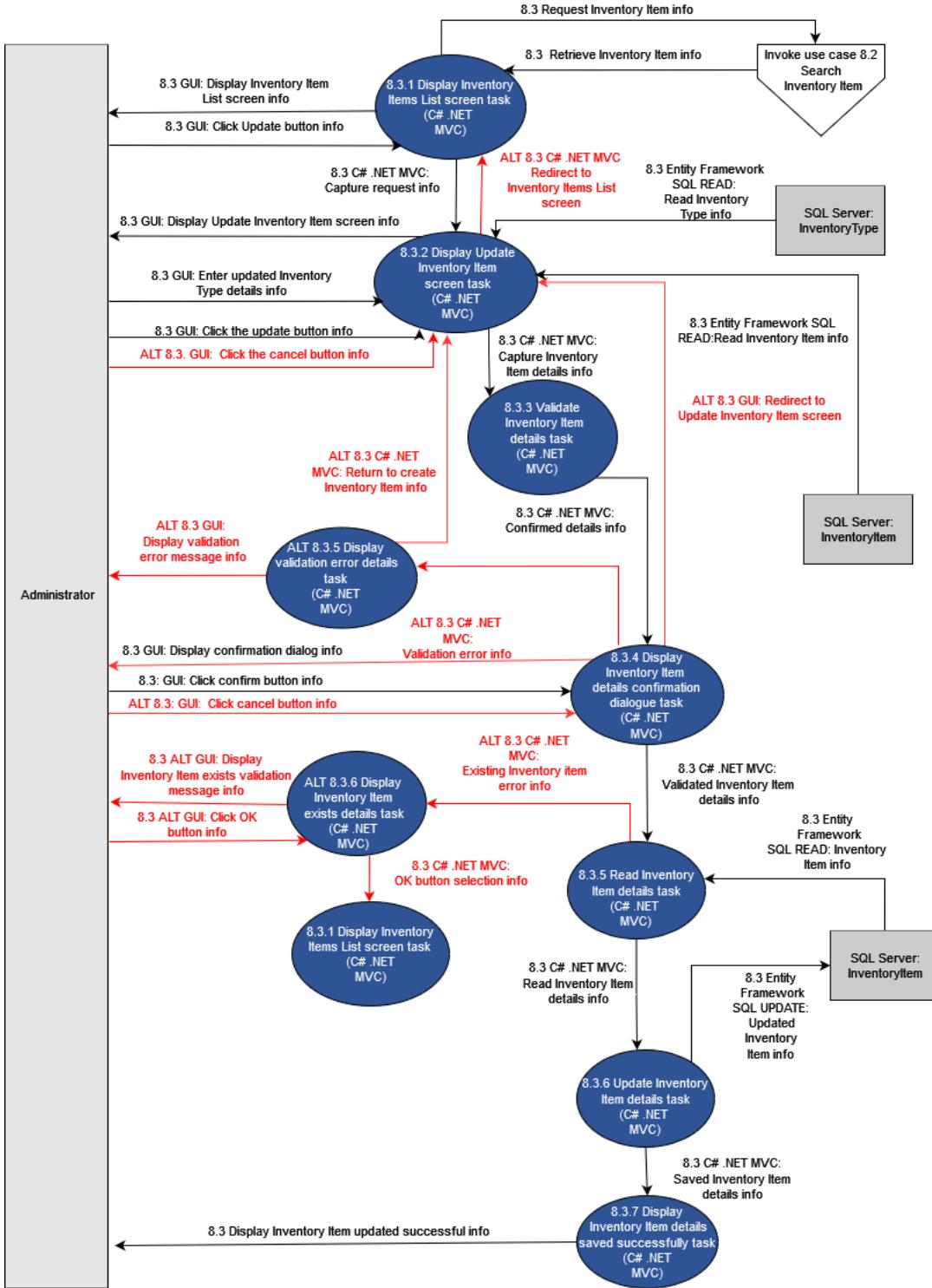


Figure 71 - 8.3 Update Inventory Item

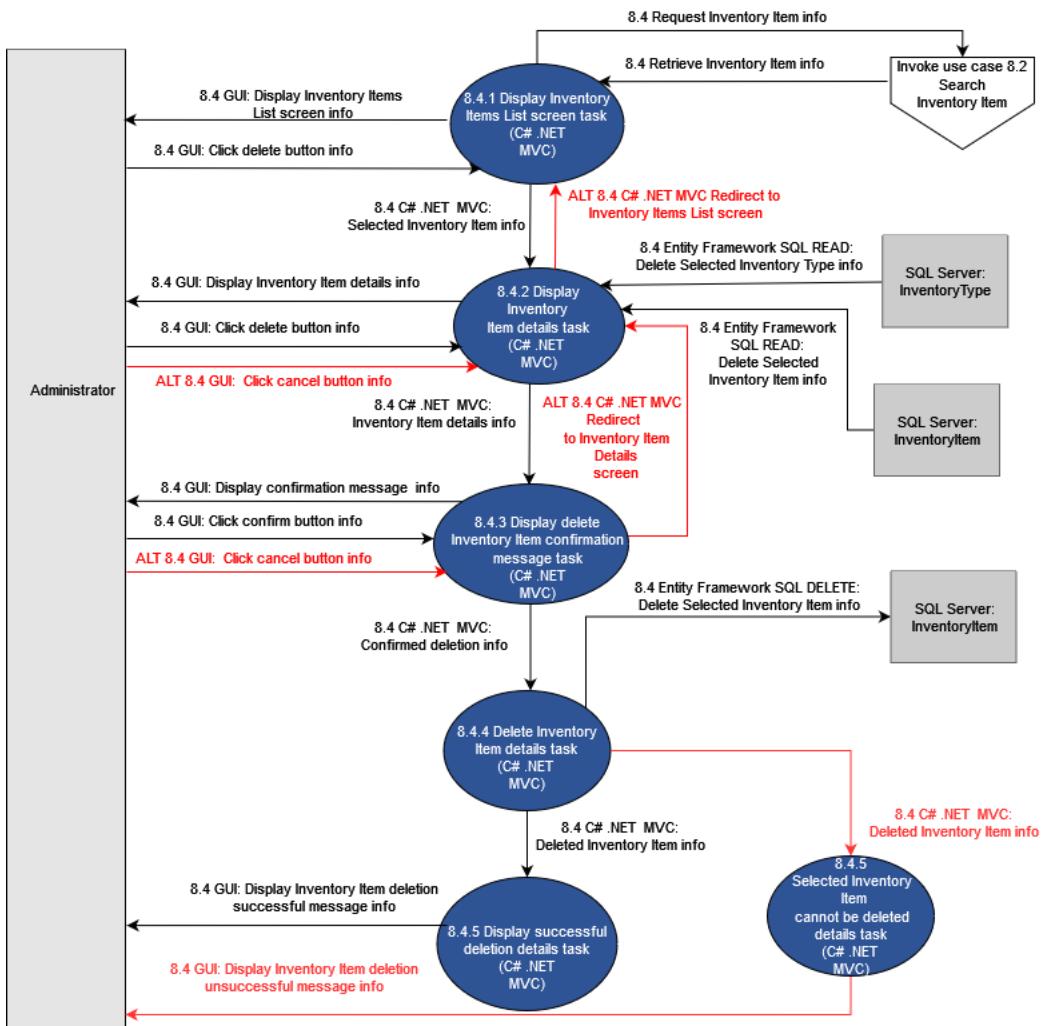


Figure 72 - 8.4 Delete Inventory Item

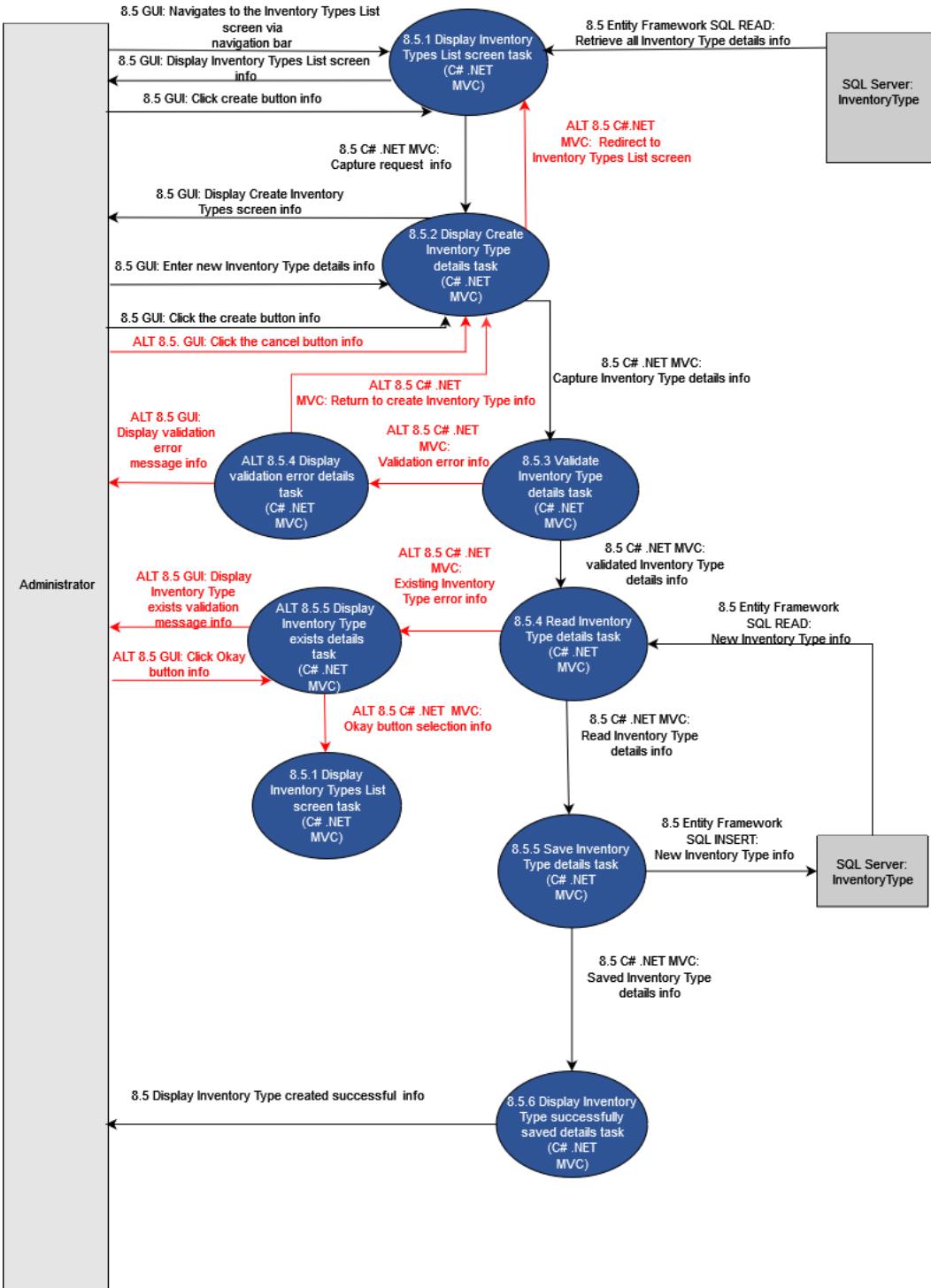


Figure 73 - 8.5 Add Inventory Type

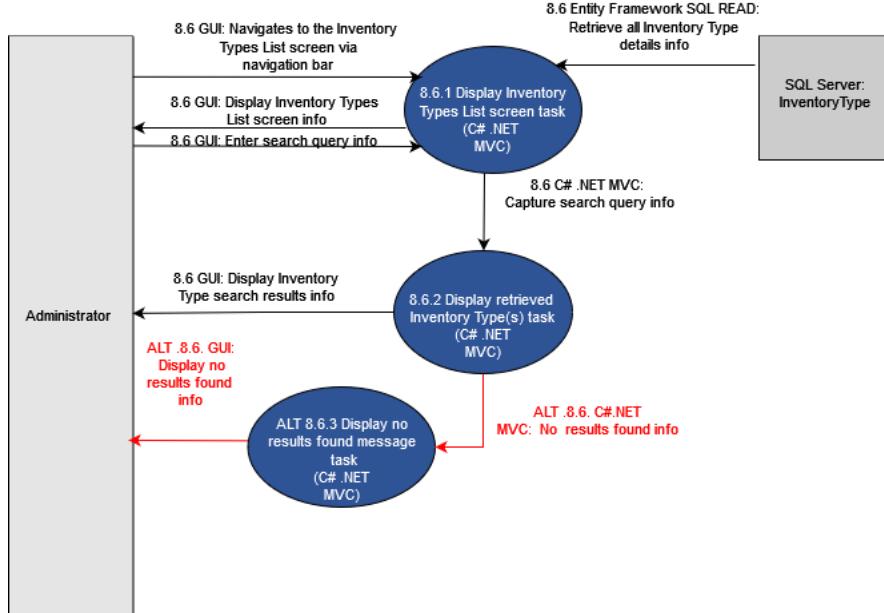


Figure 74 - 8.6 Search Inventory Type

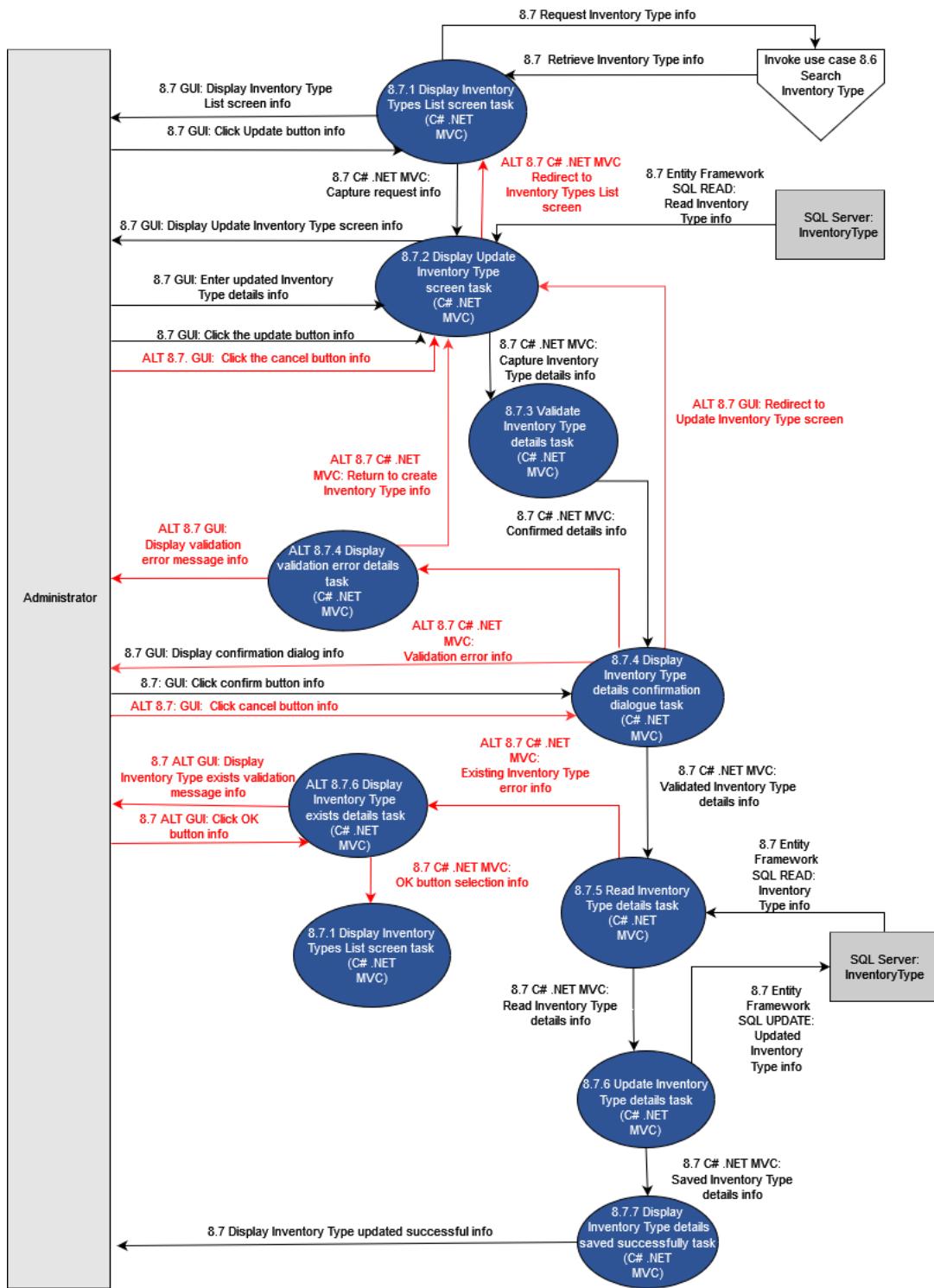


Figure 75 - 8.7 Update Inventory Type

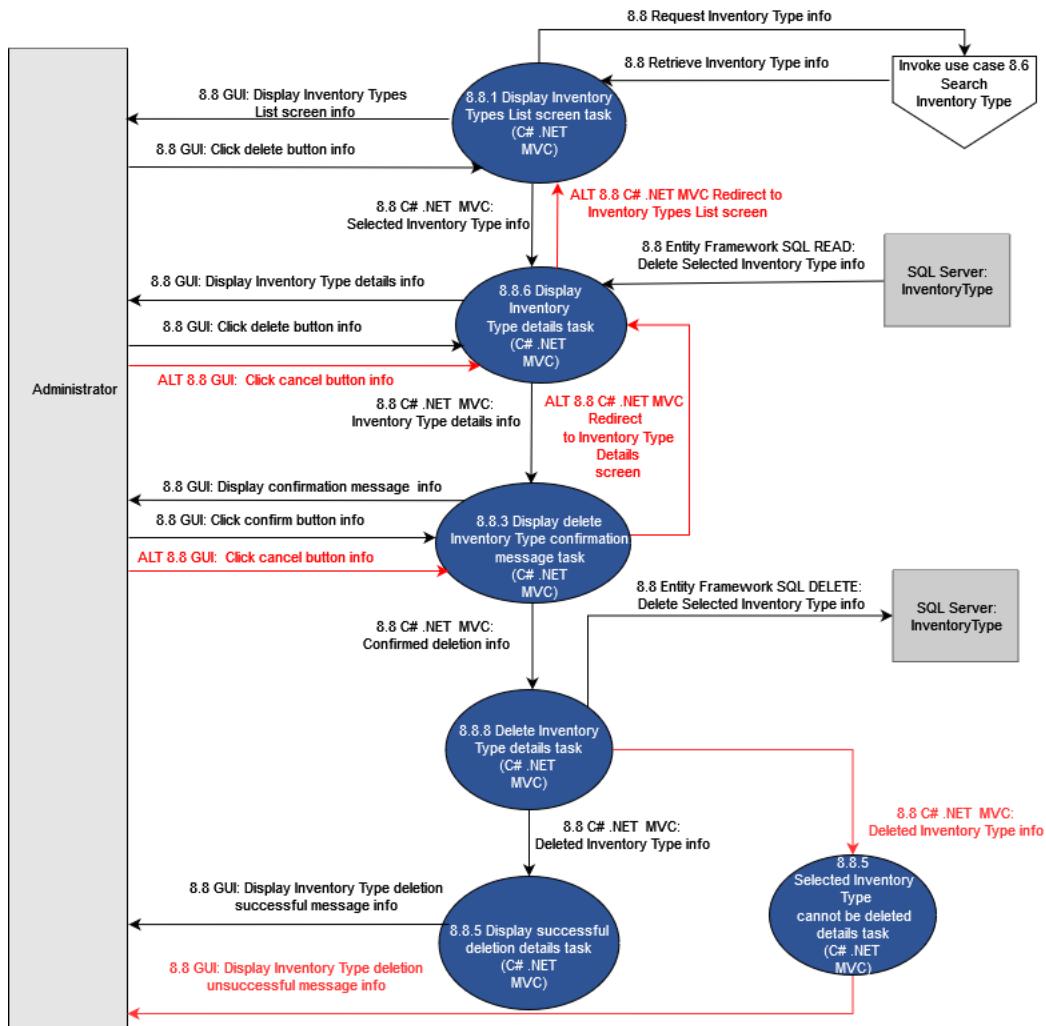


Figure 76 - 8.8 Delete Inventory Type

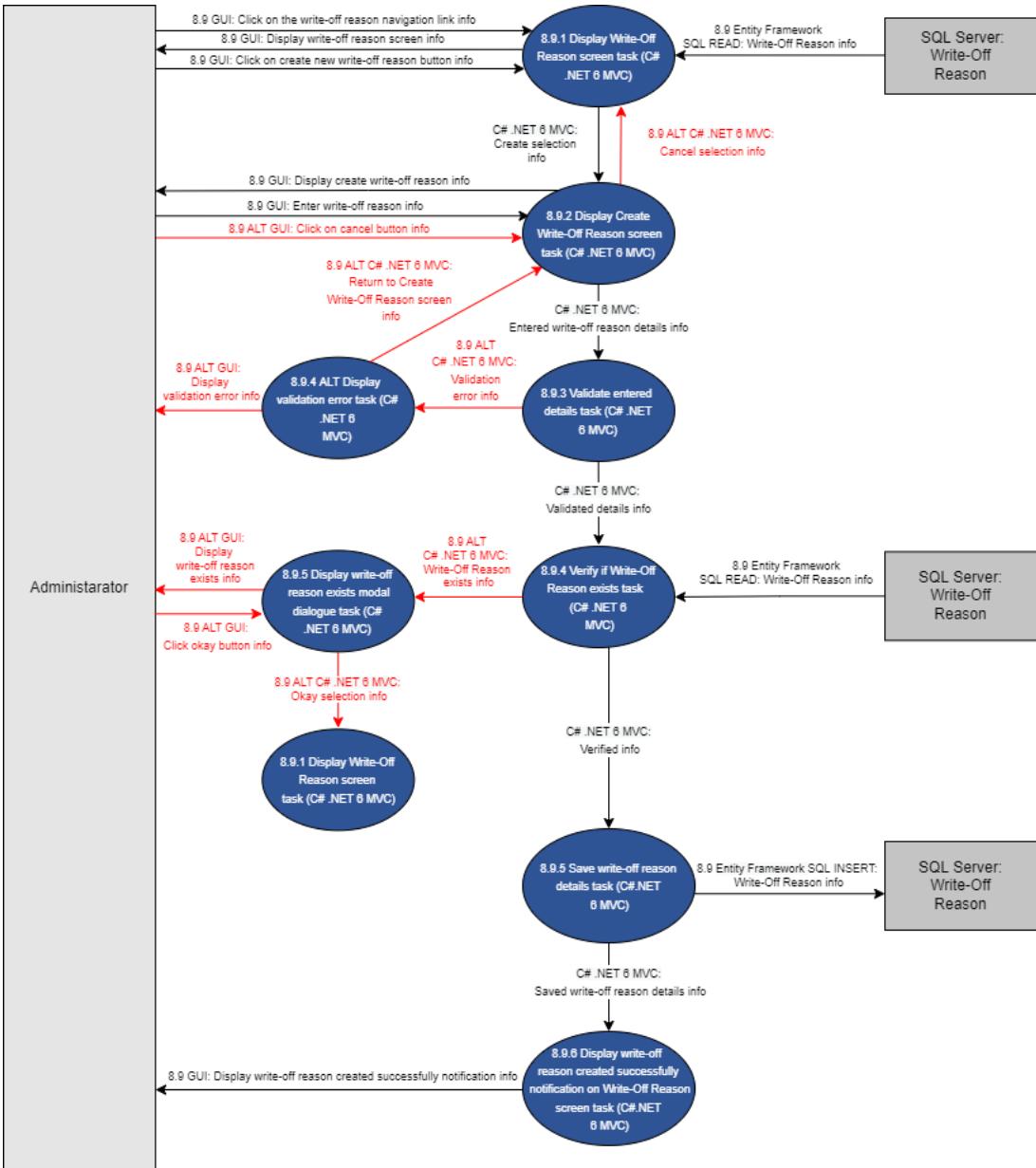


Figure 77 - 8.9 Add Write-off Reason

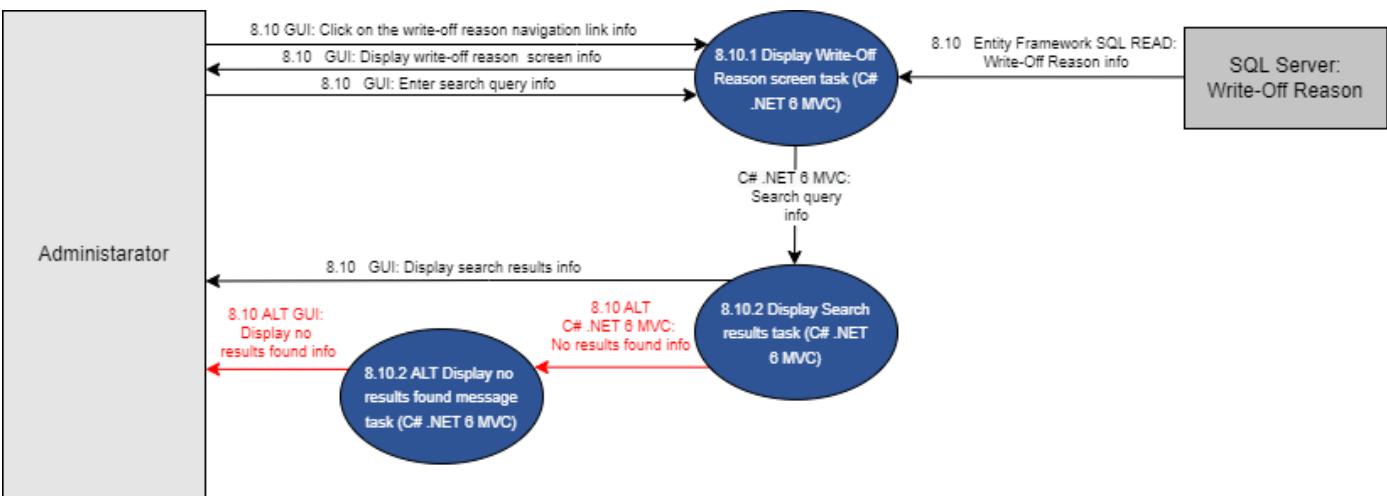


Figure 78 - 8.10 Search Write-off Reason

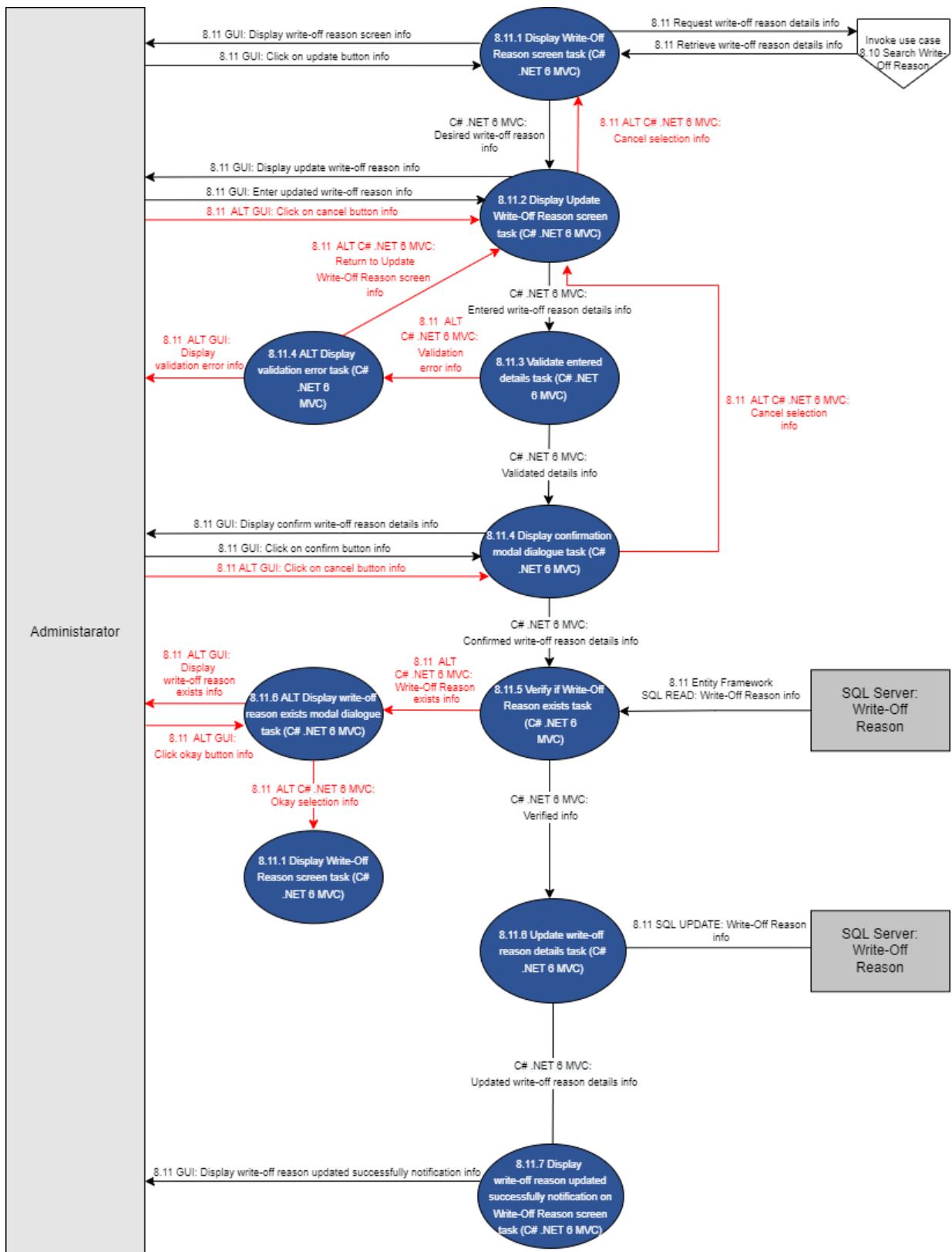


Figure 79 - 8.11 Update Write-off Reason

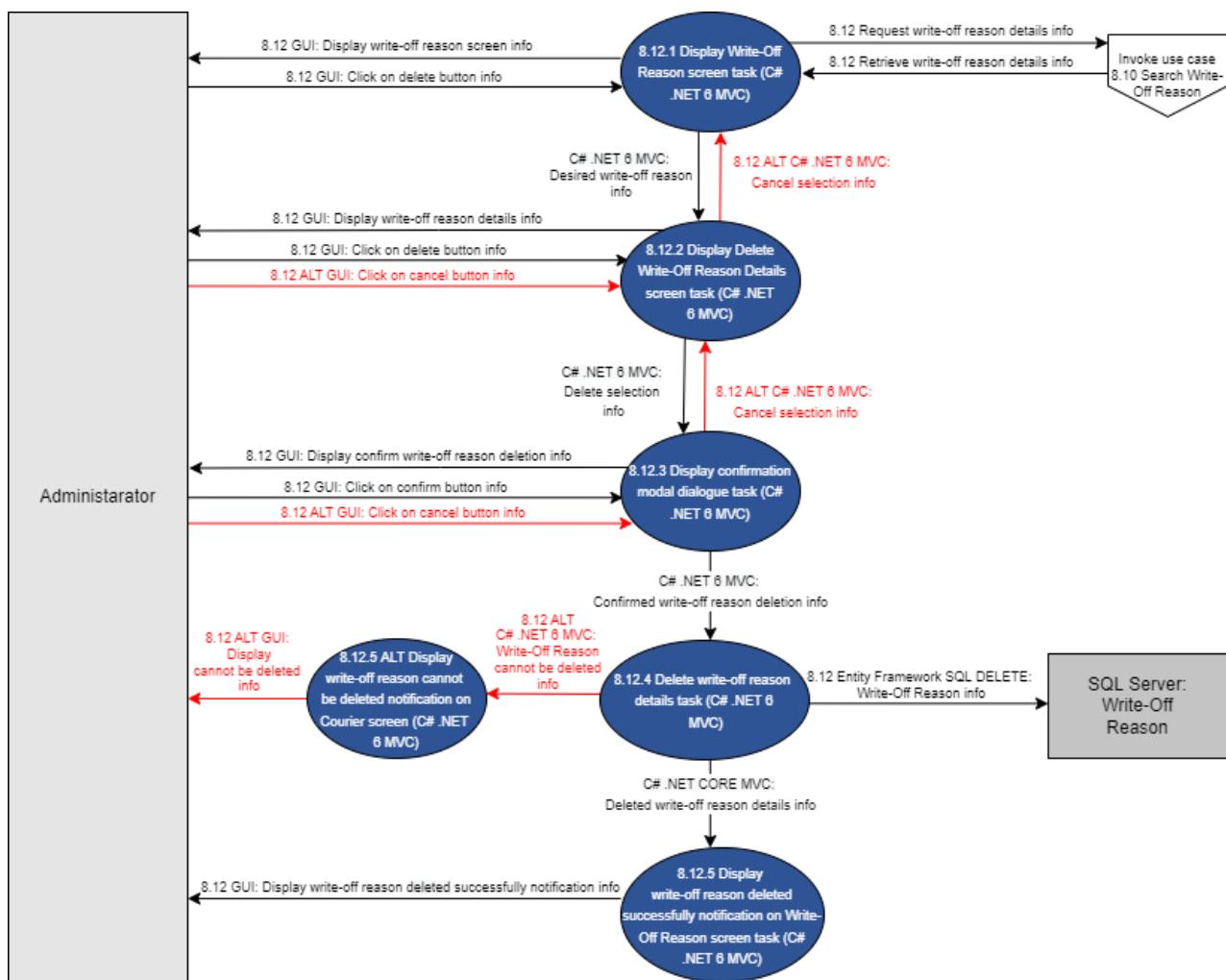


Figure 80 - 8.12 Delete Write-off Reason

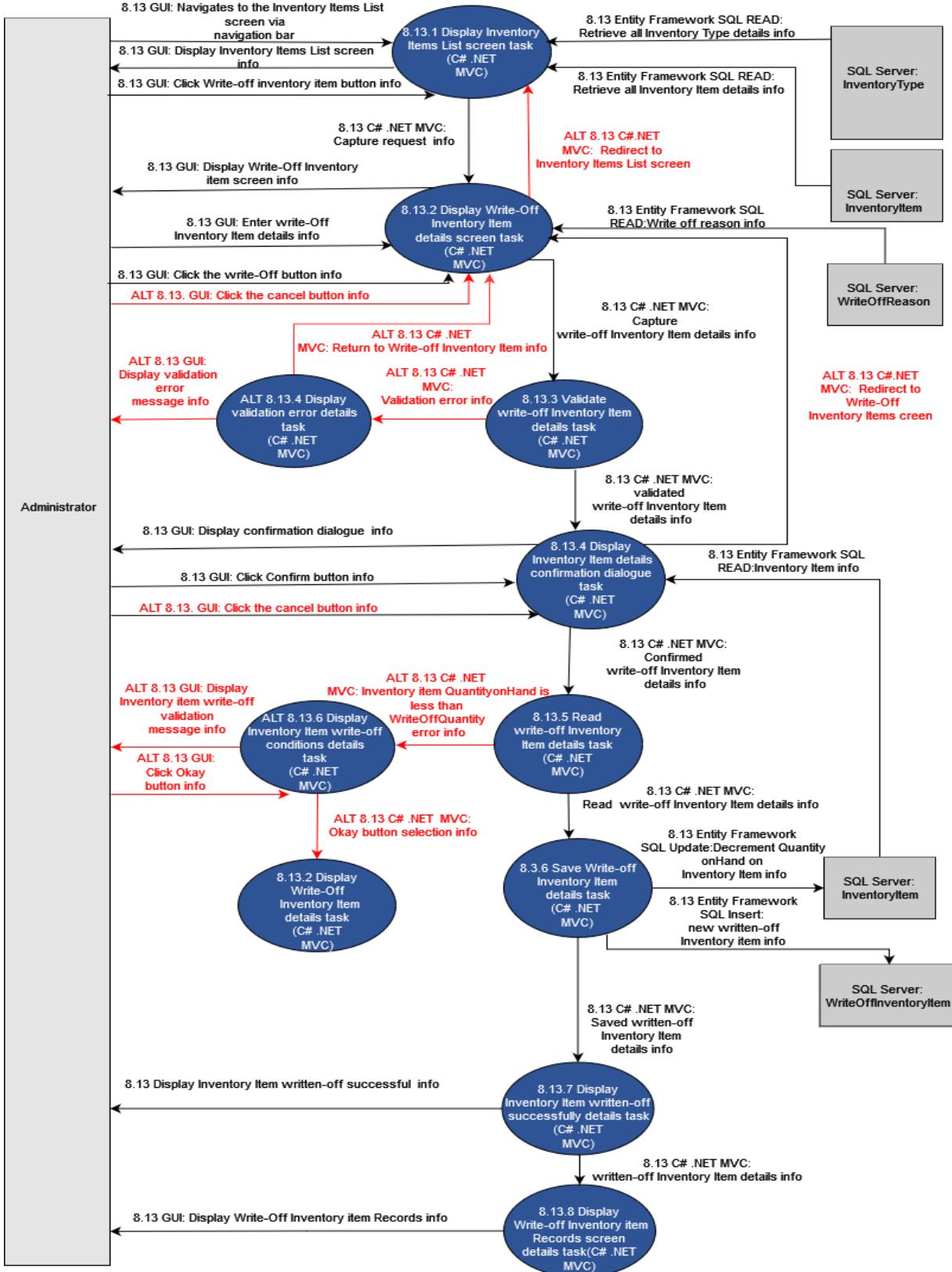


Figure 81-8.13 Write-off Inventory

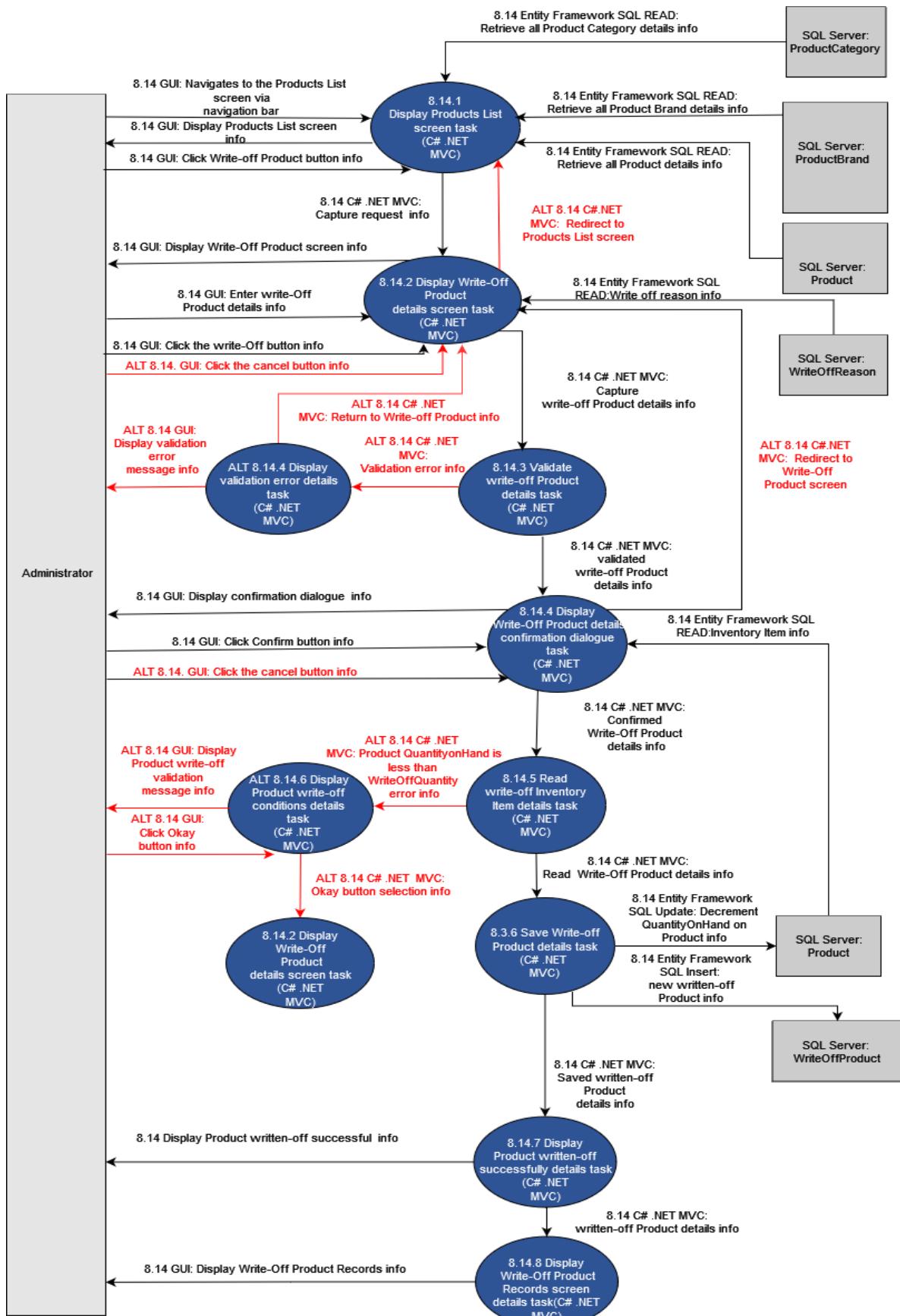


Figure 82 - 8.14 Write-off product

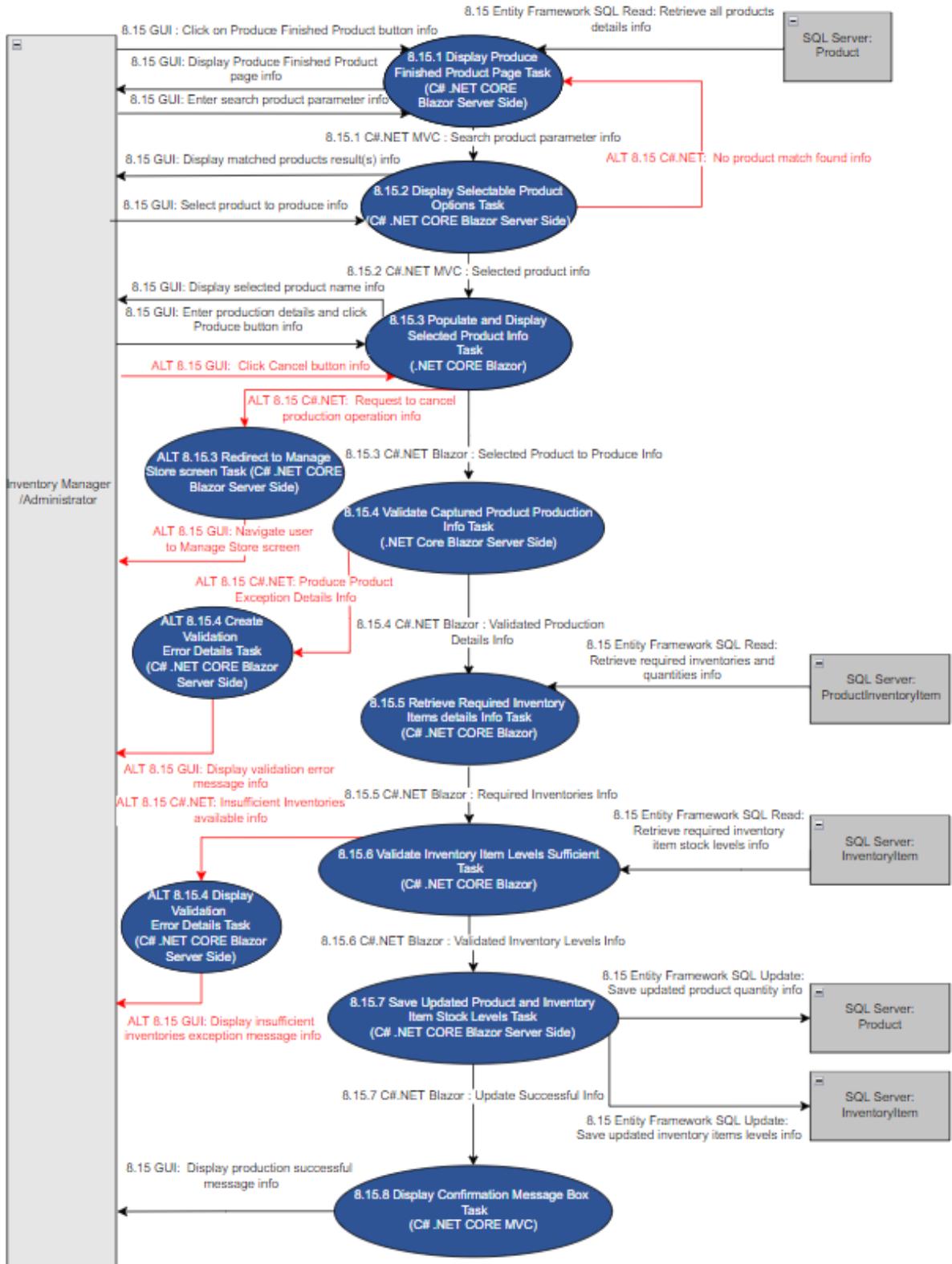


Figure 83- 8.15 Convert Inventory to Product (s)

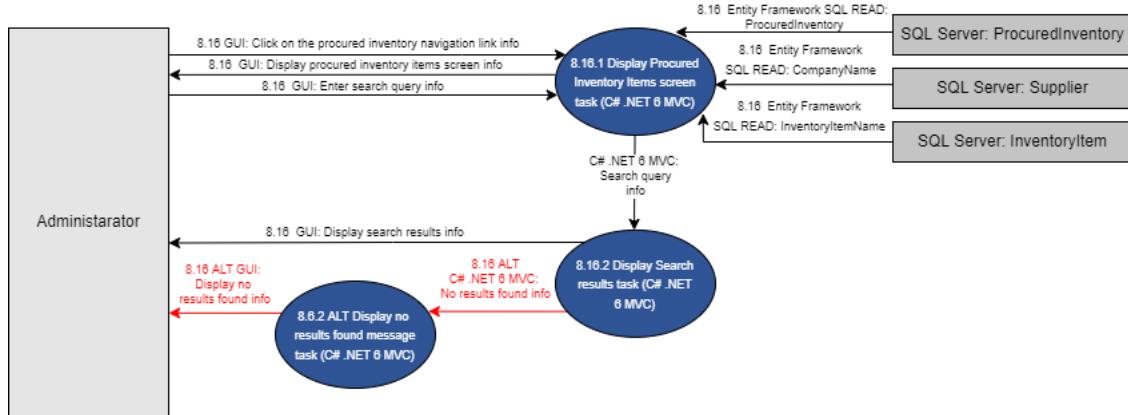


Figure 84 - 8.16 Search Procured Inventory

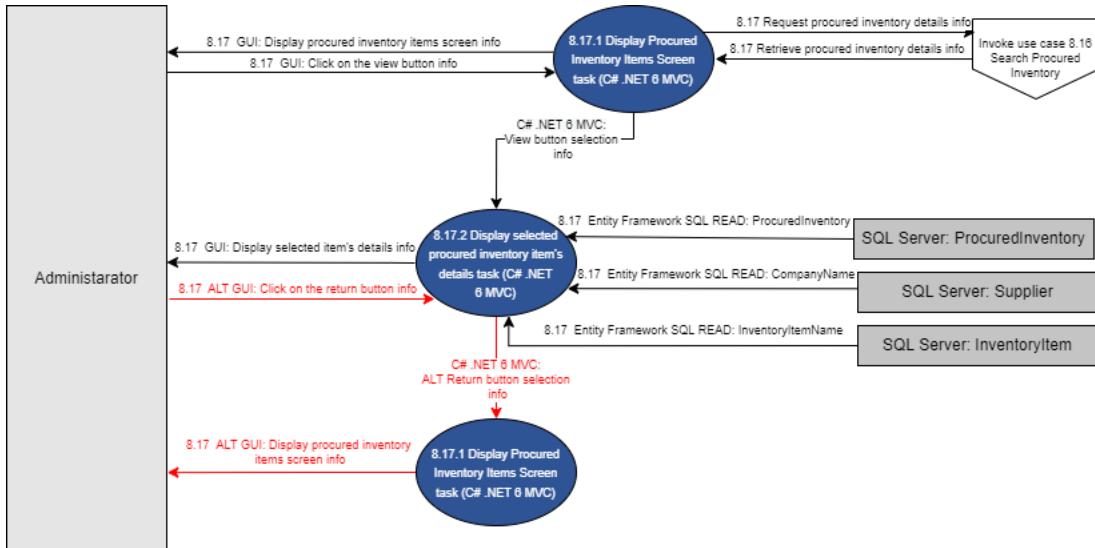


Figure 85- 8.17 View Procured Inventory Item Details

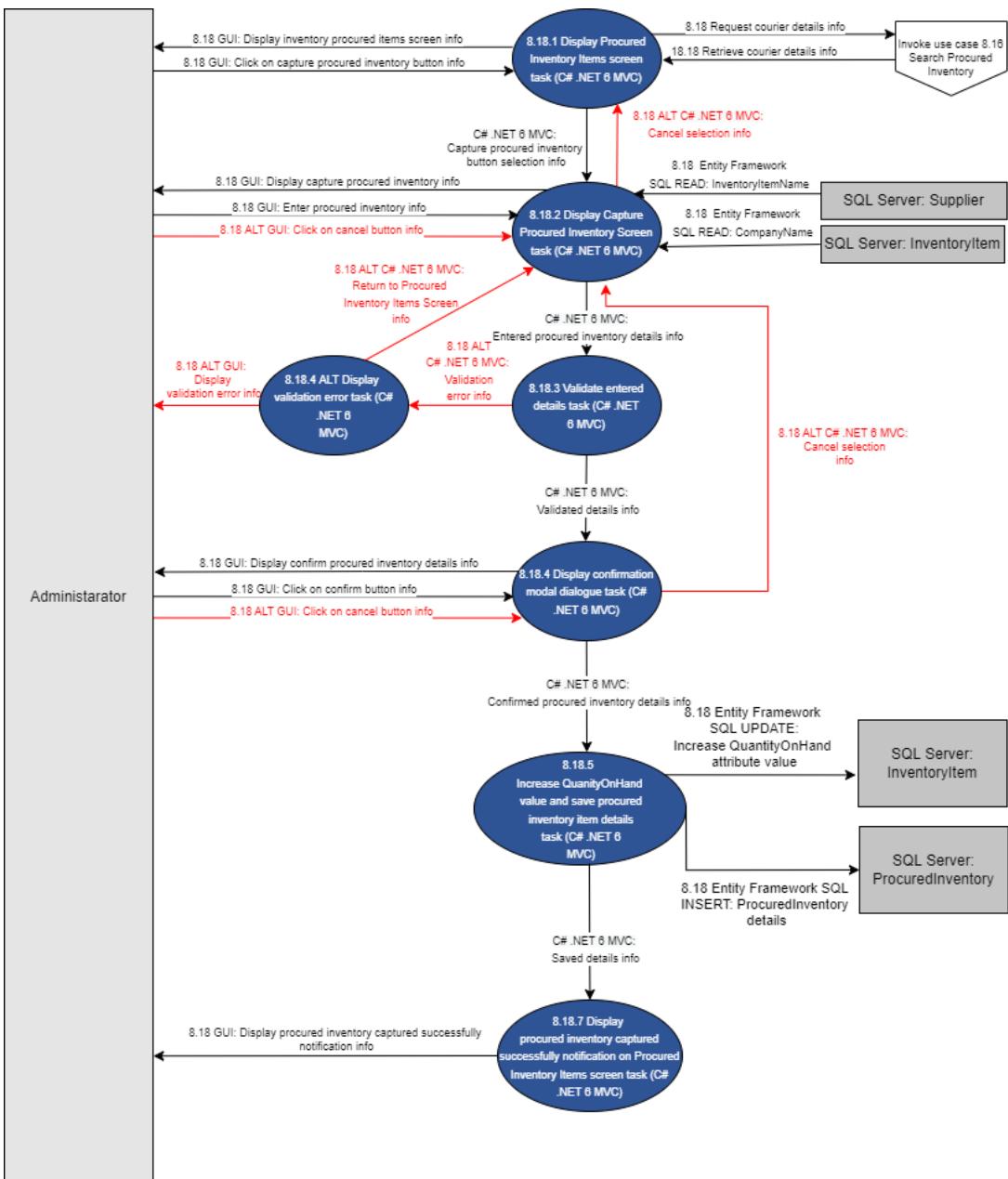


Figure 86 - 8.18 Capture Procured Inventory

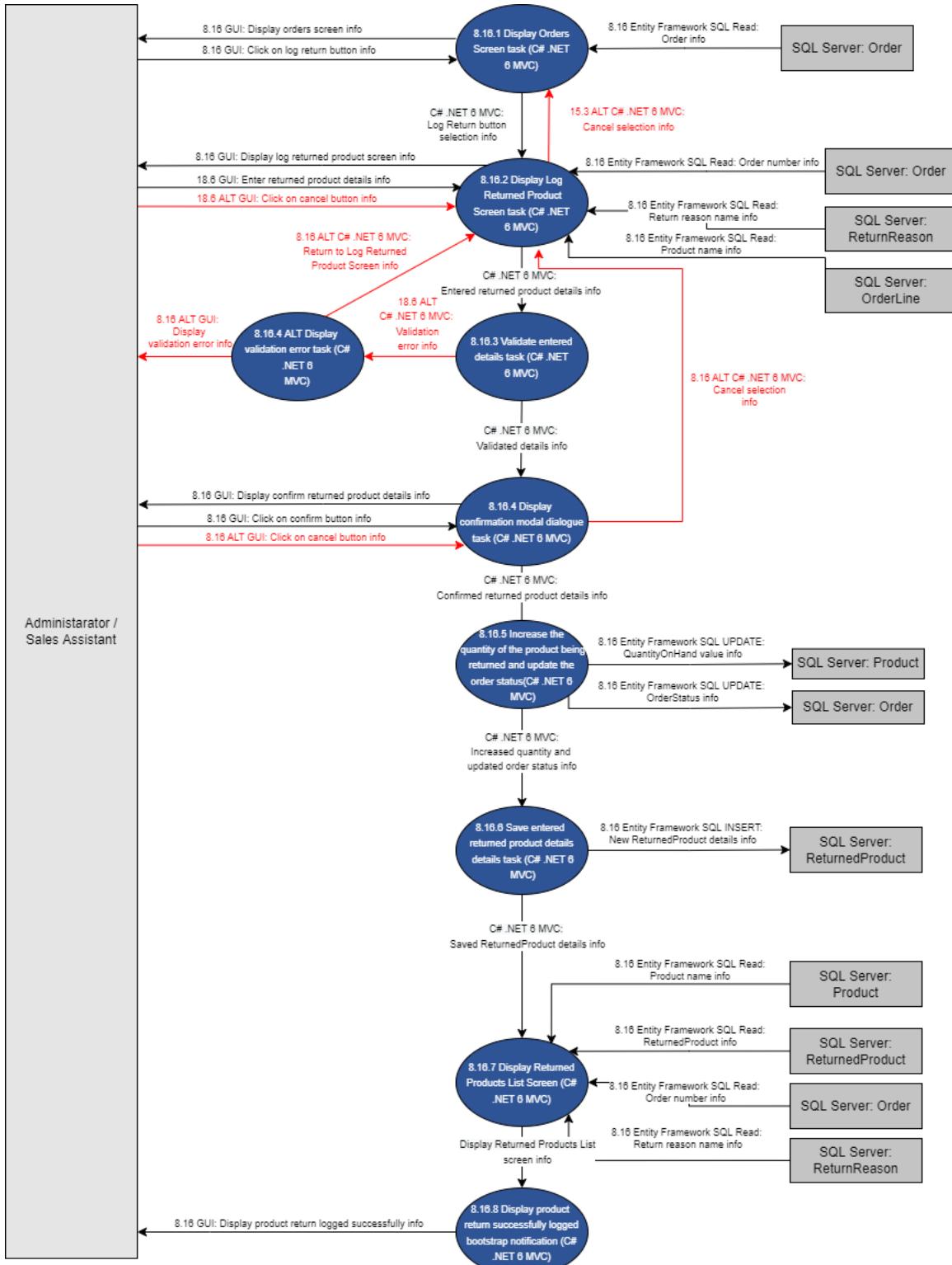


Figure 87- 8.19 Capture Returned Product

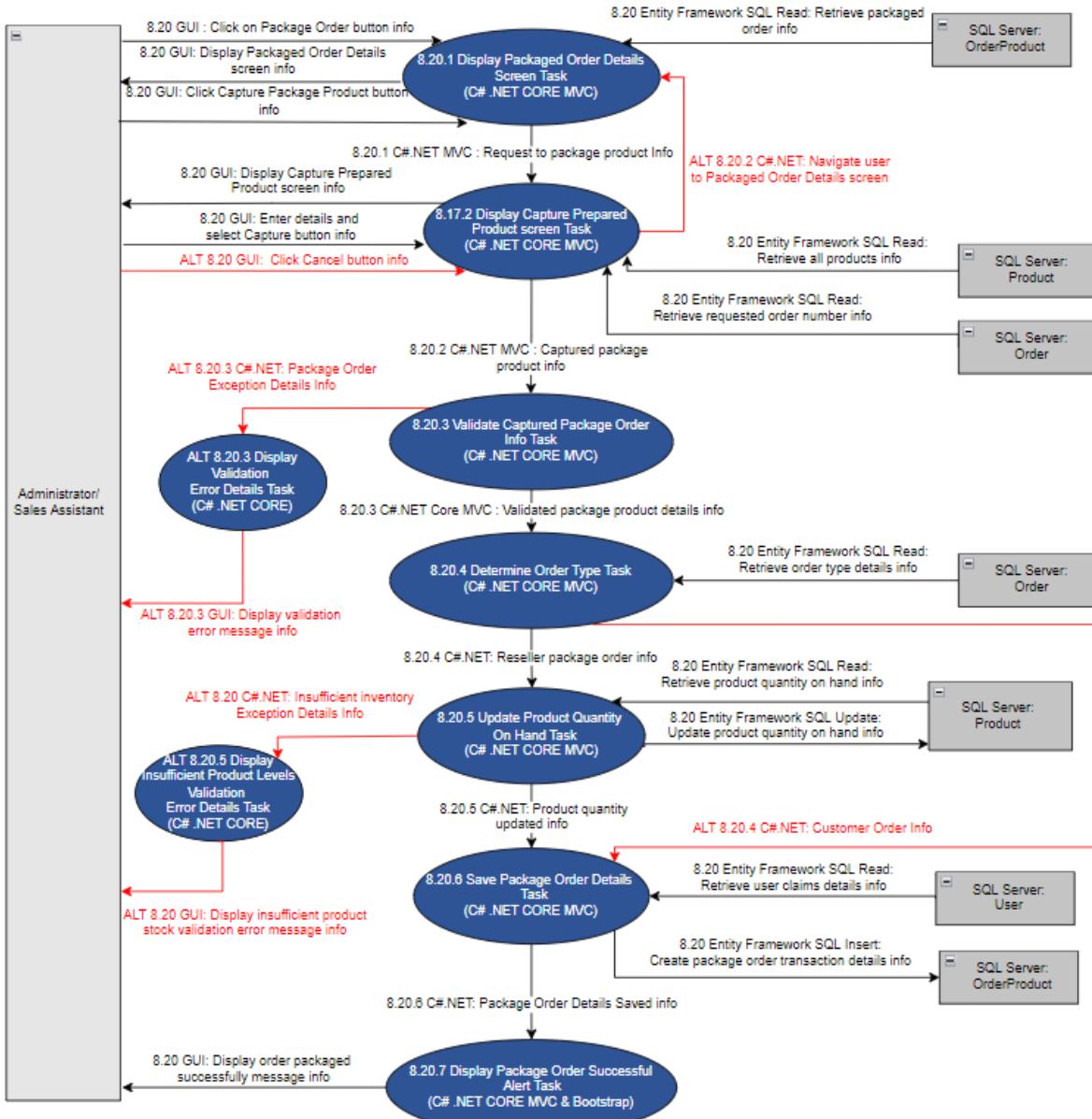


Figure 88- 8.20 Package Order

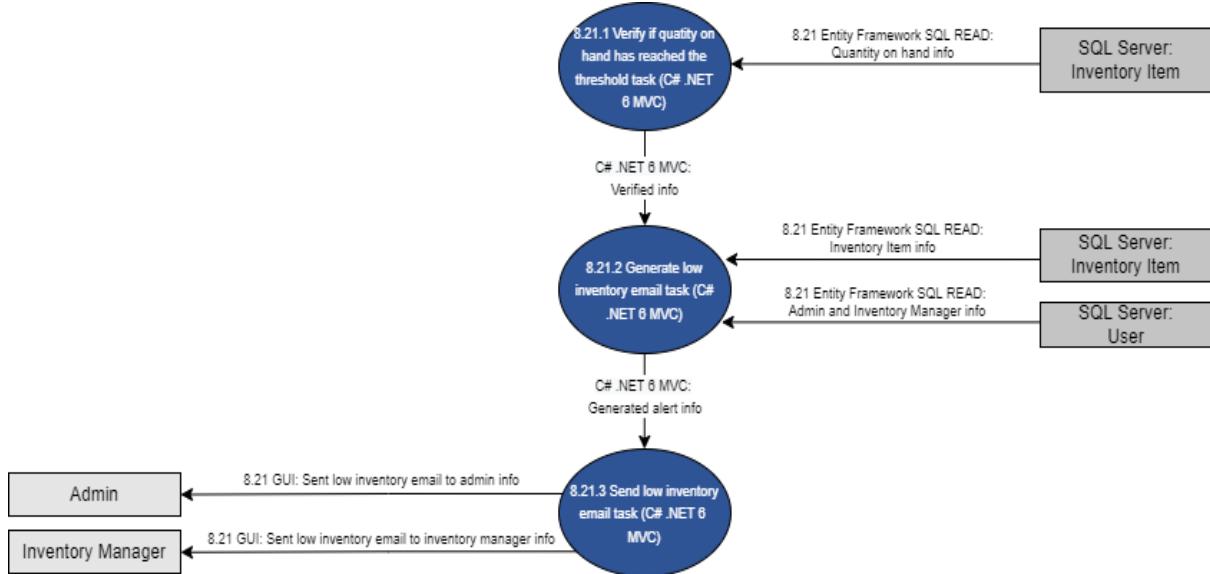


Figure 89- 8.21 Send Low Inventory Alert

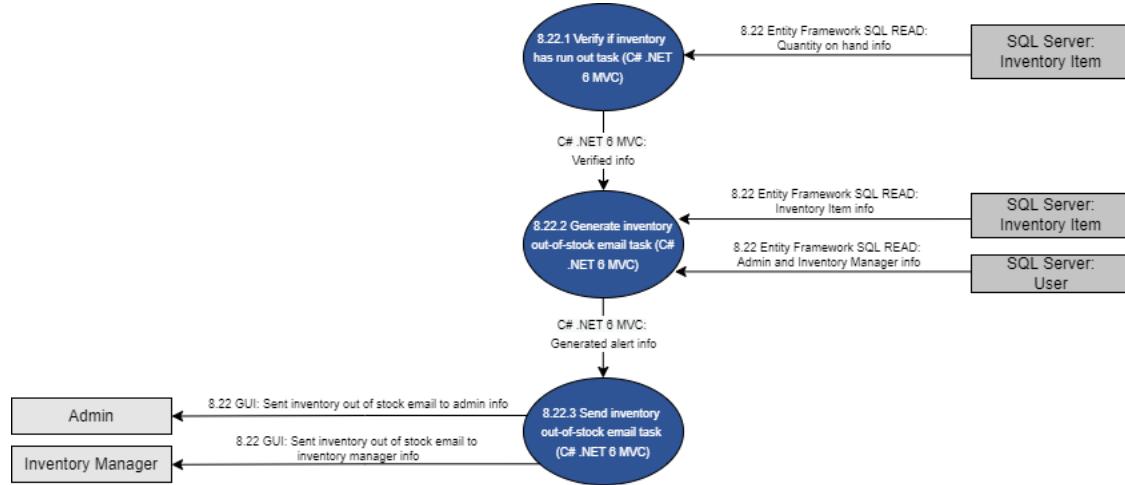


Figure 90- 8.22 Send Inventory Out of Stock Alert

## 2.9. Location Subsystem

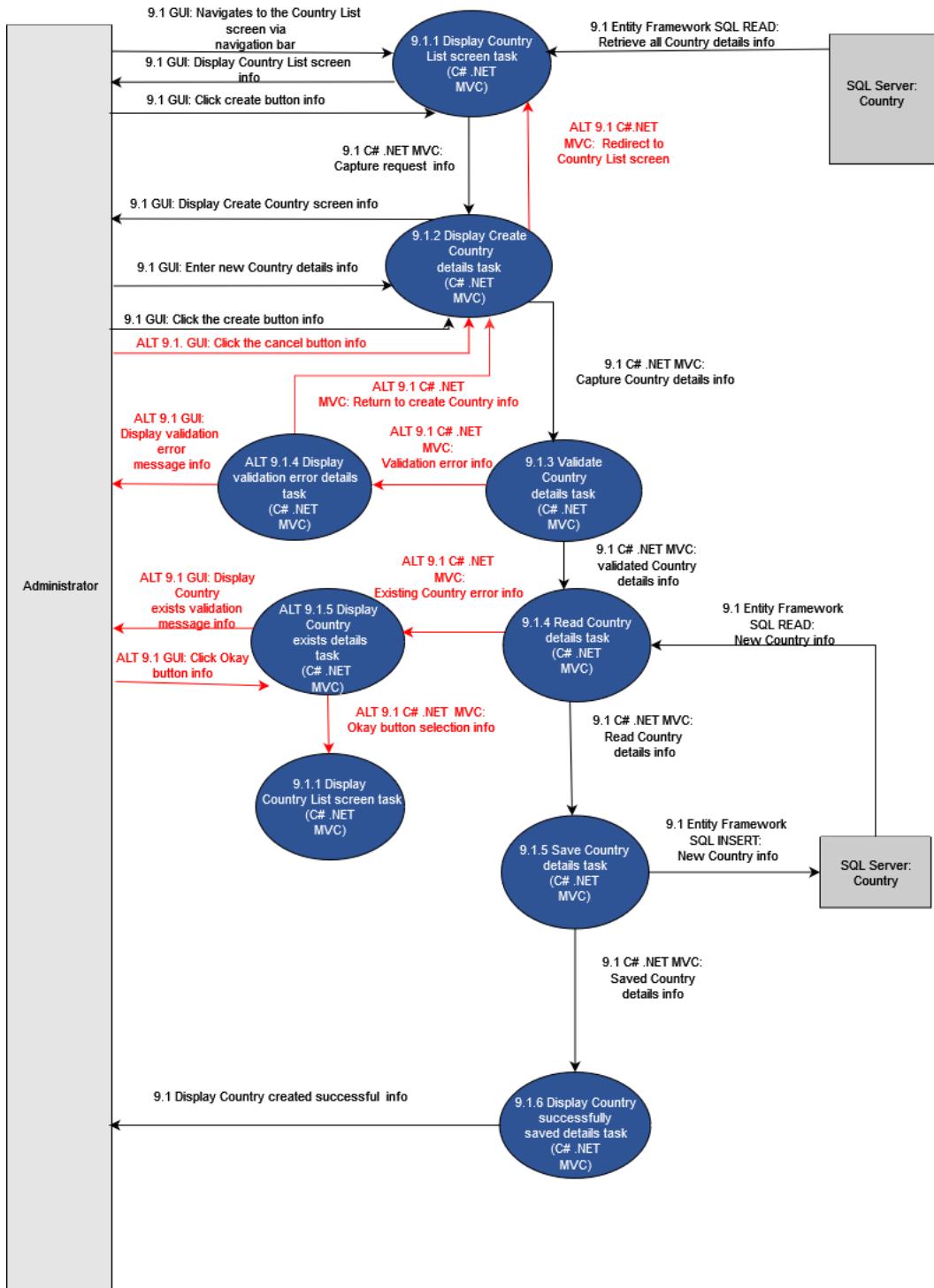


Figure 91- 9.1 Create Country

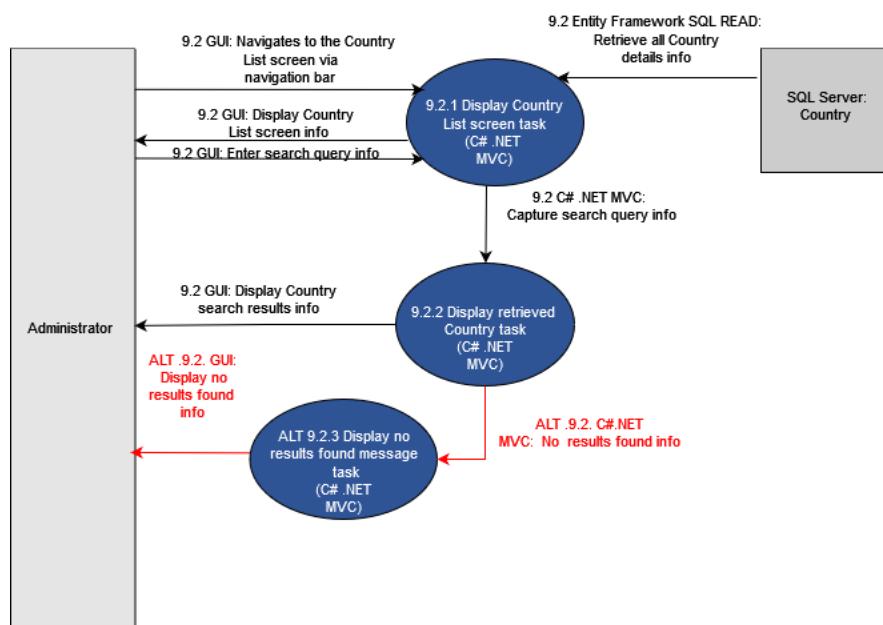


Figure 92- 9.2 Search Country

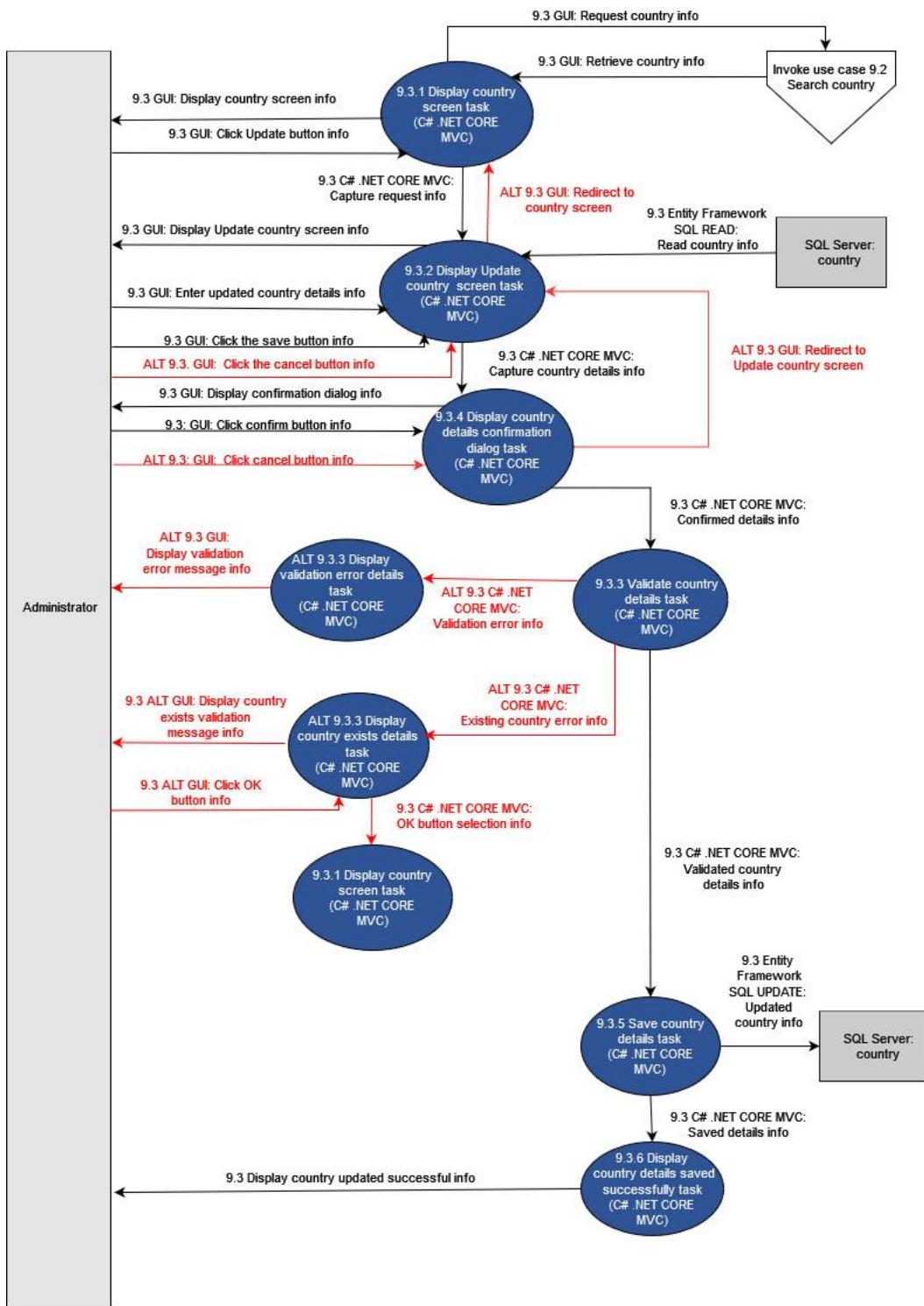


Figure 93- 9.3 Update Country

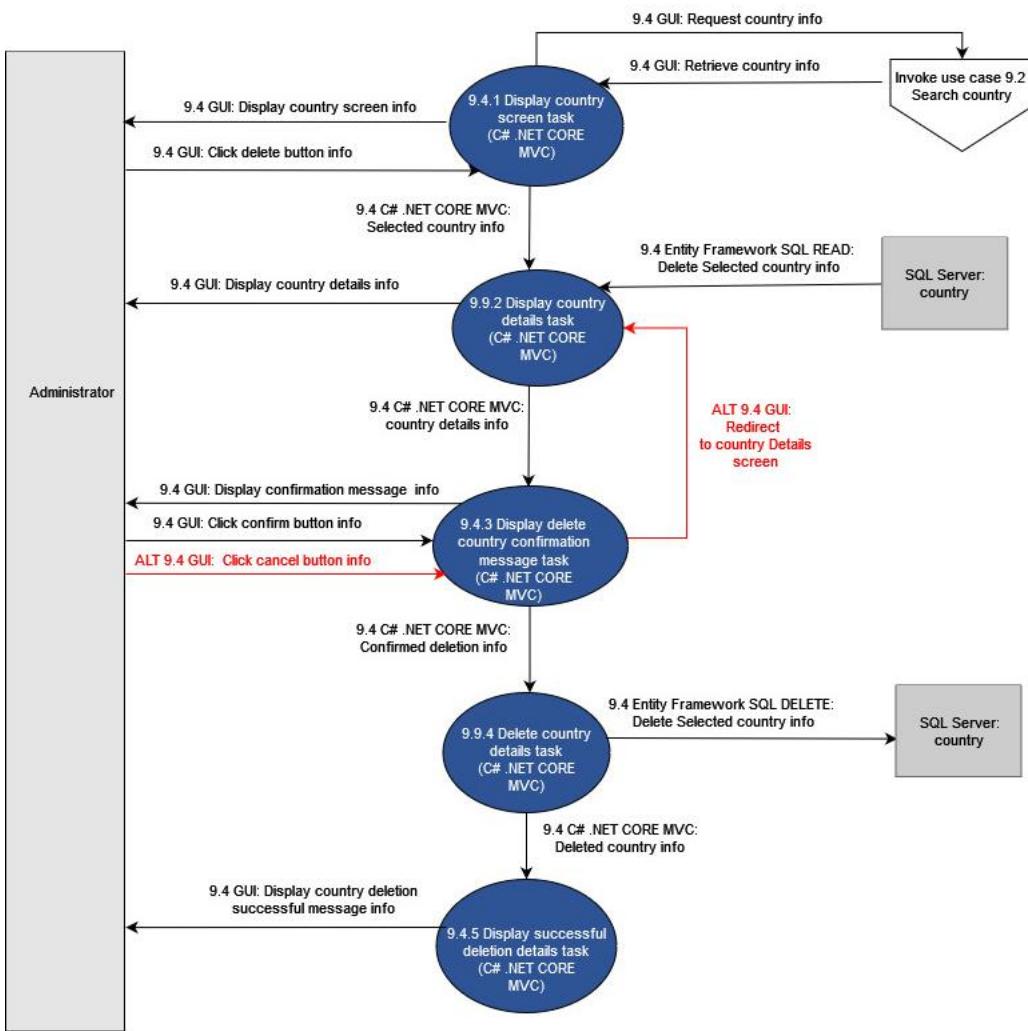


Figure 94- 9.4 Delete Country

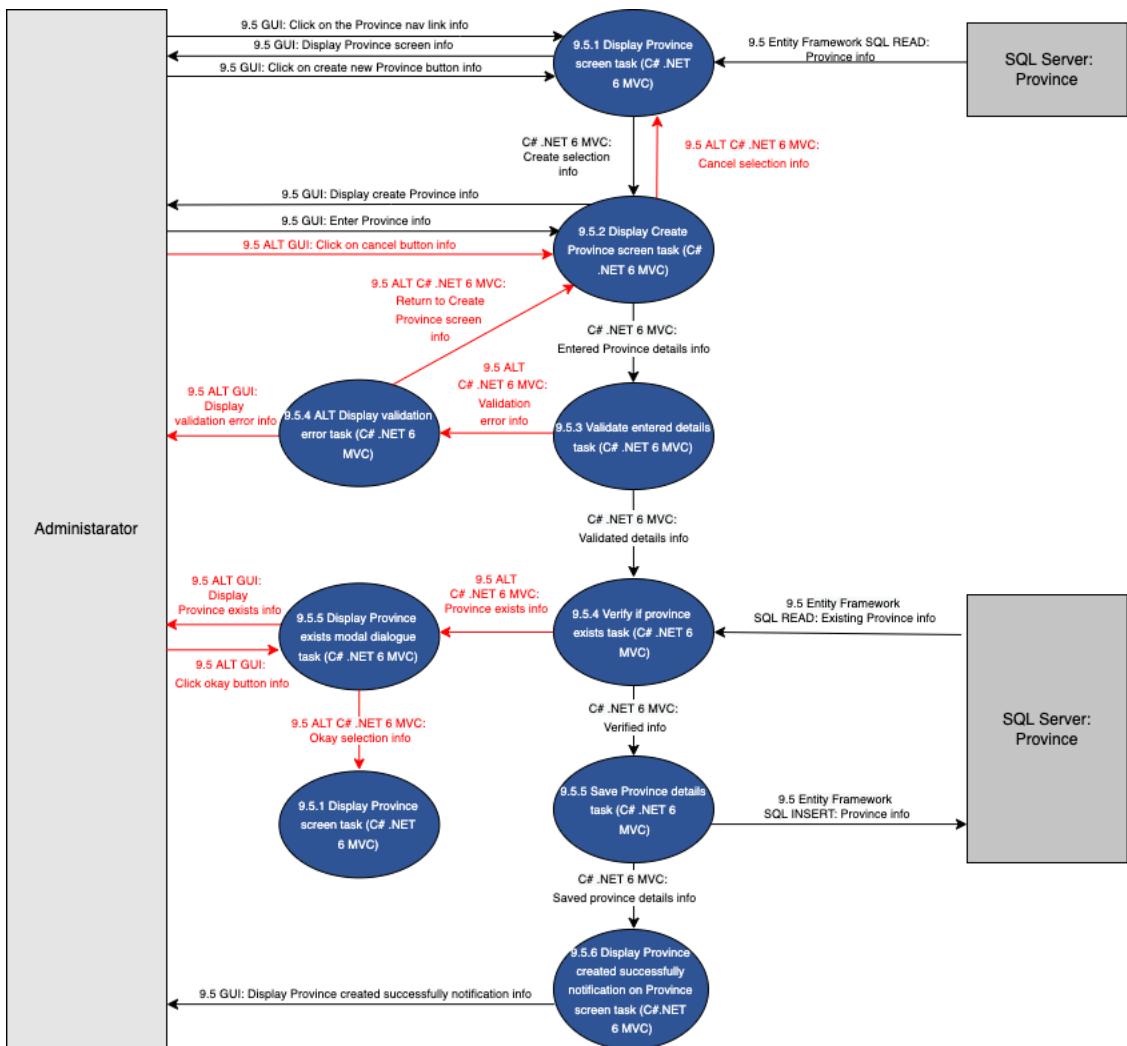


Figure 95- 9.5 Add Province

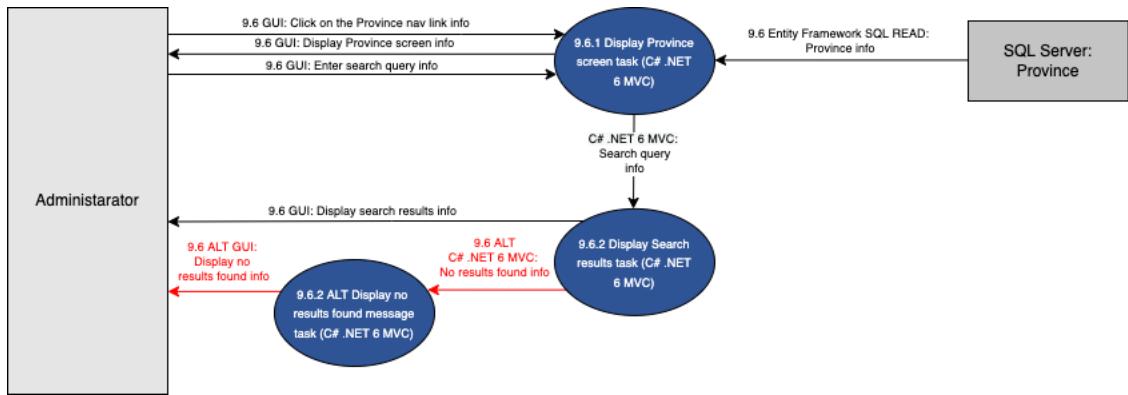


Figure 96- 9.6 Search Province

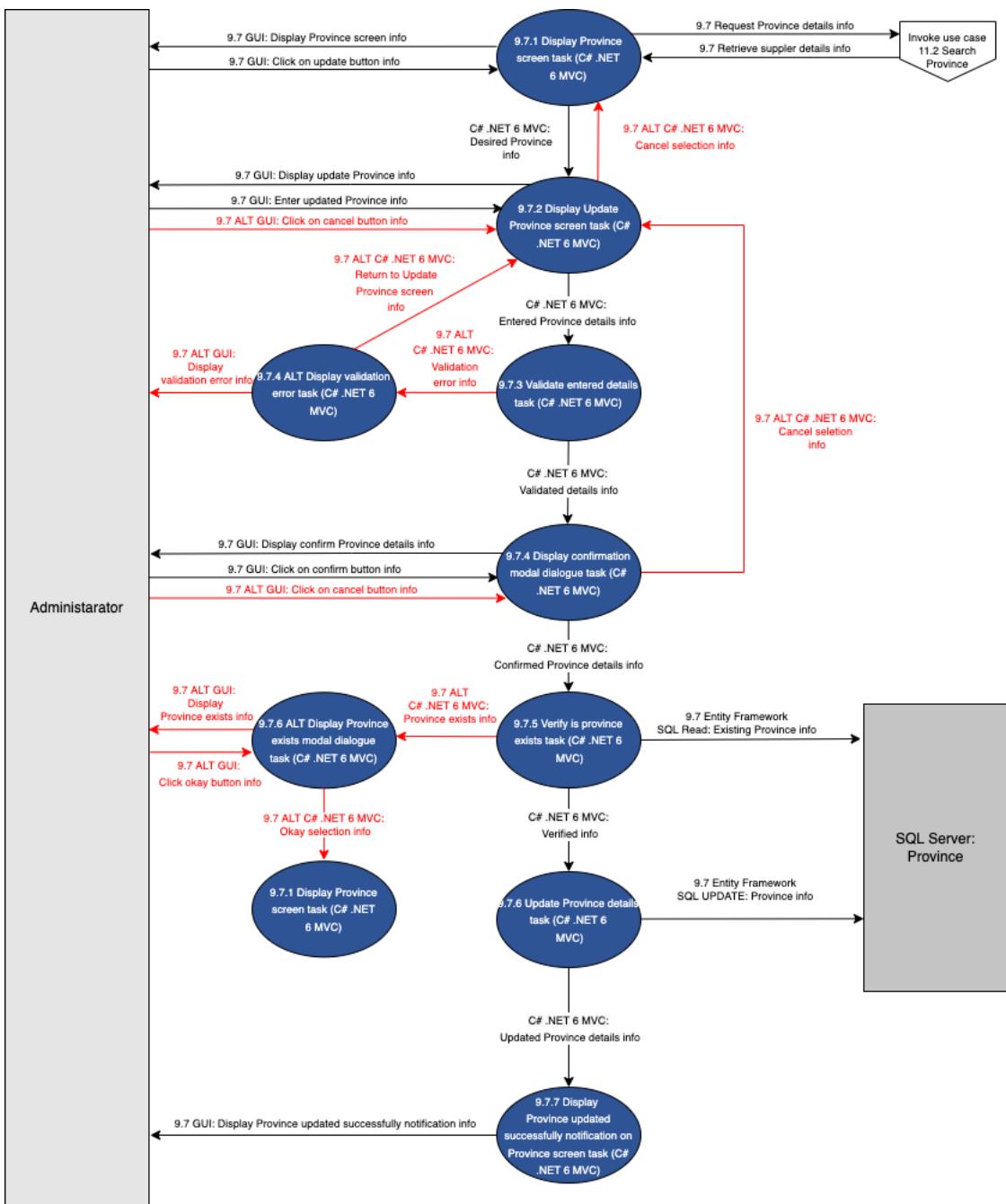


Figure 97- 9.7 Update Province

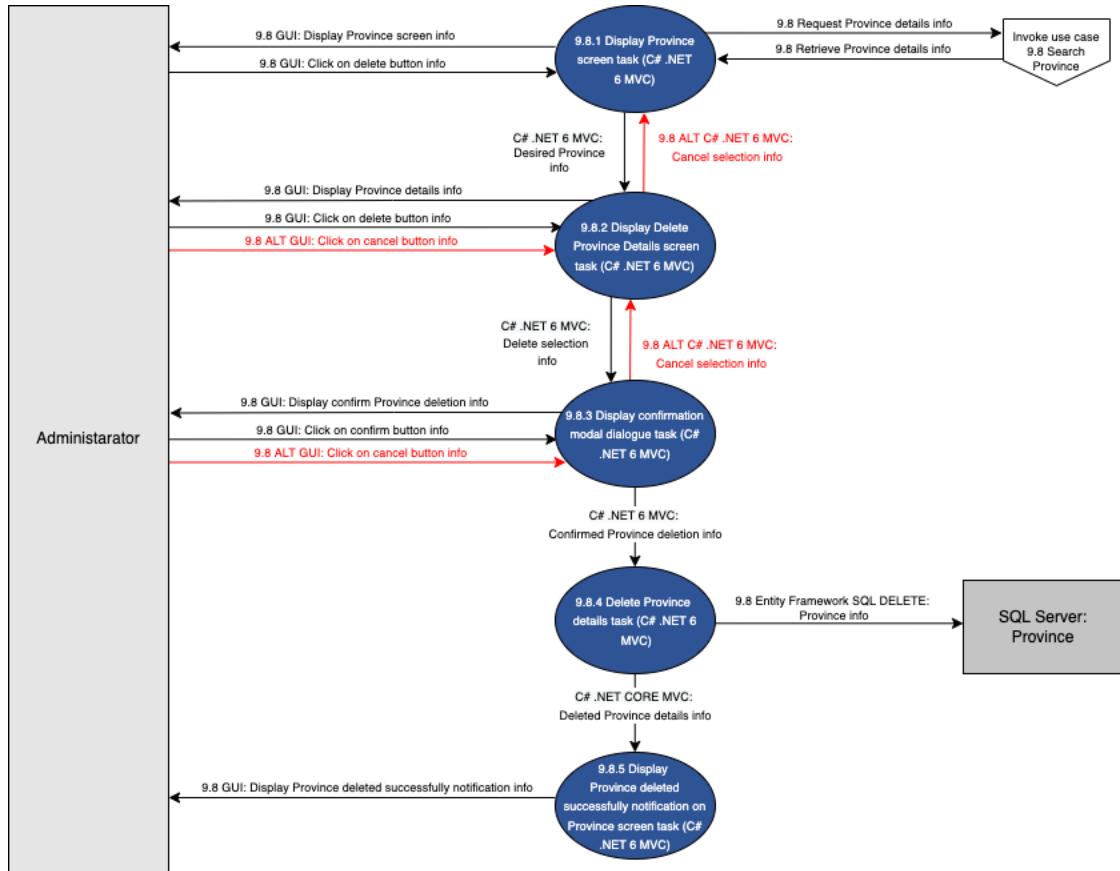


Figure 98- 9.8 Delete Province

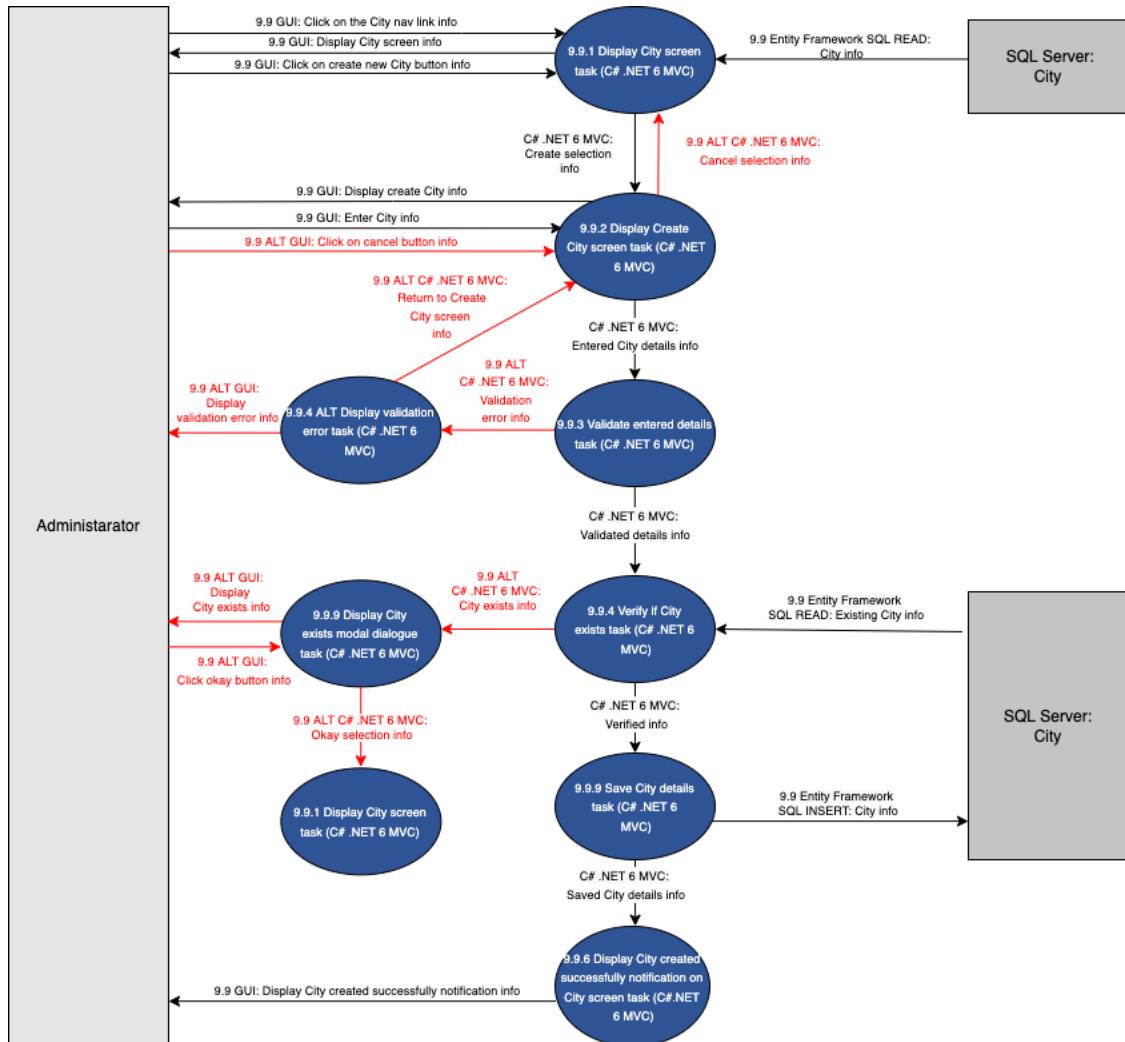


Figure 99- 9.9 Create City

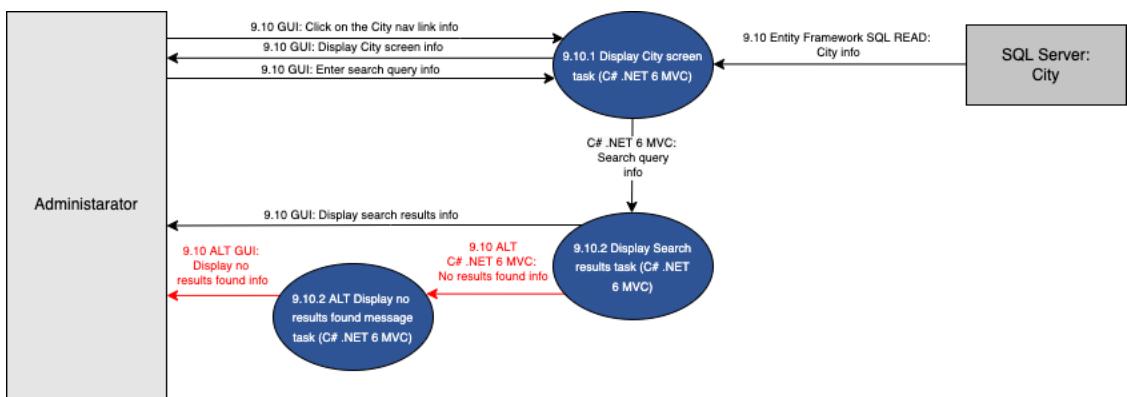


Figure 100- 9.10 Search City

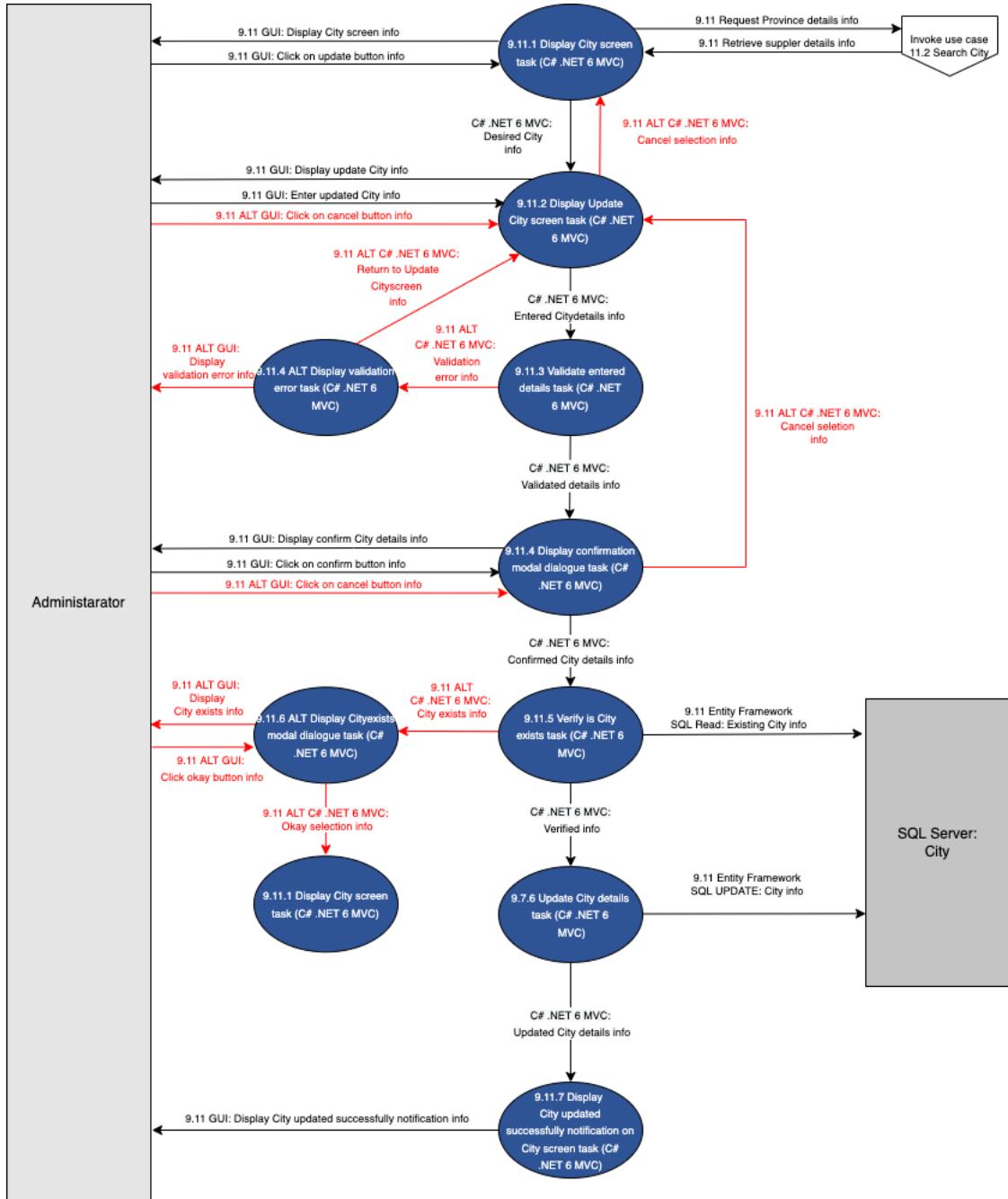


Figure 101- 9.11 Update City

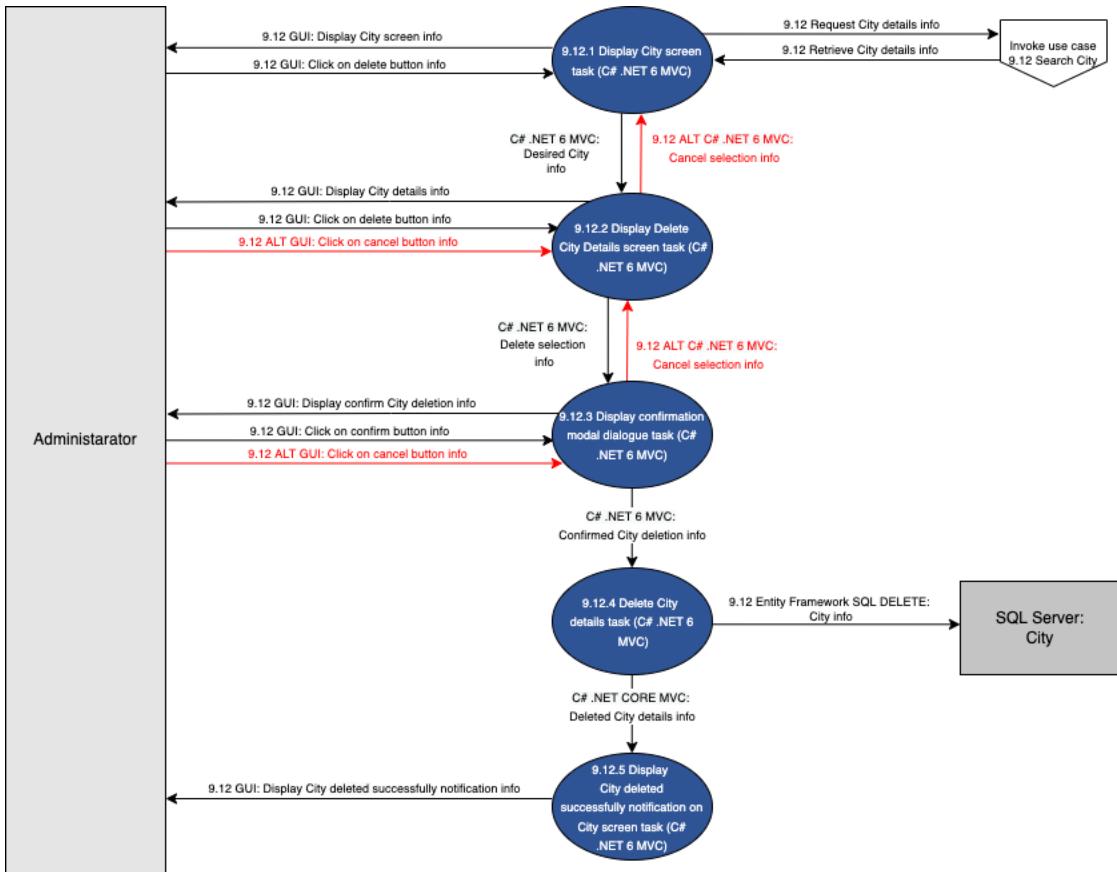
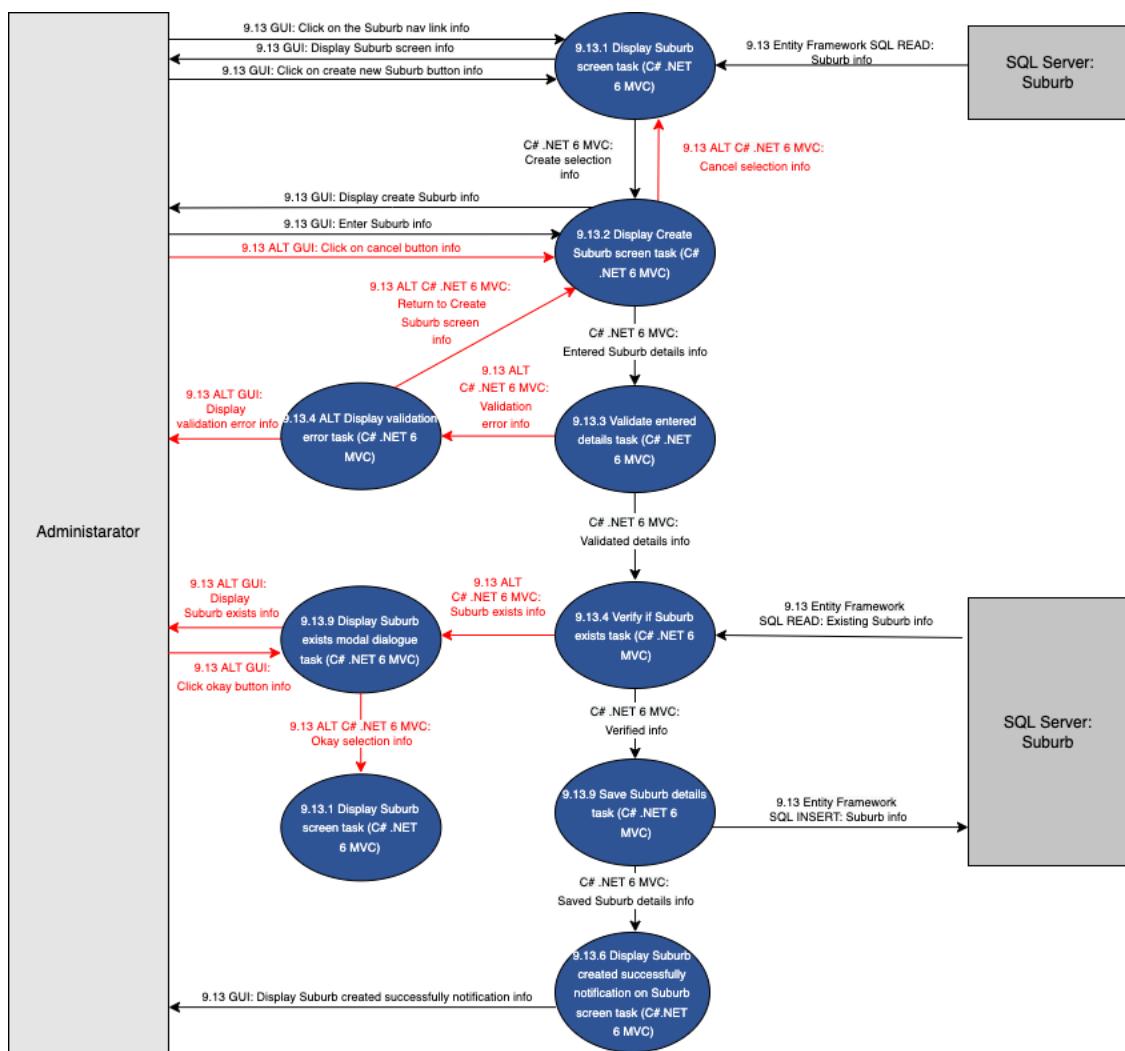


Figure 102- 9.12 Delete City



*Figure 103- 9.13 Add Suburb*

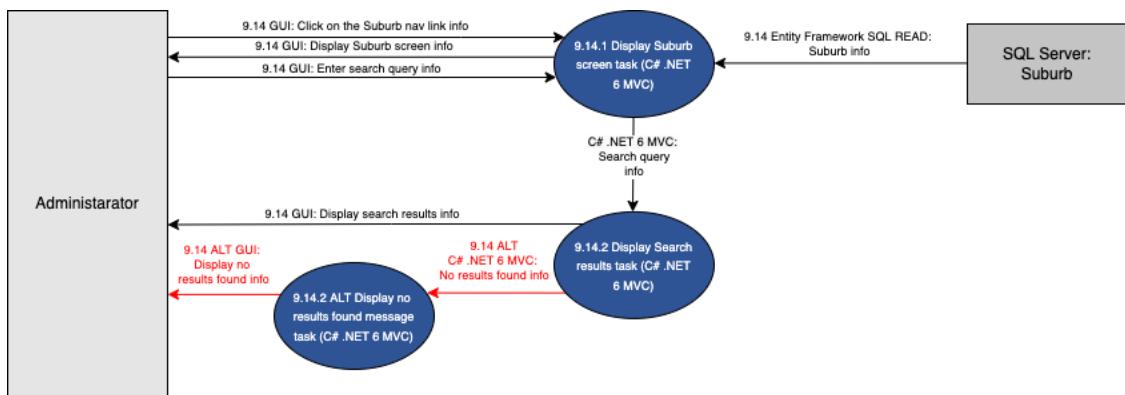


Figure 104- 9.14 Search Suburb

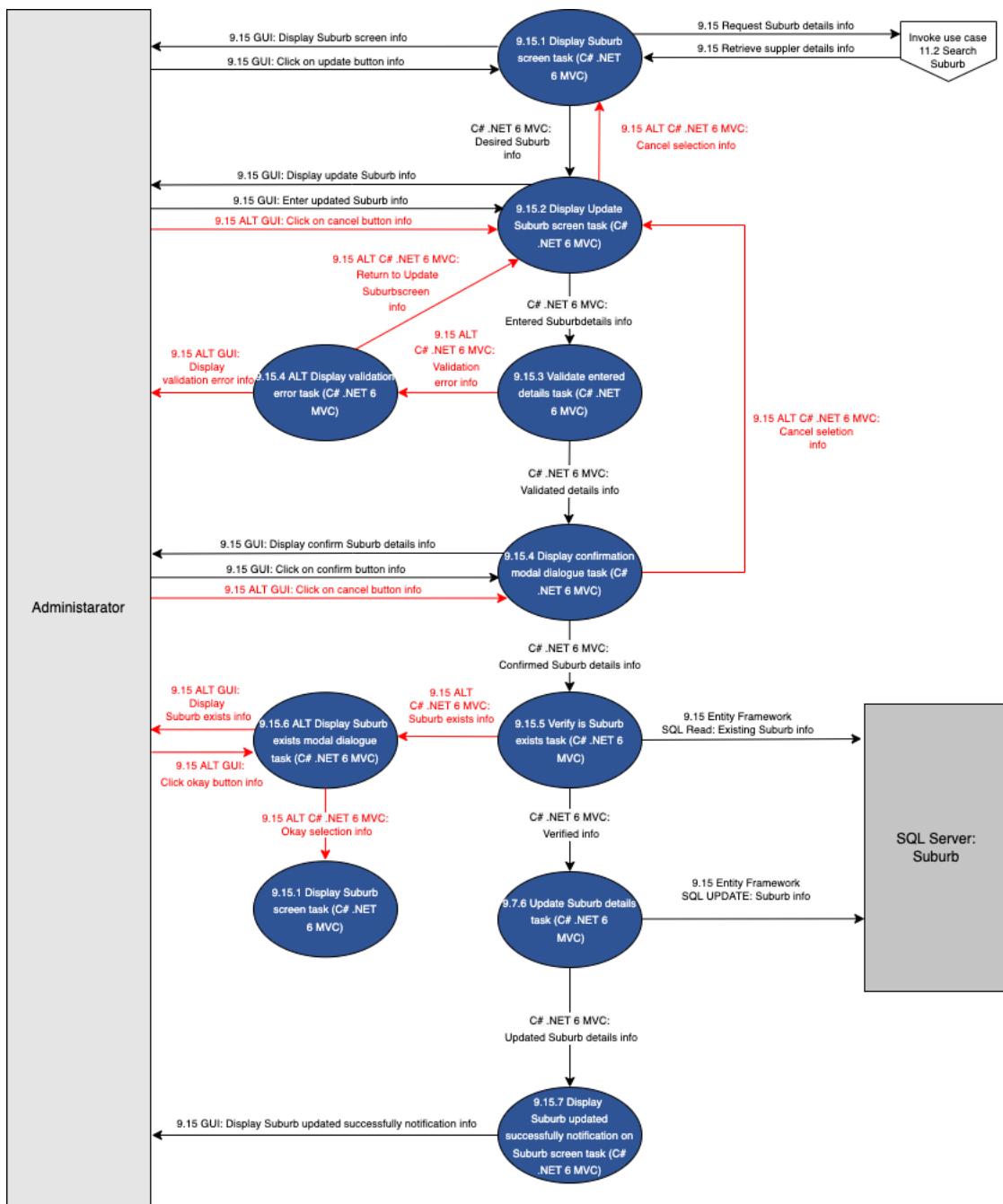


Figure 105- 9.15 Update Suburb

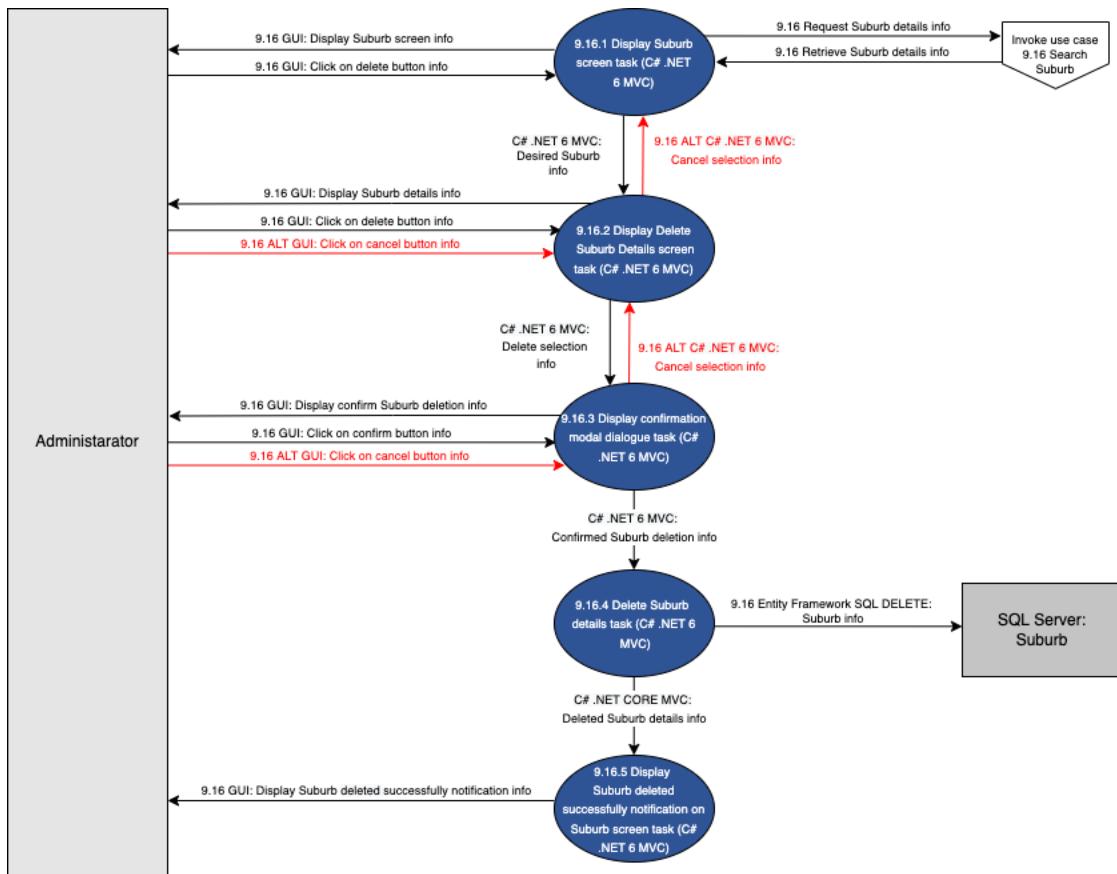


Figure 106- 9.16 Delete Suburb



## 2.10. Reporting Subsystem

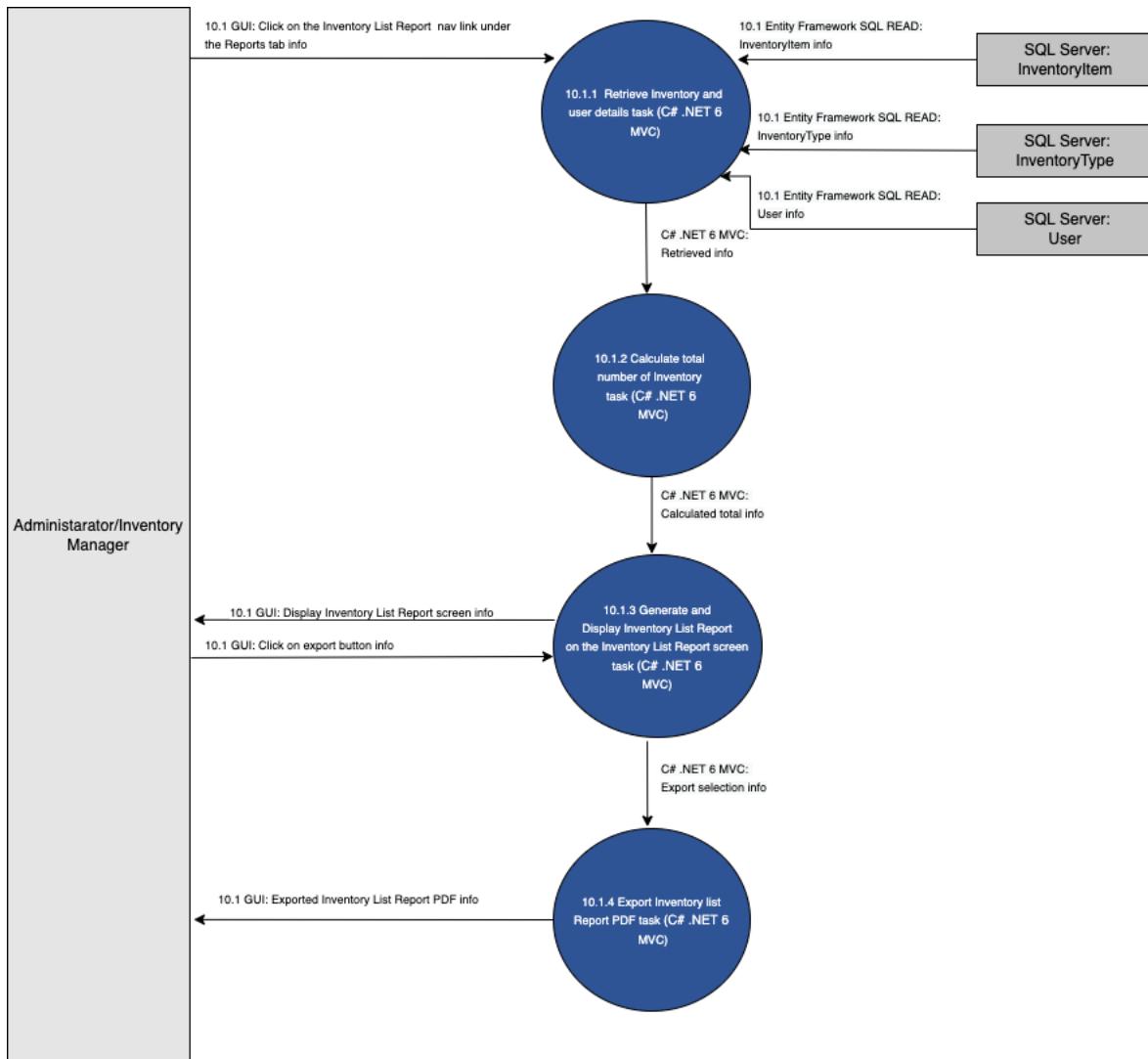


Figure 107 -10.1 Generate Inventory List Report

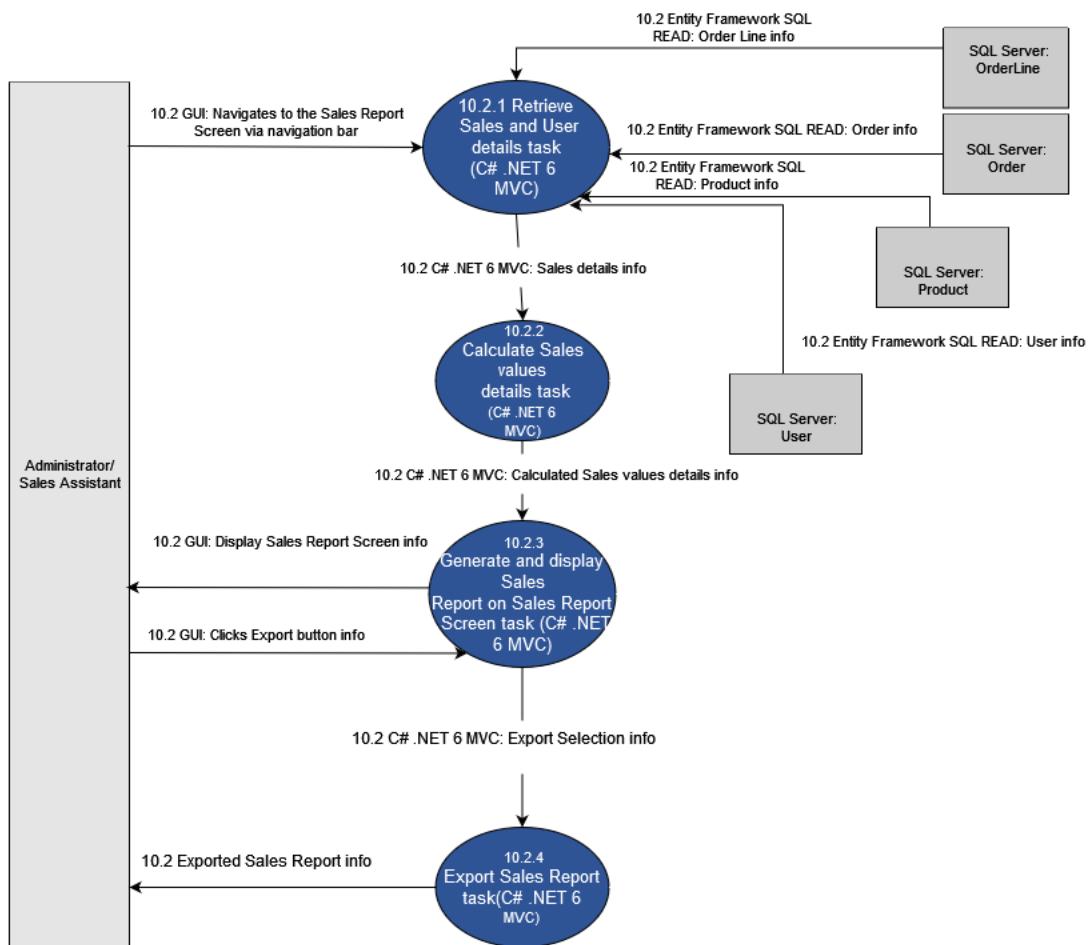


Figure 108- 10.2 Generate Sales Report

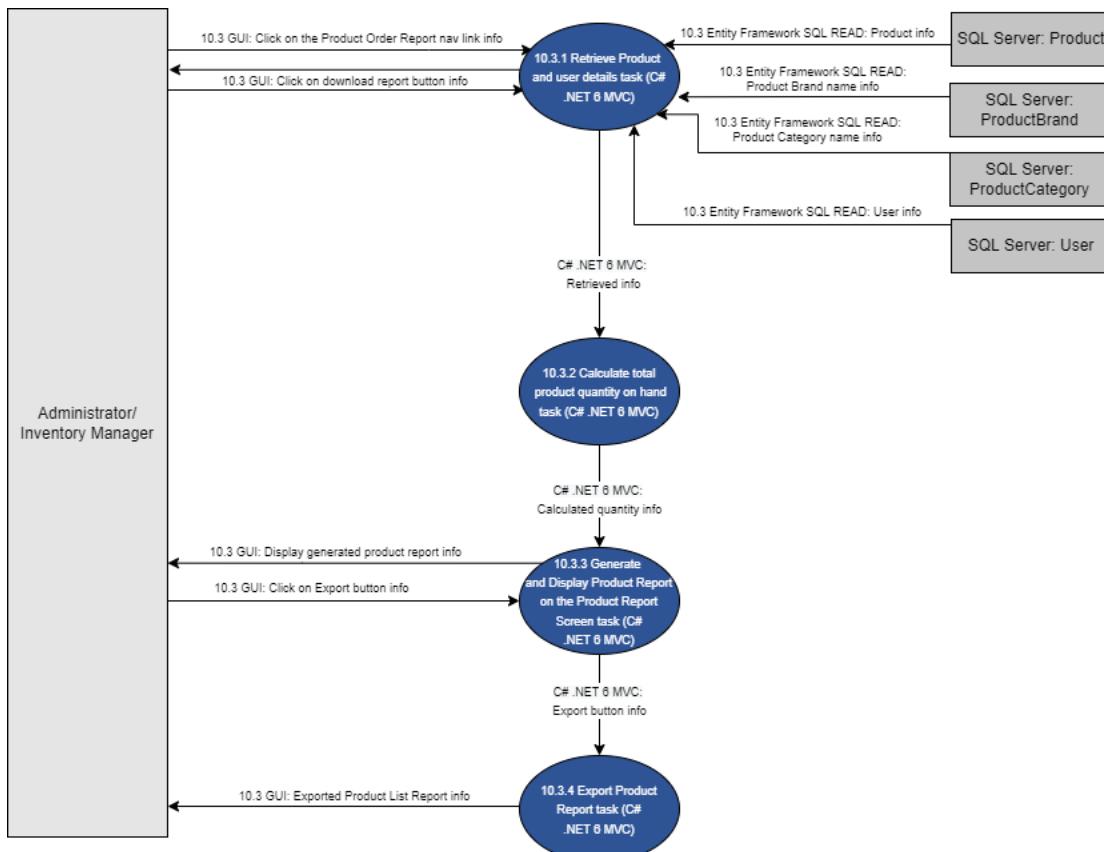


Figure 109- 10.3 Generate Product List Report

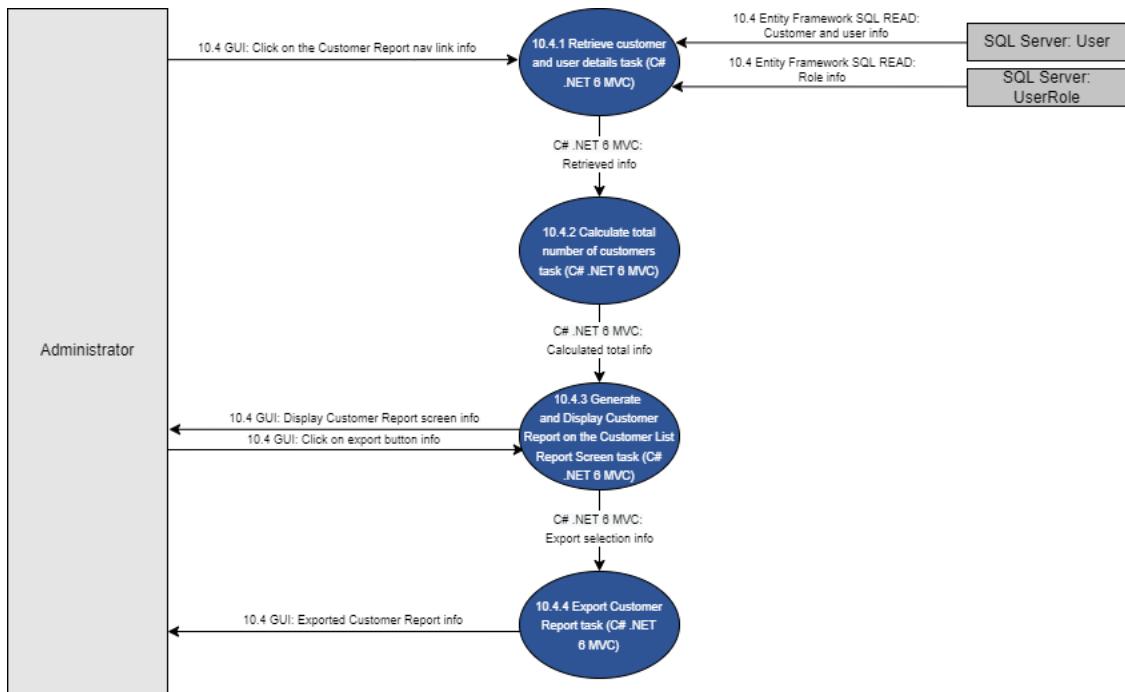


Figure 110- 10.4 Generate Customer List Report

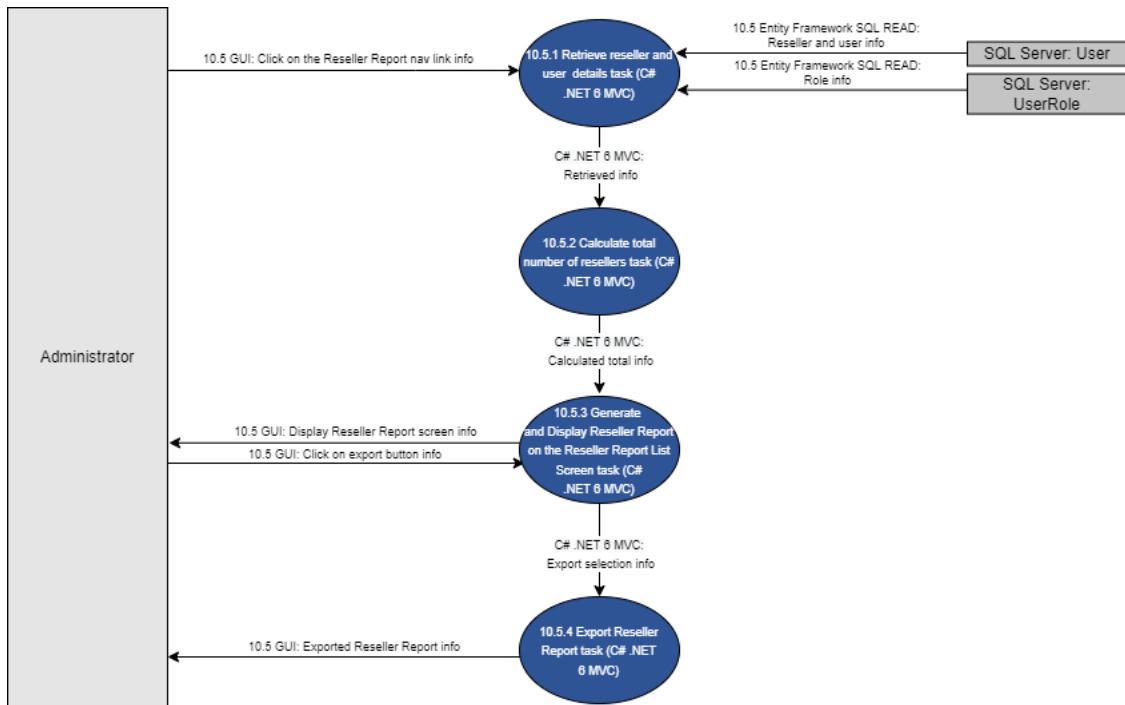


Figure 111- 10.5 Generate Reseller List Report

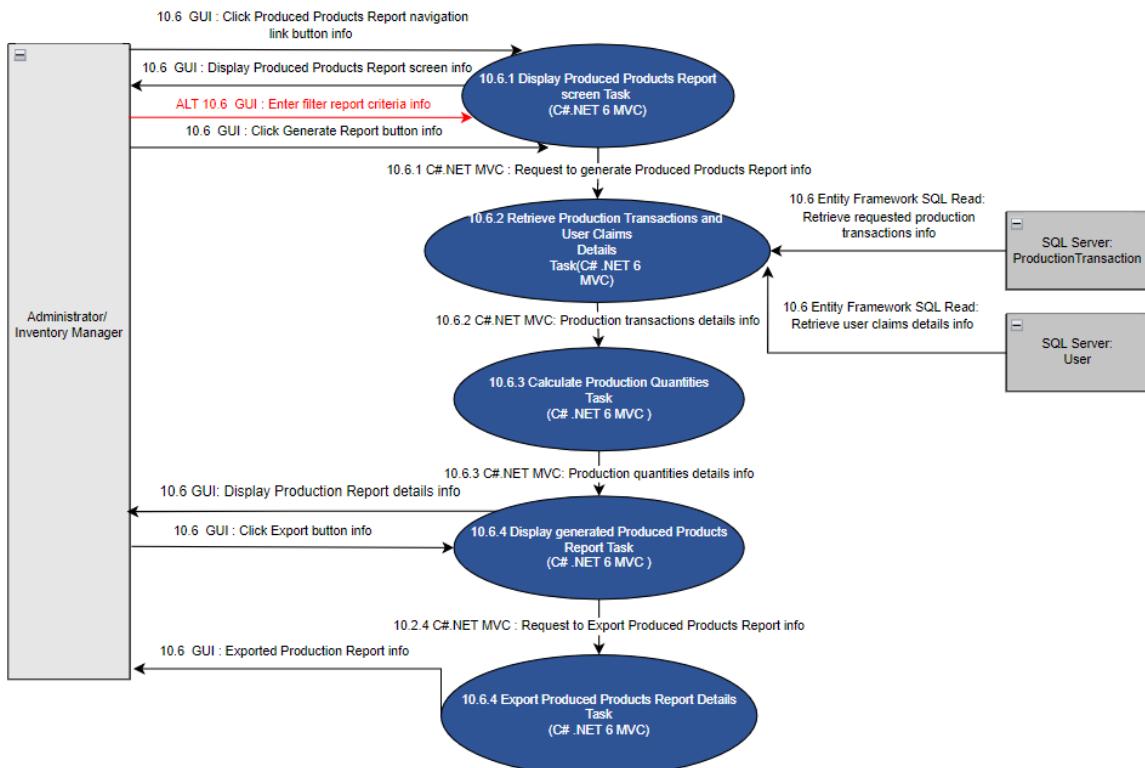


Figure 112- 10.6 Generate Produced Products Report

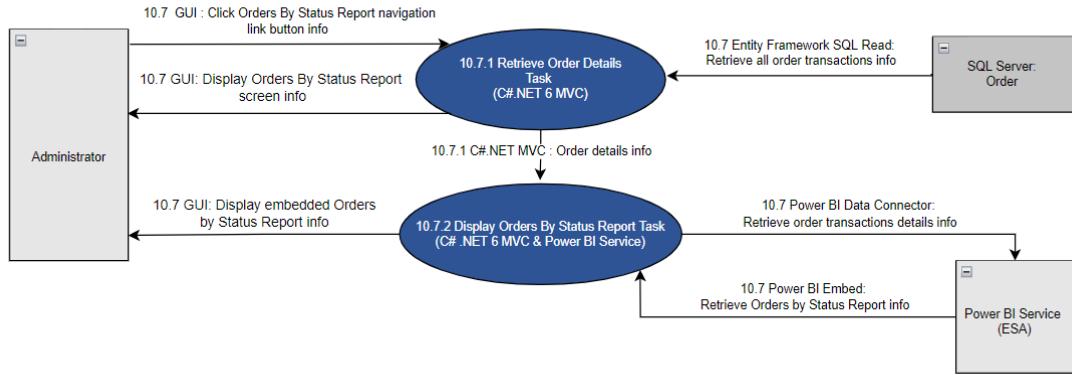


Figure 113- 10.7 Generate Orders (By Status) Report

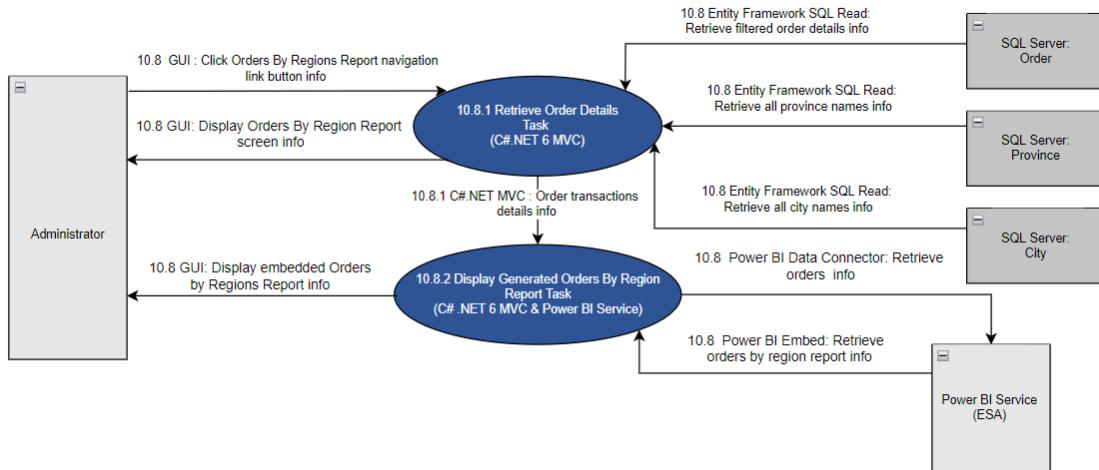


Figure 114- 10.8 Generate Sales (By Region) Report

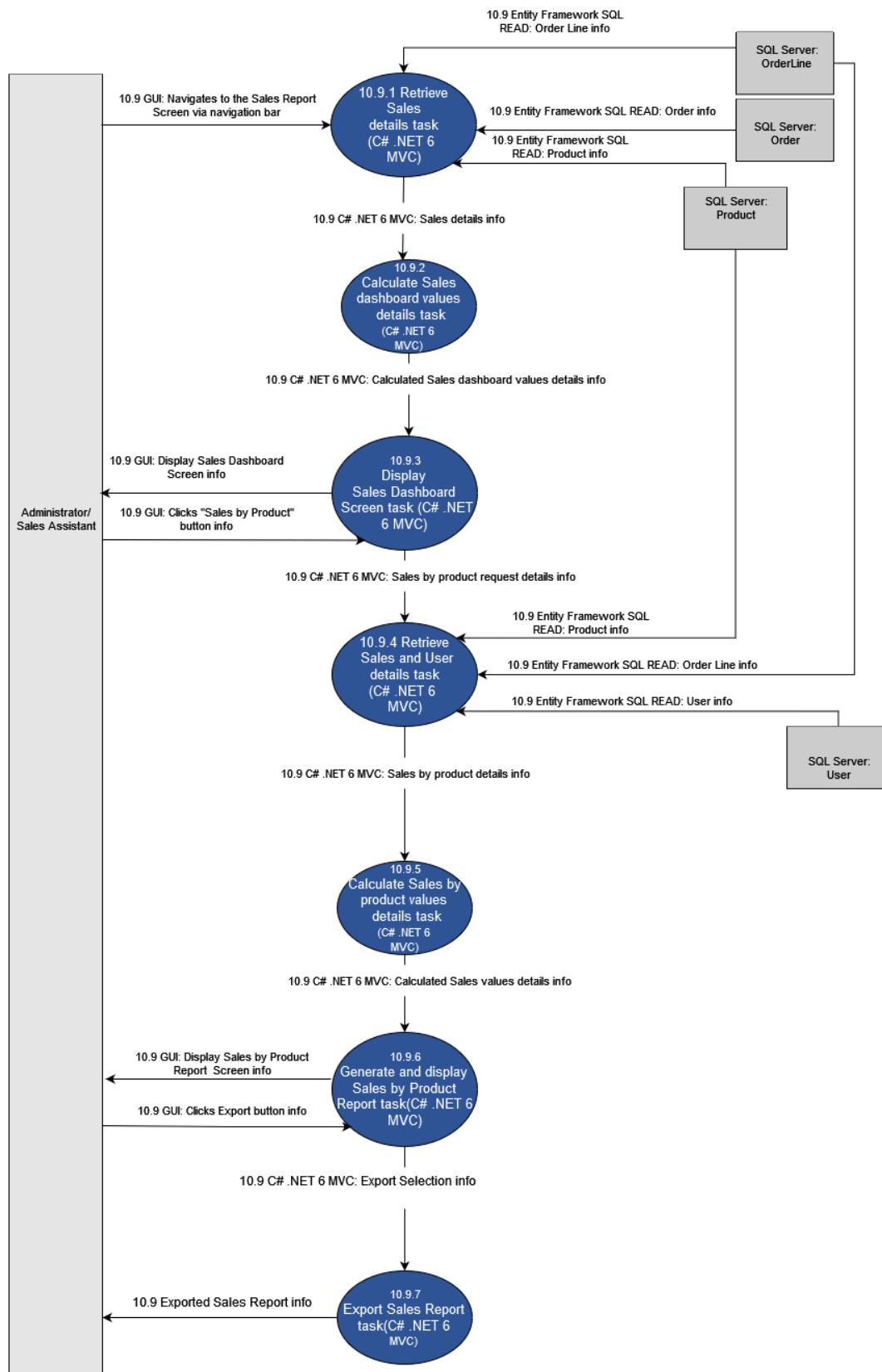


Figure 115- 10.9 Generate Sales (by Product) Report

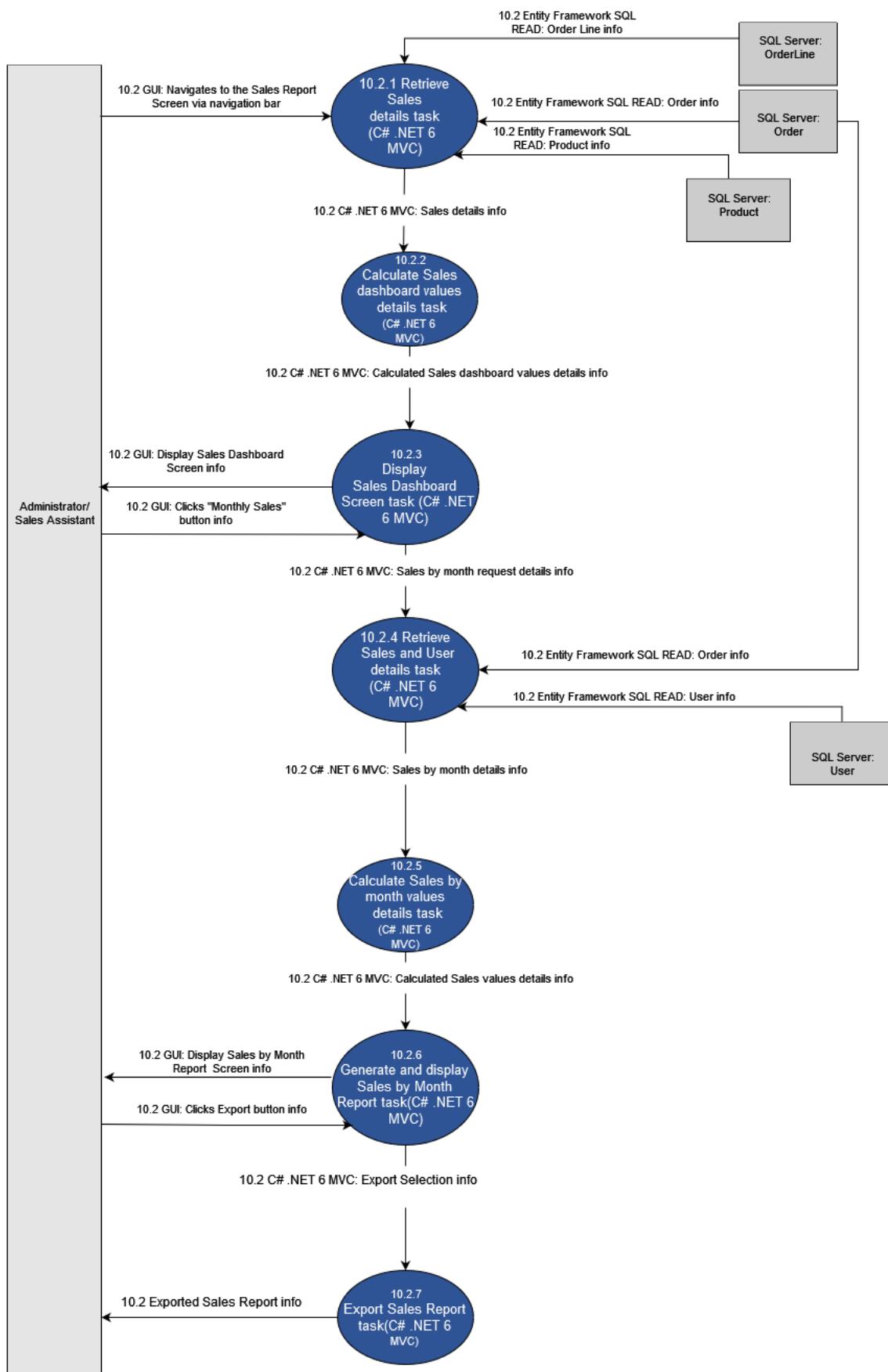
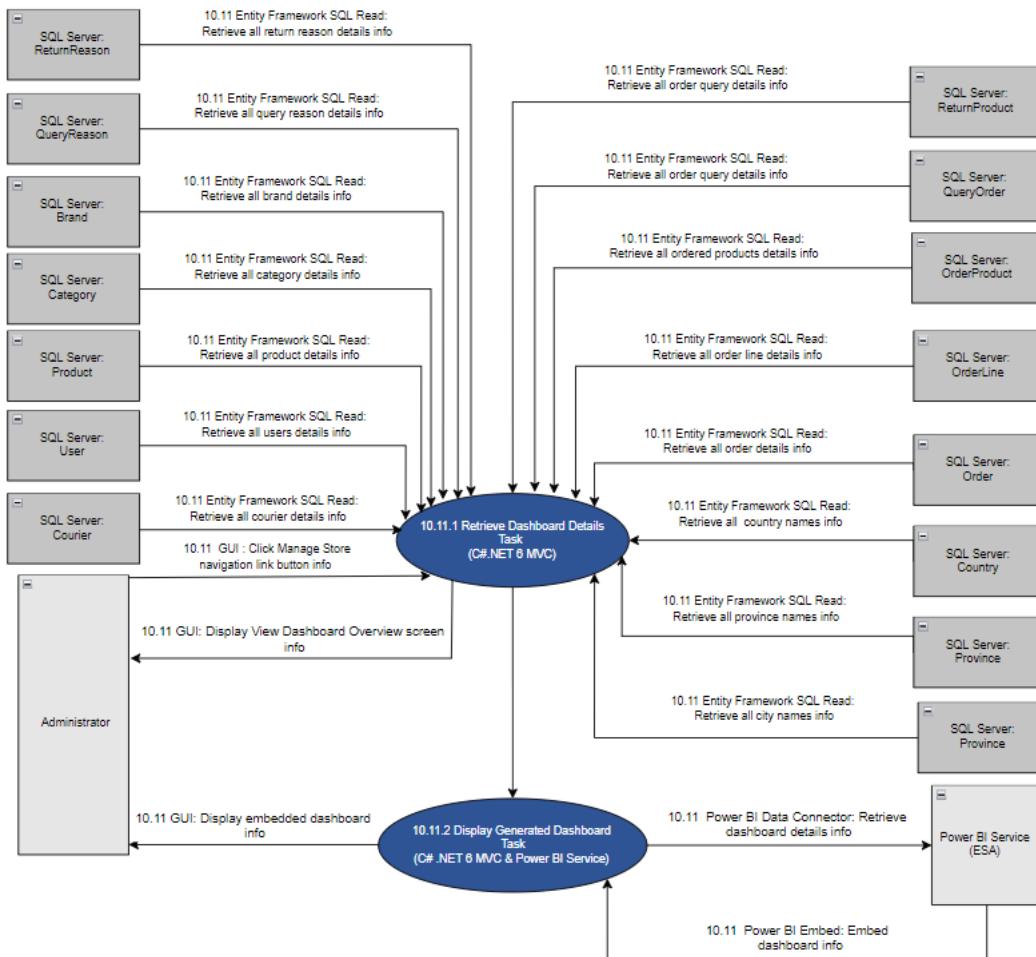


Figure 116- 10.10 Generate Sales (by Month) Report



*Figure 117- 10.11 View Dashboard Overview*

## 2.11. Supplier Subsystem

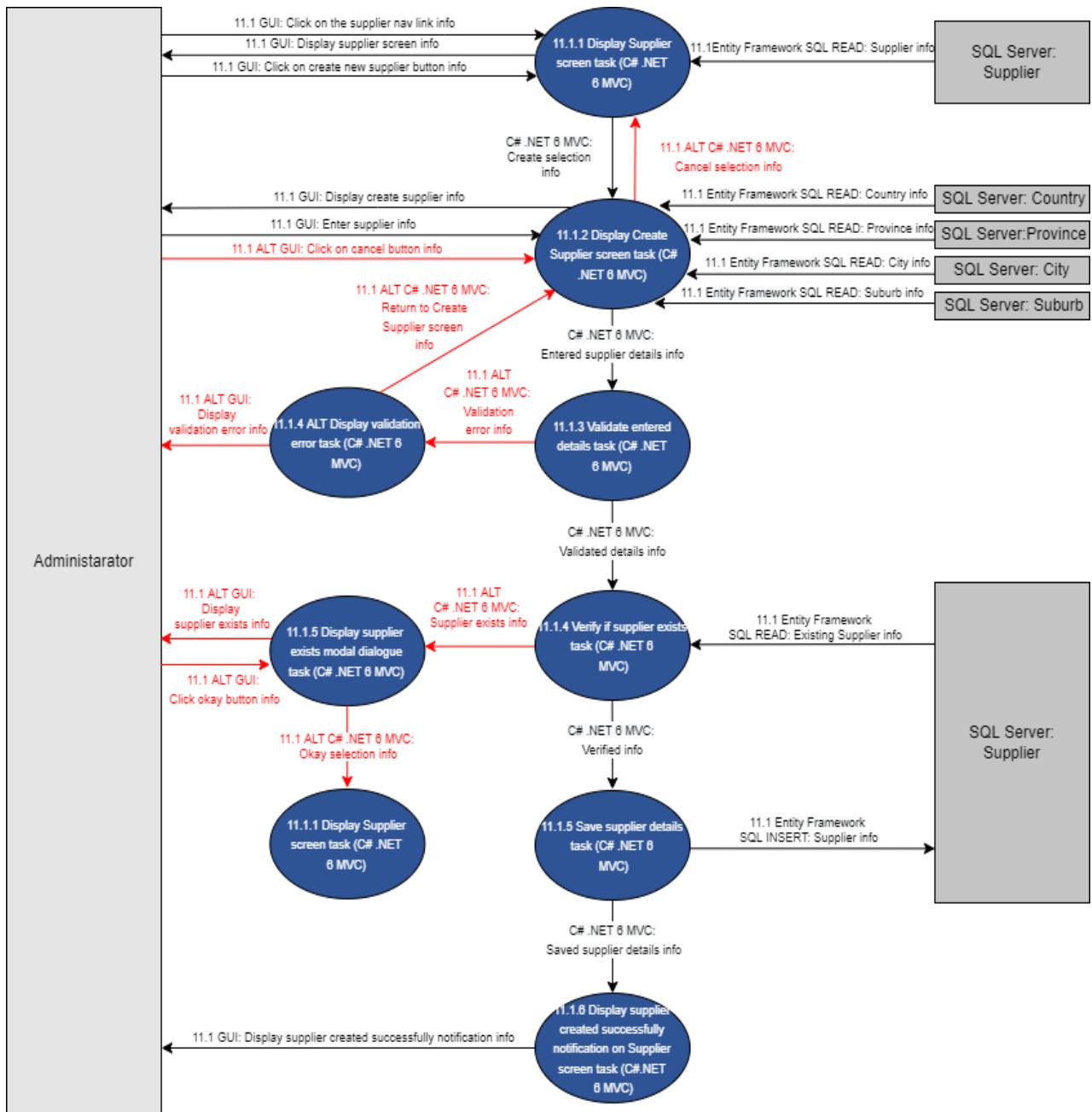


Figure 118 - 11.1 Add Supplier

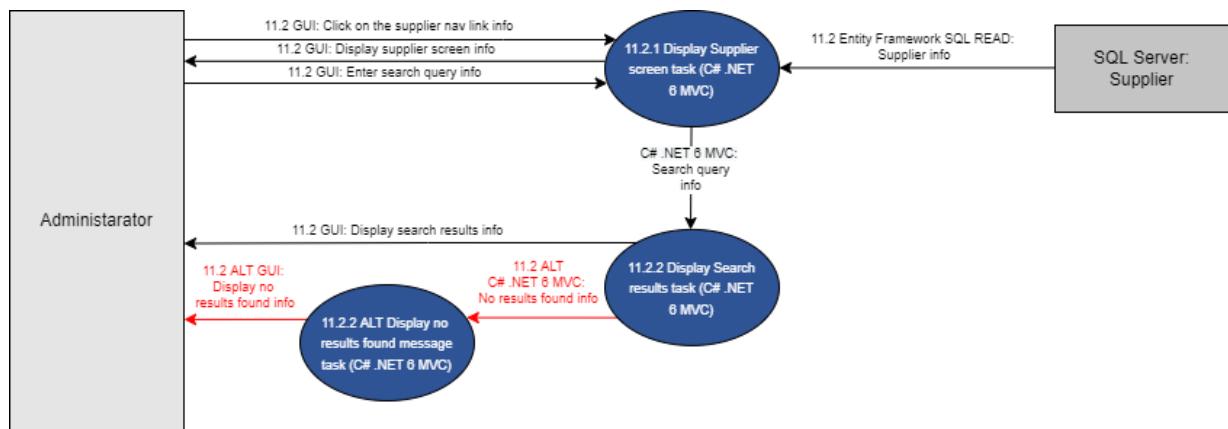


Figure 119 - 11.2 Search Supplier

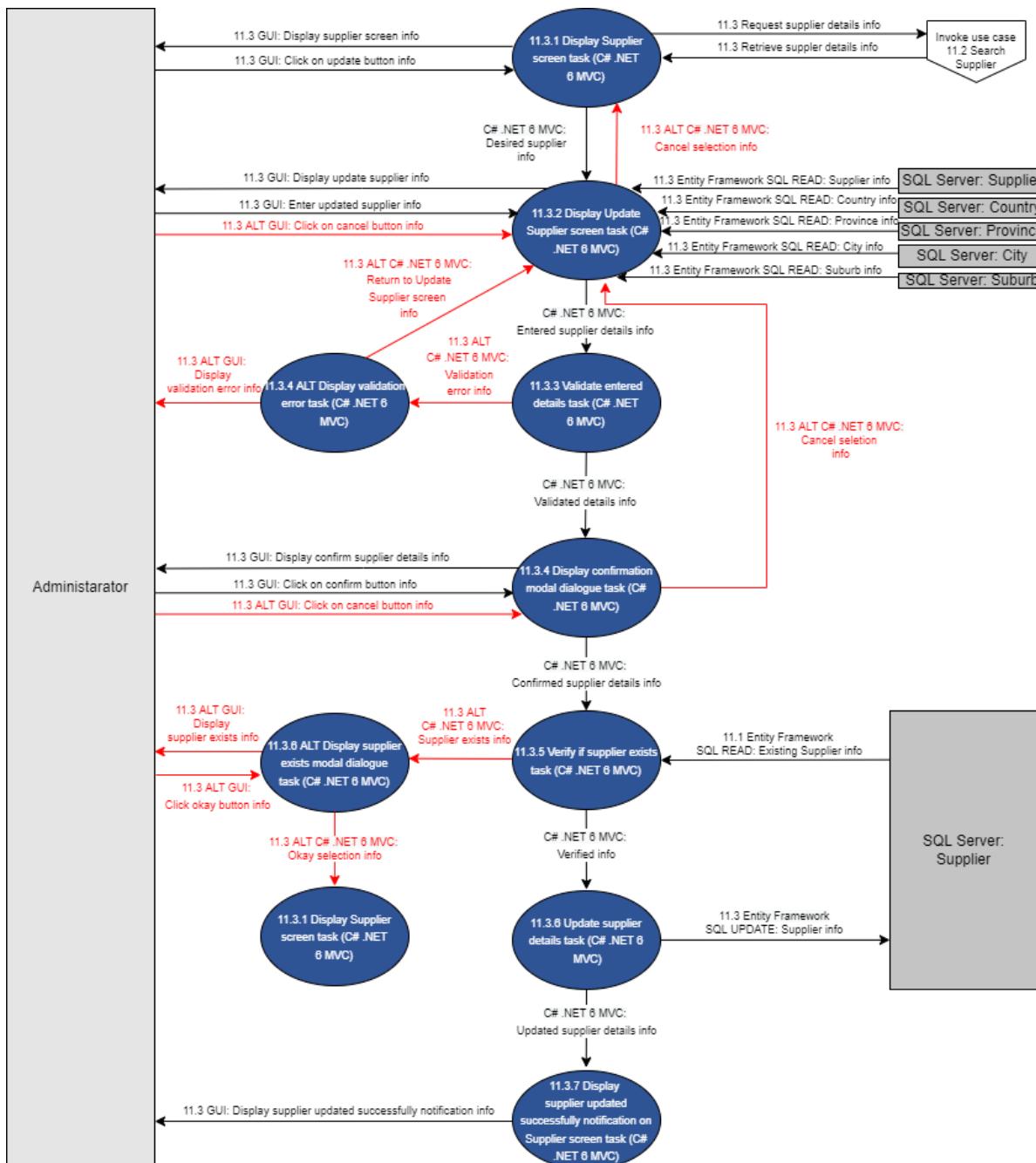


Figure 120 - 11.3 Update Supplier

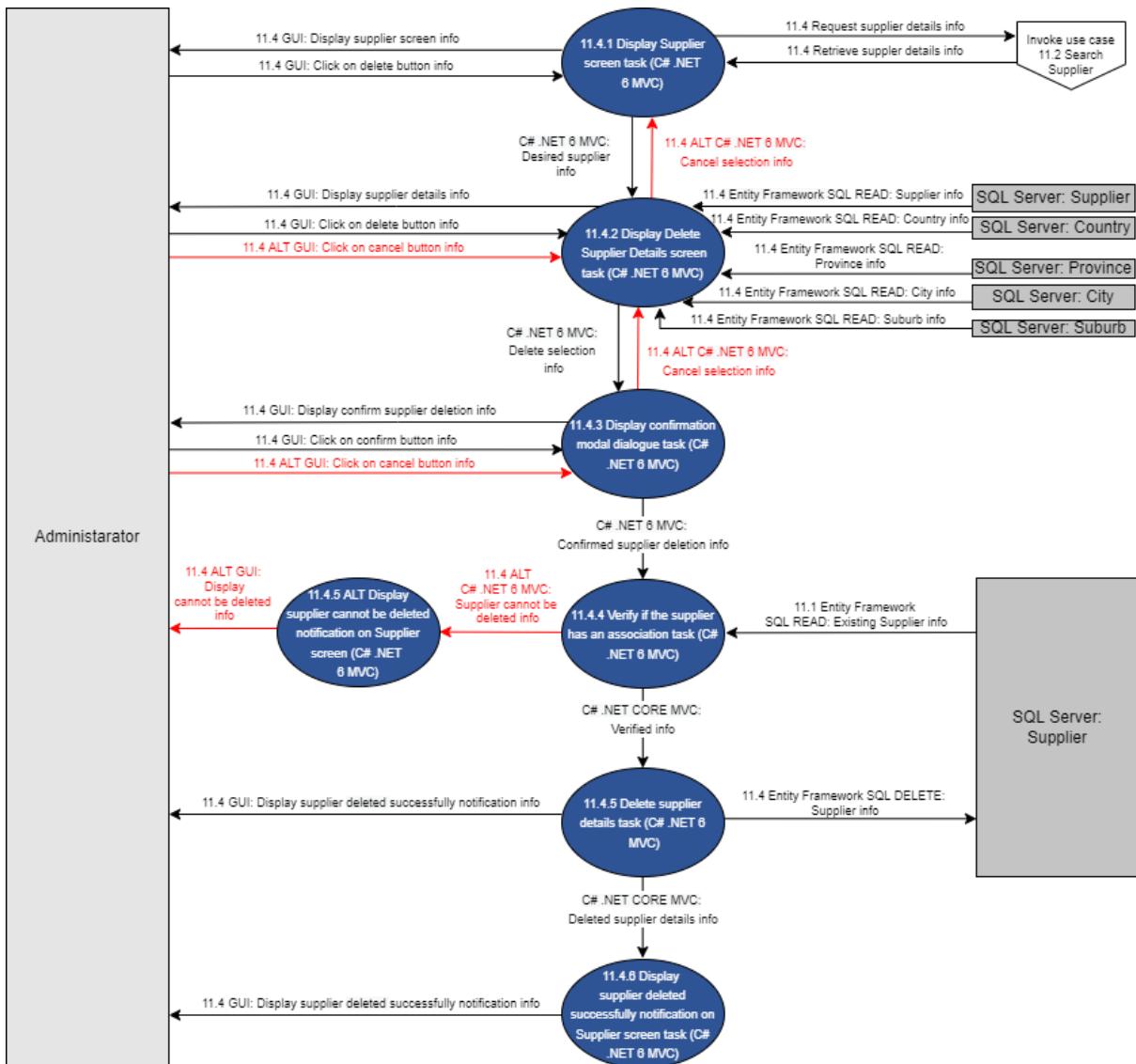


Figure 121- 11.4 Delete Supplier

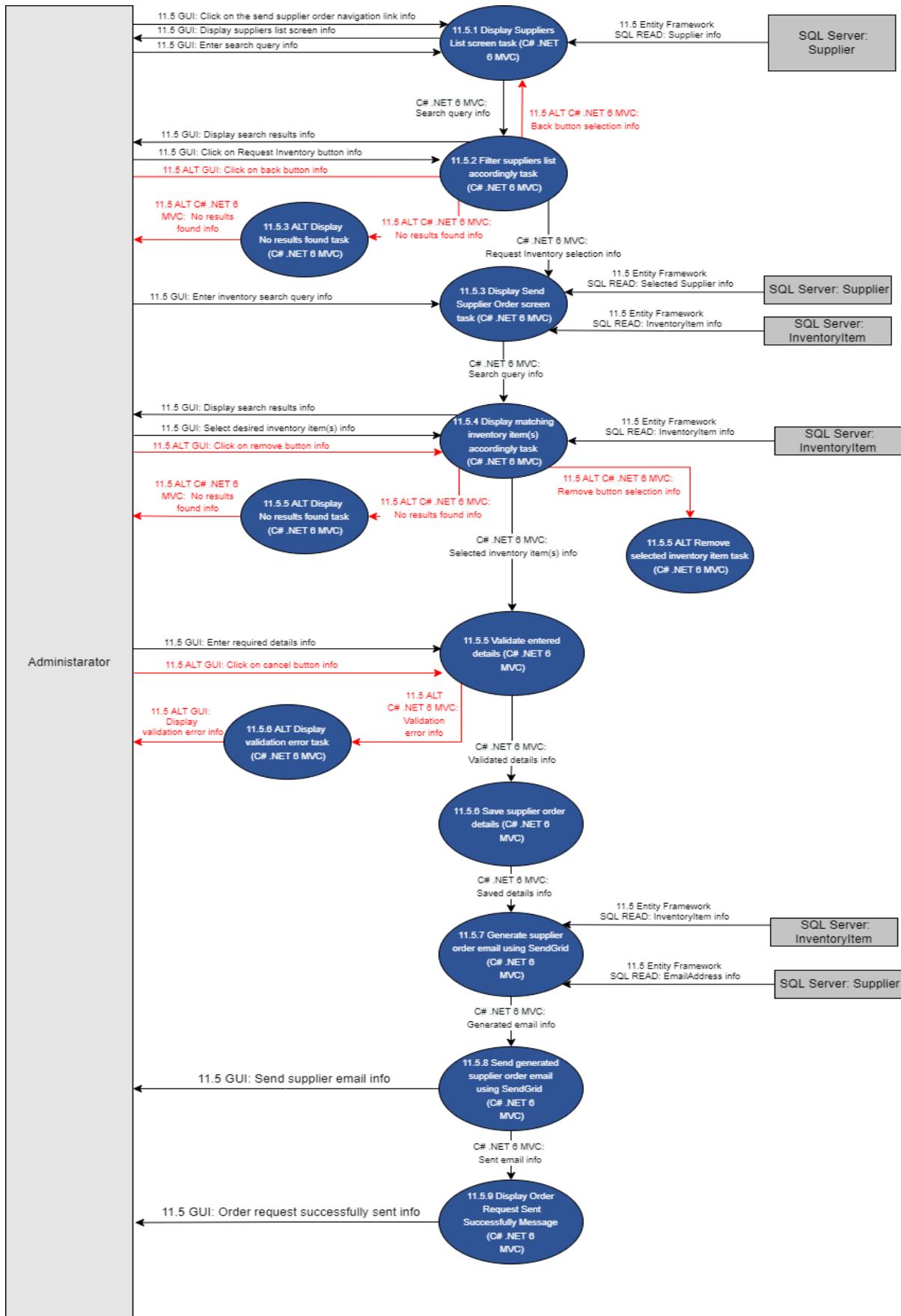


Figure 122- 11.5 Send Supplier Order



## 2.12. Driver Subsystem

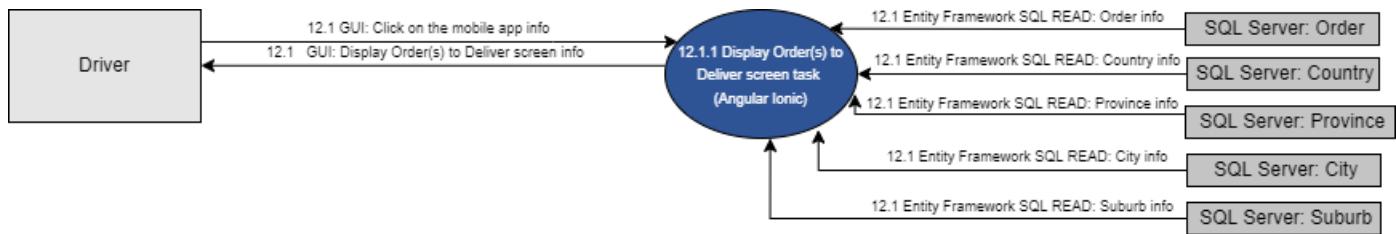


Figure 123- 12.1 View Deliveries

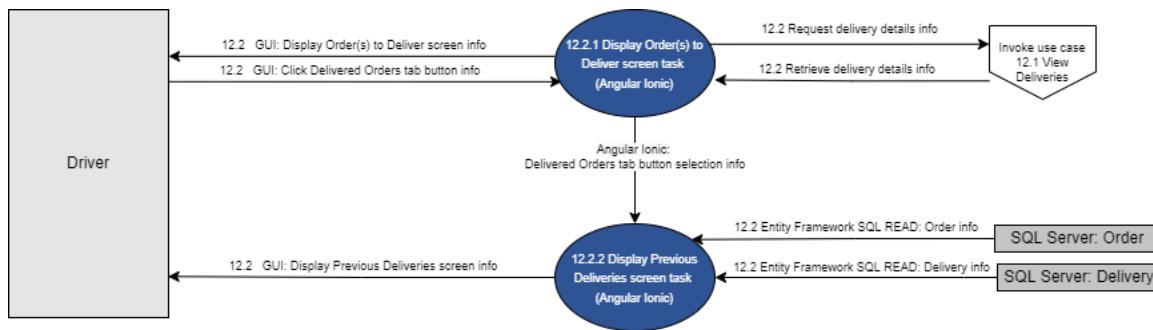


Figure 124- 12.2 View Previous Deliveries

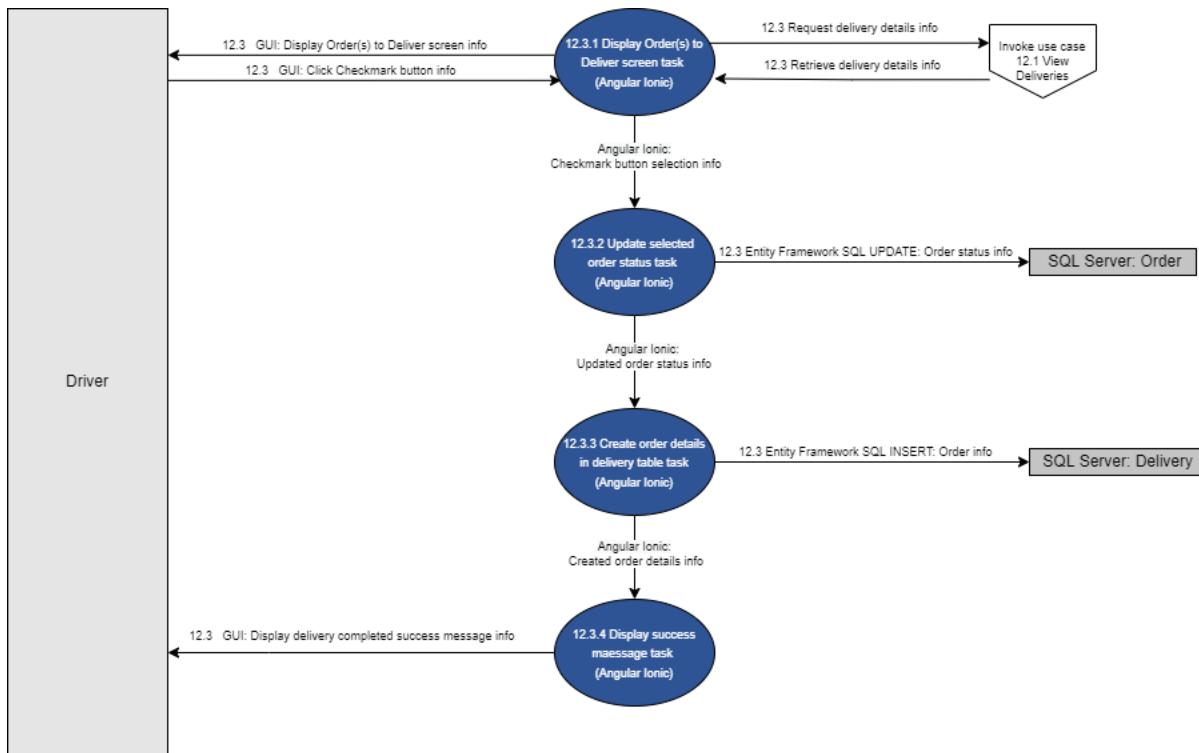


Figure 125- 12.3 Confirm Deliveries

## 2.13. VAT Subsystem

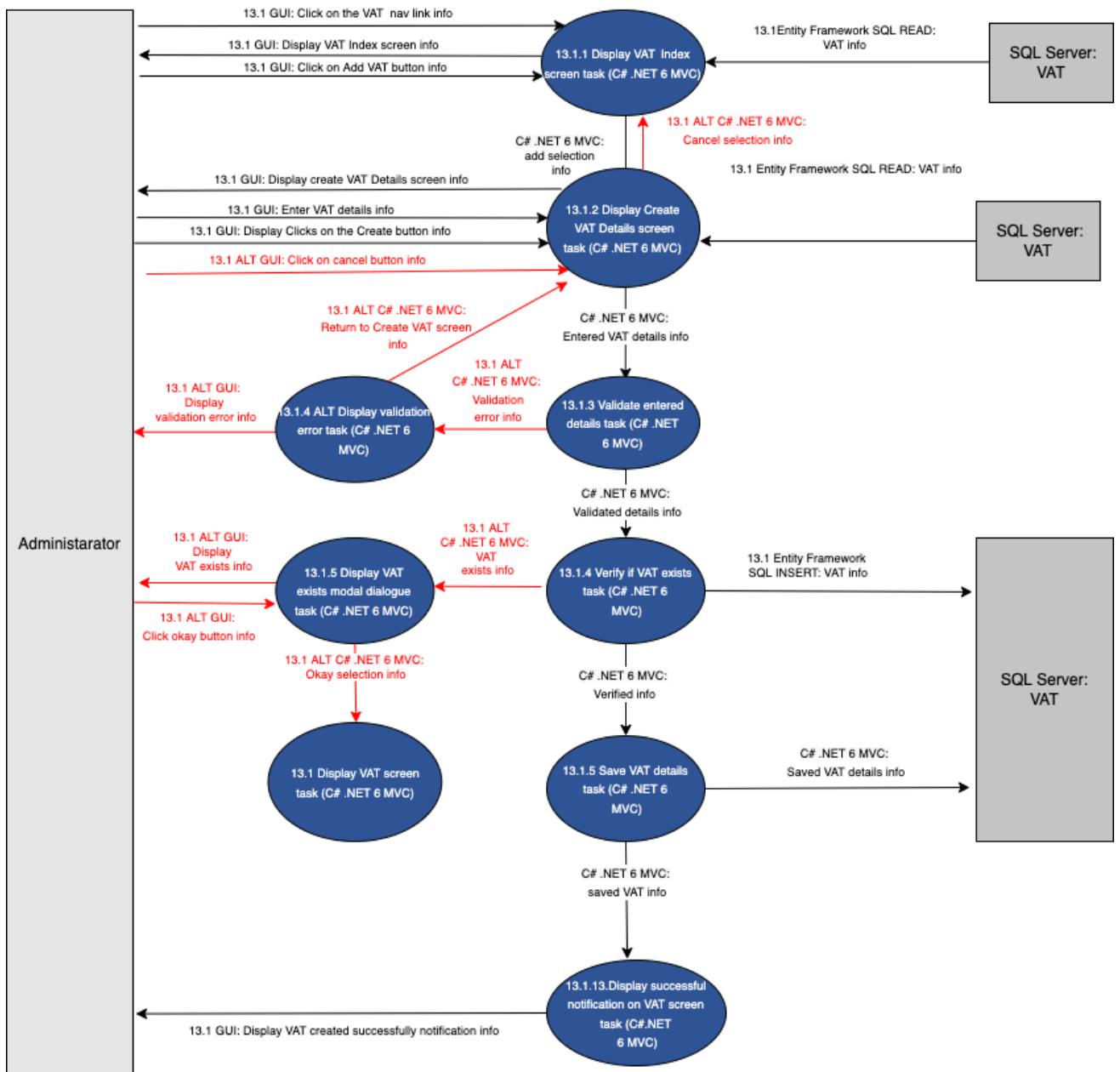


Figure 126- 13.1 Create VAT

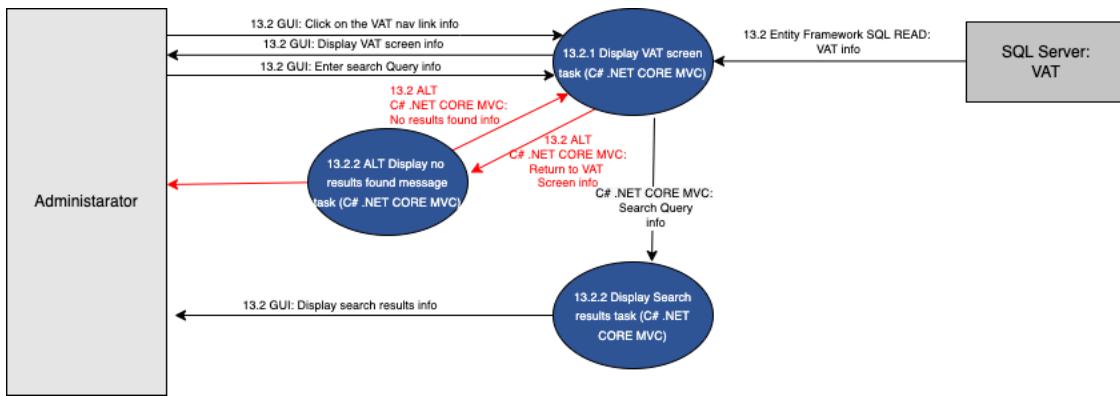


Figure 127- 13.2 Search VAT

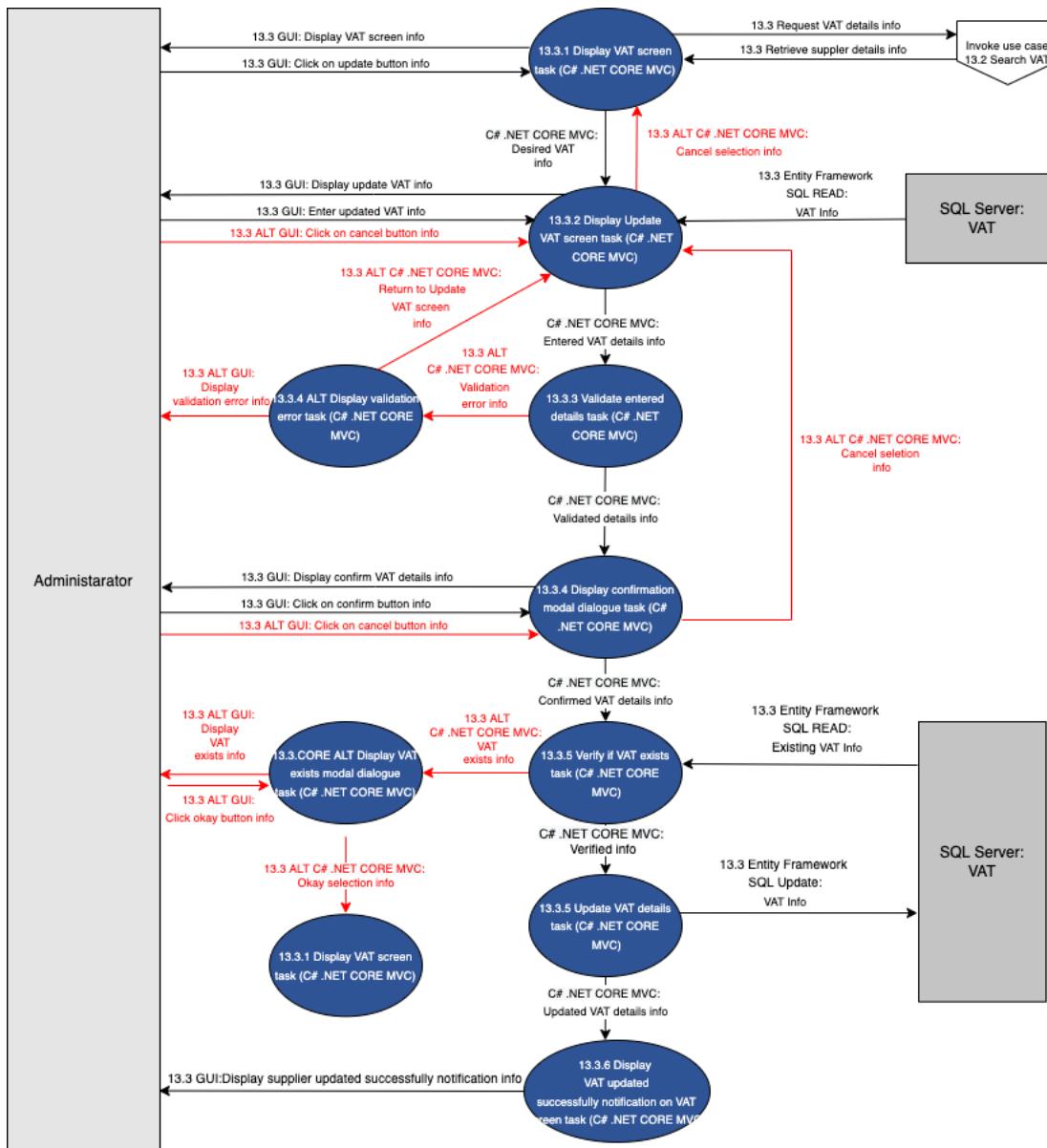


Figure 128- 13.3 Update VAT Details

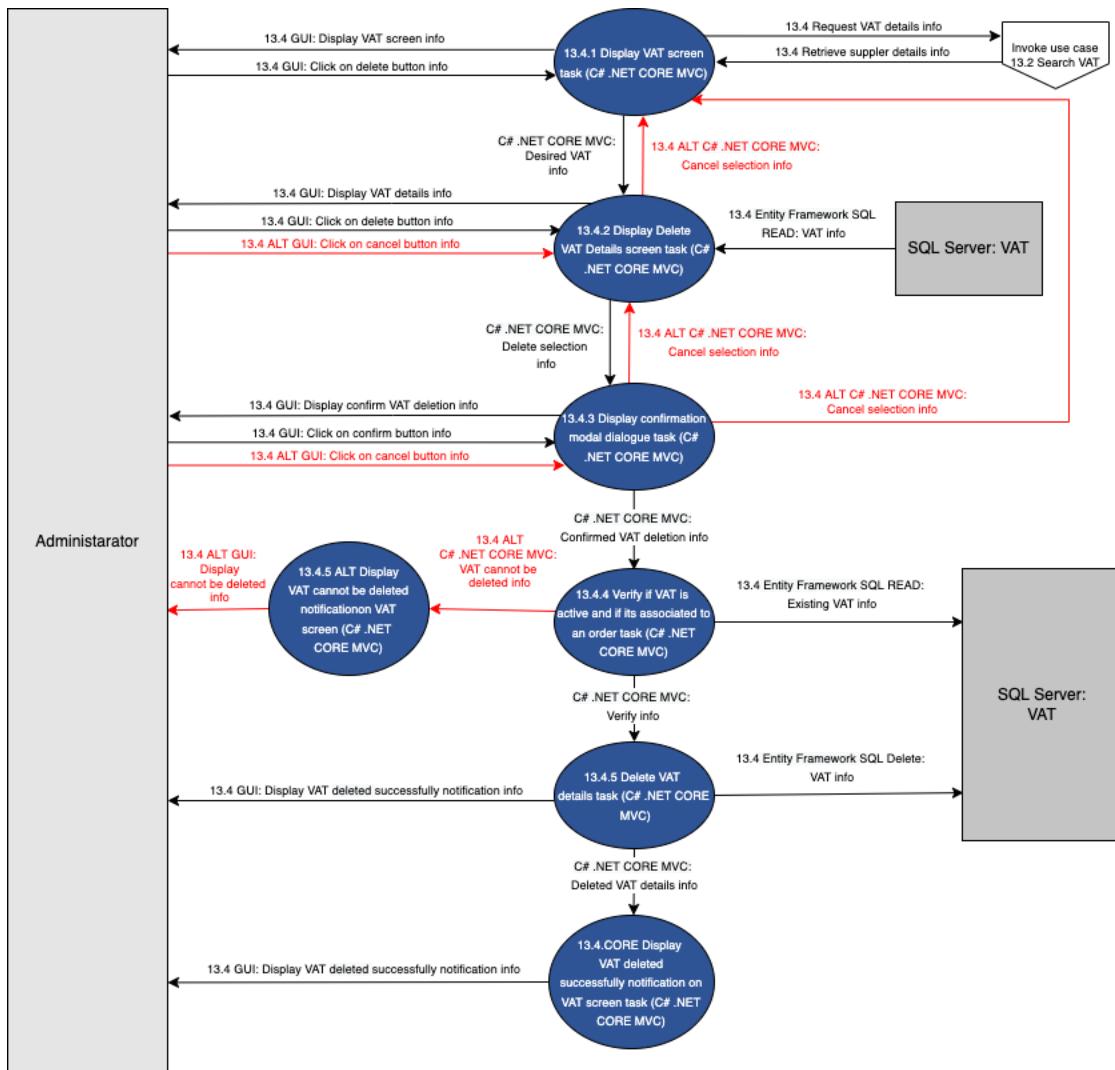


Figure 129- 13.4 Delete VAT



## 2.14. Reseller Credit Settlement Time Subsystem

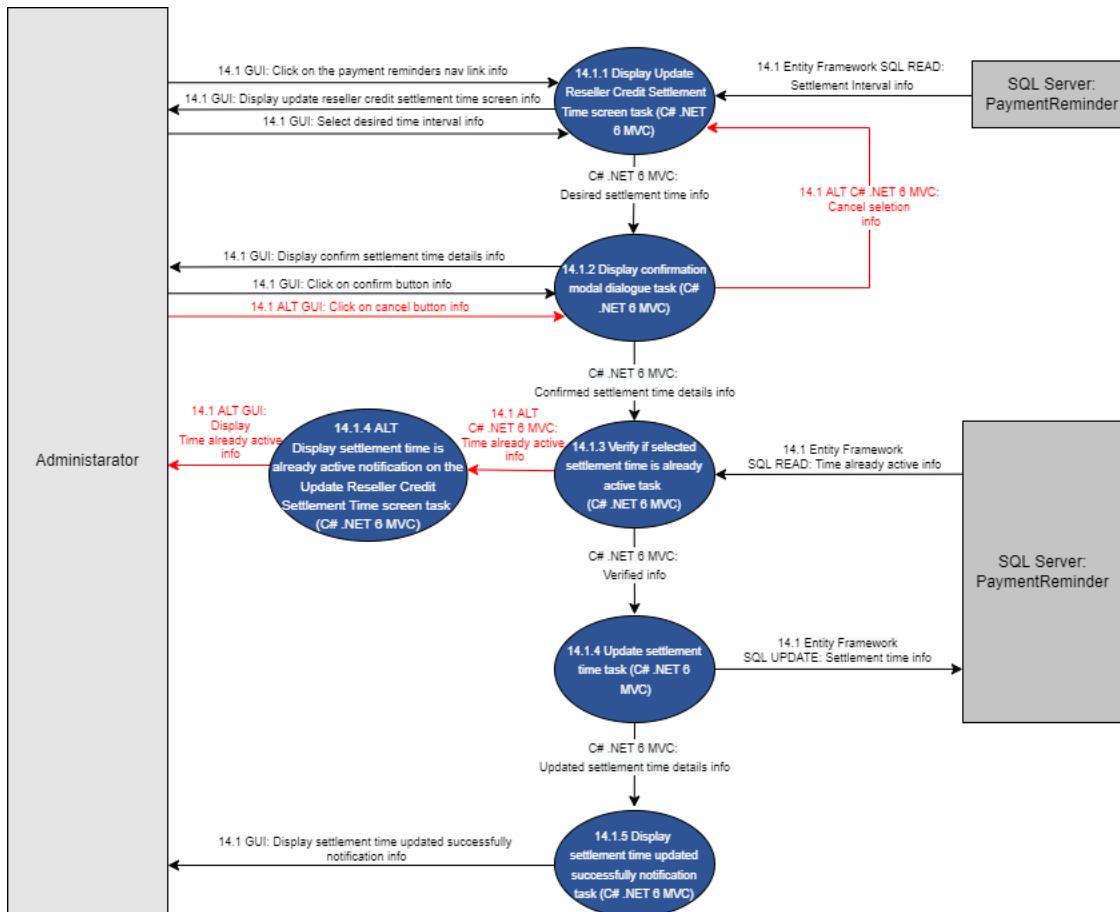


Figure 130- 14.1 Update Reseller Credit Settlement Time

## 2.15. Video Subsystem

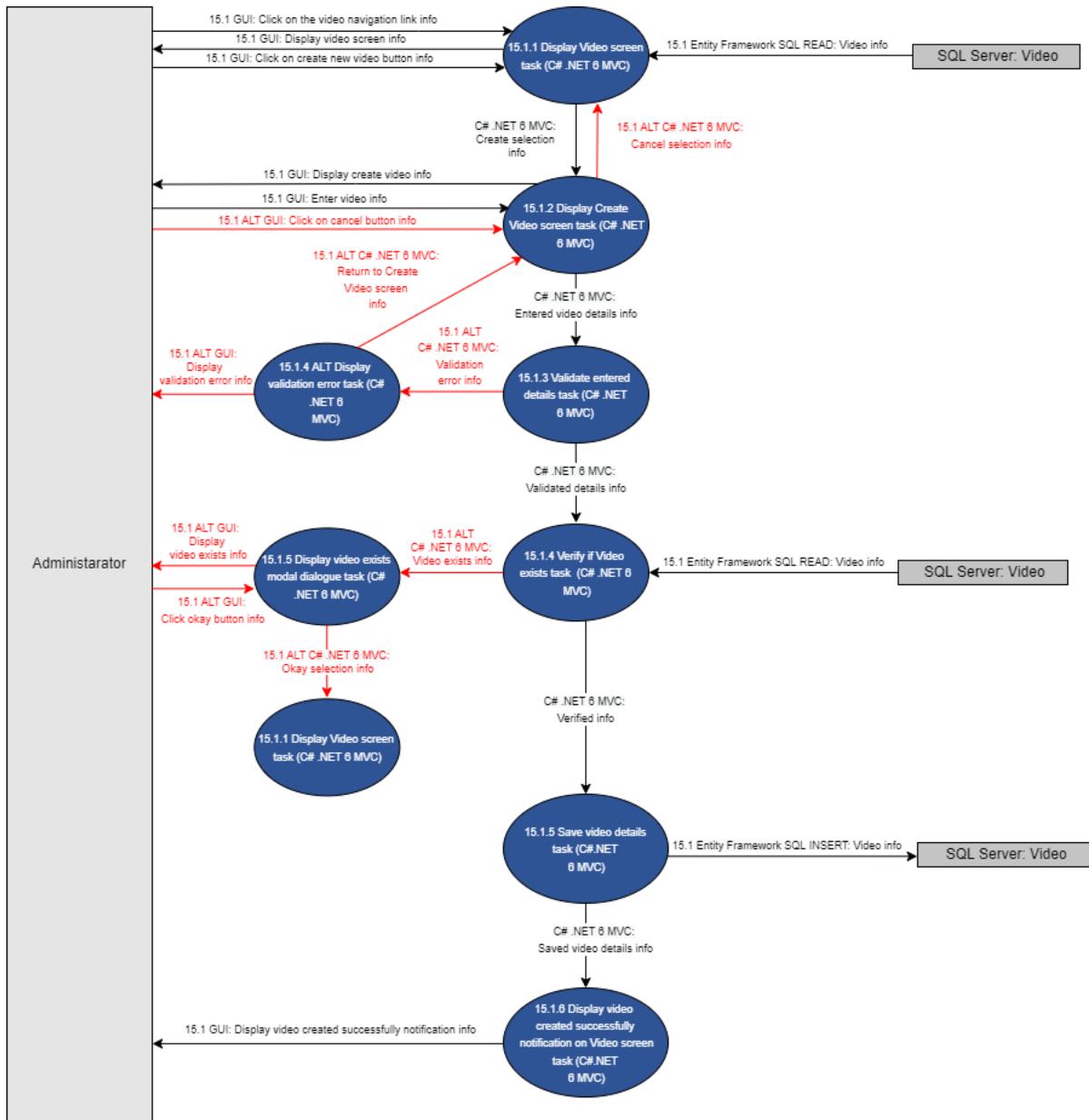


Figure 131- 15.1 Add Video

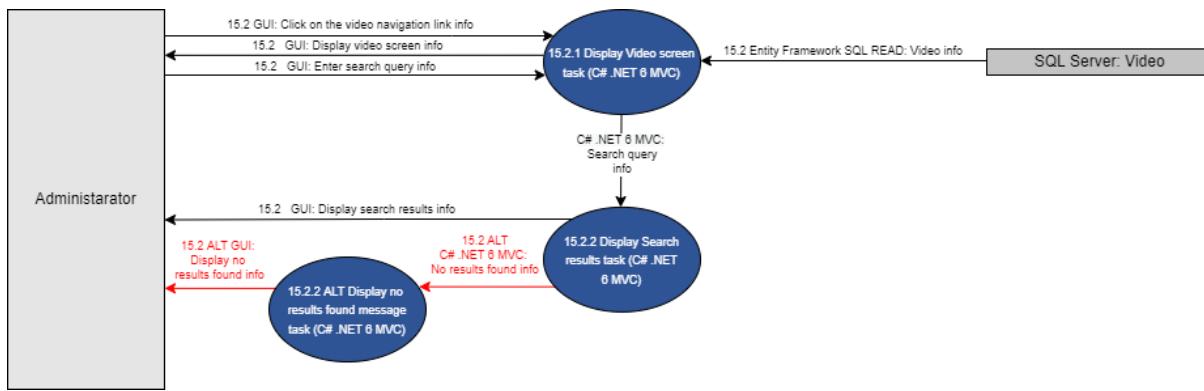


Figure 132- 15.2 Search Video

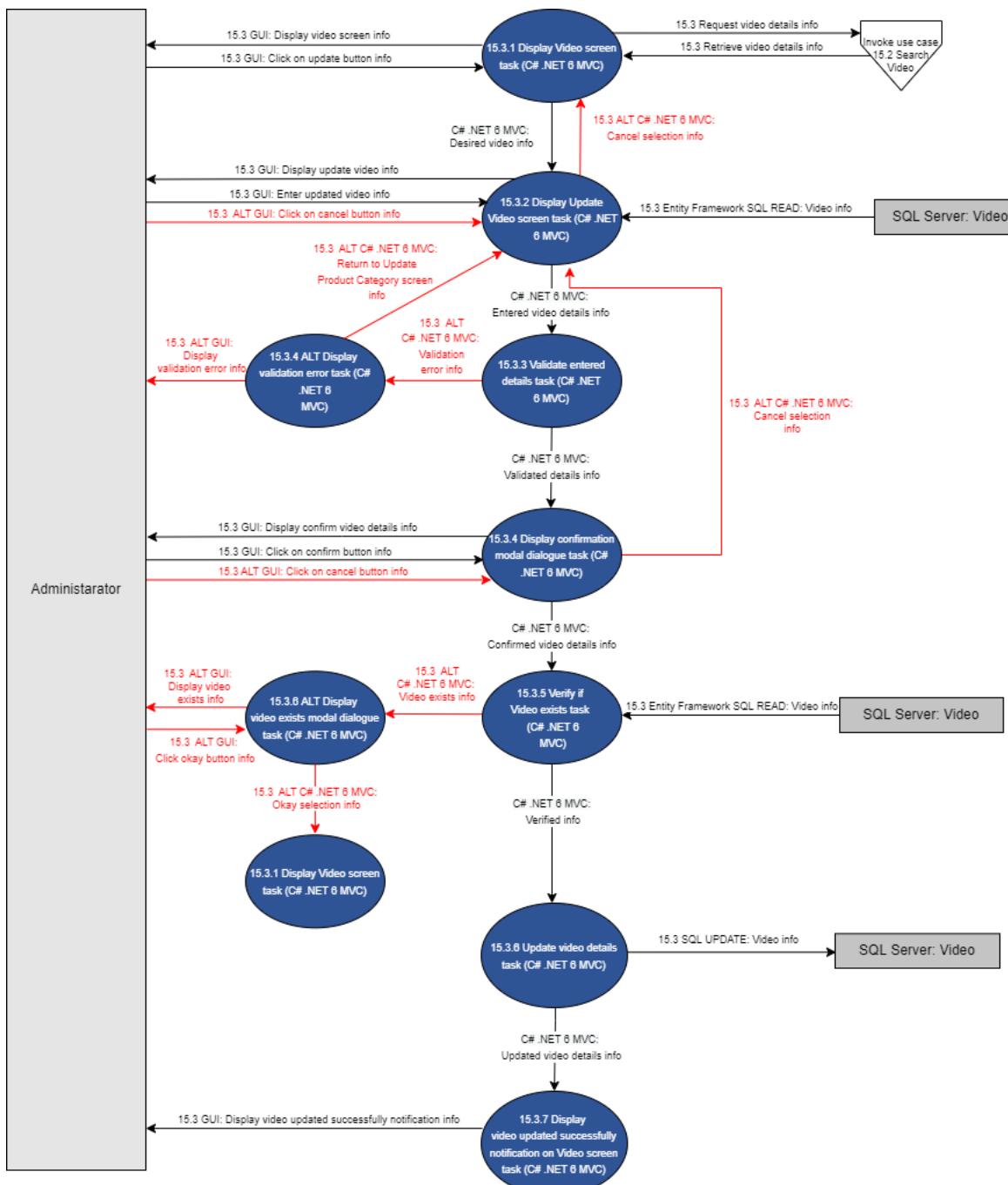


Figure 133- 15.3 Update Video

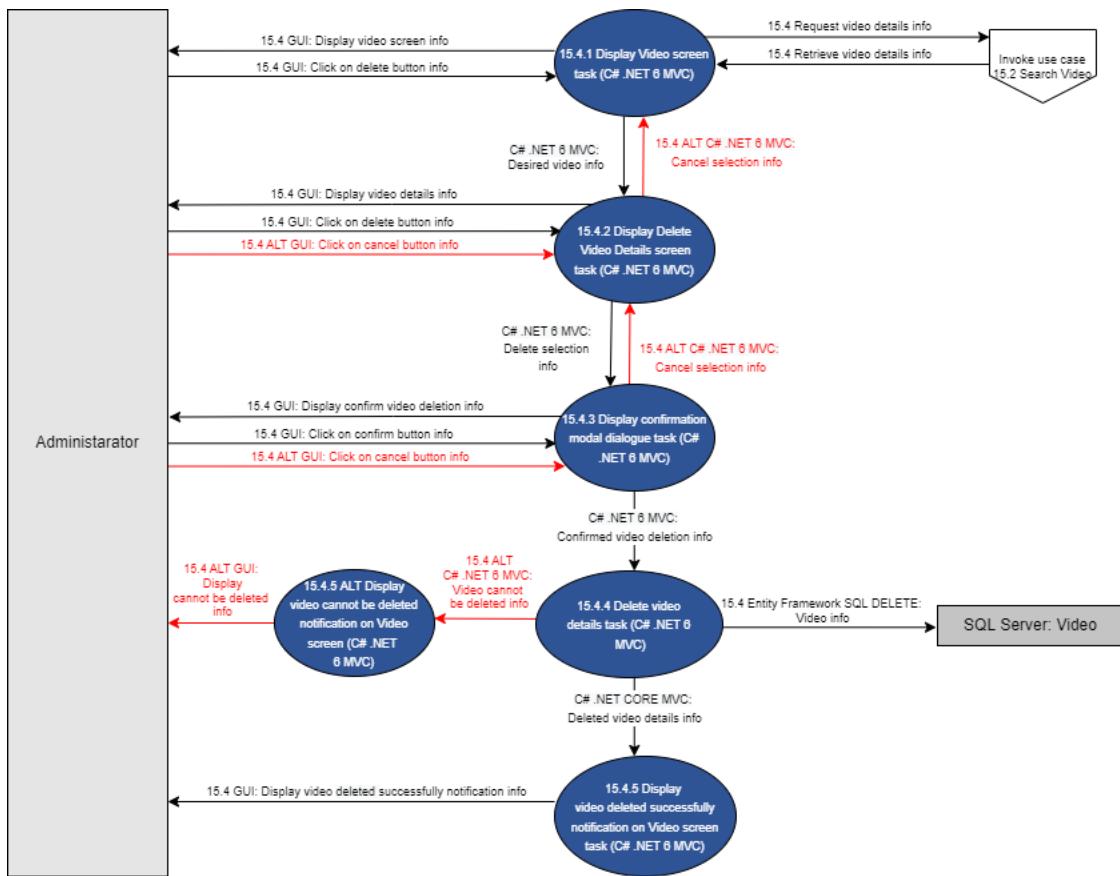


Figure 134- 15.4 Delete Video

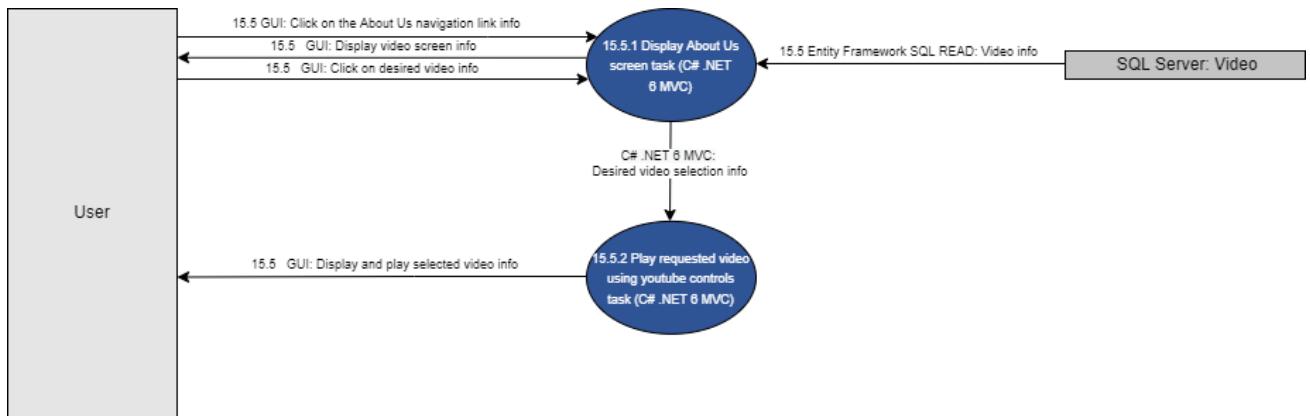


Figure 135- 15.5 View Video

## 2.16 Help Subsystem

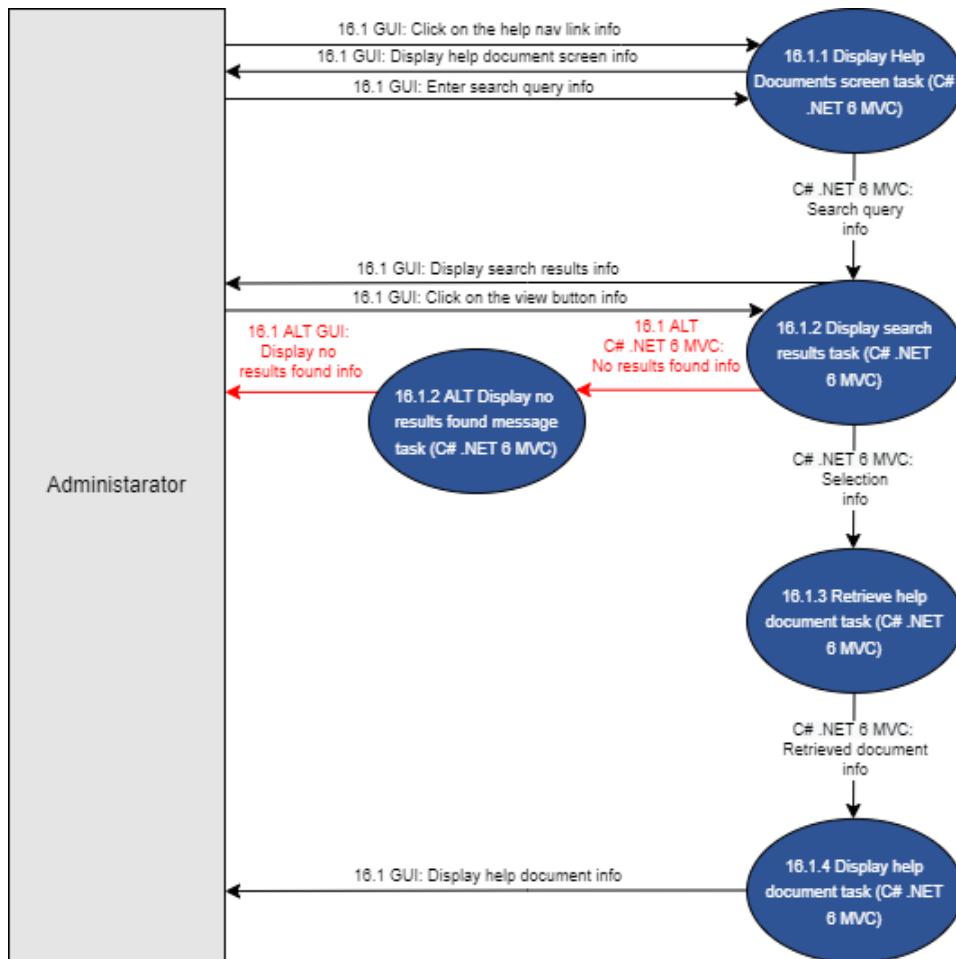


Figure 136- 16.1 View Help Document

## Conclusion

In conclusion the compiled iteration four document detailed the design and development of our ByteXecom E-commerce system. This document 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.

## 3. Iteration Conclusion

In conclusion the compiled iteration detailed the final documentation for the design and development of the ByteXecom E-commerce system. The documents contained 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 our use cases.