



Sri Lanka Institute of Information Technology

Online Pharmaceutical Ordering System for Healthymart Pharmacy

Project Report

Information Technology Project 2021

Project ID: ITP2021_S2_B05_G02

Submitted by:

1. IT20189594– Rathnayake R.K.A.R
2. IT20200206– Mallawarachchi S.M.A.
3. IT20148454– Dilshan A.J.Y.J
4. IT20191788– Wijesiriwardana H.G.N.D
5. IT20126292– Silva K.V
6. IT20124076– Manaram.M.G.T
7. IT20129576– Jayawardana J.K.M.D.T
8. IT20187132– Asahara G.A

Submitted to:

Name of the supervisor/lecturer

Date of submission

Declaration

We declare that this project report or part of it was not a copy of a document done by any organization, university any other institute or a previous student project group at SLIIT and was not copied from the Internet or other sources.

Project Details

| | |
|---------------|----------------------------------------------------------------|
| Project Title | Online Pharmaceutical Ordering System for Healthymart Pharmacy |
| Project ID | ITP2021_S2_B05_G02 |

Group Members

| | Registration Number | Name with Initials | Signature |
|----|---------------------|-------------------------|---------------------------------------------------------------------------------------|
| 1. | IT20189594 | Rathnayake R.K.A.R |  |
| 2. | IT20200206 | Mallawarachchi S.M.A. |  |
| 3. | IT20148454 | Dilshan A.J.Y.J |  |
| 4. | IT20191788 | Wijesiriwardana H.G.N.D |  |
| 5. | IT20126292 | Silva K.V |  |
| 6. | IT20124076 | Manaram.M.G.T |  |
| 7. | IT20129576 | Jayawardana J.K.M.D.T |  |
| 8. | IT20187132 | Asahara G.A |  |

Abstract

This project is about a web application developed for a pharmacy know as **Healthy-mart Pharmacy** which has 6 branches spread across the country, where the main branch resides in Colombo district. Having difficulties with the management of all branches, lower sales and safety problems with staff members and customers are some of problems project's client is currently facing due to the ongoing pandemic situation.

A web application with eight main functions was developed as a solution for above issues. This report will cover the full development of the project and contain in detailed information about each function.

Acknowledgement

We would like to express our deepest appreciation to everyone who gave us with crucial assistance and guidance in successfully finishing our project.

We would want to express our deepest gratitude to our lecturer in charge of Information Technology Ms.Geethanjali, our group lecturer Ms.Amali Gunasinghe and evaluator Mr.Pubudu Nallaperuma for inspiring us and providing the guidance to successfully prepare for this project.

In addition, we would like to express our heartfelt gratitude to Mr.S.M.B.Harshanath for providing us with invaluable assistance and caring supervision throughout the project, allowing us to successfully finish it.

Furthermore, we would like to thank our client Mr.Gehan Pathiraja, the owner of Healthy-Mart Pharmacy, for providing us with the opportunity and guiding us in producing this product.

All the group members contributed considerably, and their hard work, dedication and the strong team spirit are the reasons to successfully finish this product. We must also express our thanks to all parents of group members for their support and blessings in this pandemic situation. Finally, thank you to everyone who assisted us in completing this project successfully.

Table of Contents

| | |
|-------------------------------------------------|-------------------------------------|
| Abstract..... | i |
| Acknowledgement..... | iv |
| Declaration..... | i |
| Table of Contents | v |
| List of Figures..... | vi |
| List of Tables | Error! Bookmark not defined. |
| List of Acronyms and Abbreviations | ix |
| 1. Introduction..... | 1 |
| 1.1 Problem Statement..... | 1 |
| 1.2 Product Scope..... | 2 |
| 1.3 Project Report Structure | 5 |
| 2. Methodology | 6 |
| 2.1 Requirements and Analysis | 6 |
| 2.2 Design..... | 27 |
| 2.3 Implementation..... | 58 |
| 2.4 Testing | 59 |
| 3. Evaluation..... | Error! Bookmark not defined. |
| 3.1 Assessment of the Project results | Error! Bookmark not defined. |
| 3.2 Lessons Learned..... | Error! Bookmark not defined. |
| 3.3 Future Work..... | Error! Bookmark not defined. |
| 4. Conclusion | 69 |
| 5. References..... | 70 |
| Appendix A: Design Diagrams | 71 |
| Appendix B: Test Results | 72 |
| Appendix C: Selected Code Listings | 73 |

List of Figures

| | |
|-------------------------------------------------------------------------------------------|----|
| Figure 2.1.1.1 Use Case – Customer Handling..... | 6 |
| Figure 2.1.1.2 Use Case – Admin Access..... | 7 |
| Figure 2.1.1.3 Use Case – Drug Stock Handling..... | 8 |
| Figure 2.1.1.4 Use Case – Purchase an Item | 9 |
| Figure 2.1.1.5 Use Case – Drug Item Reservation..... | 10 |
| Figure 2.1.1.6 Use Case – Access Purchase History | 11 |
| Figure 2.1.1.7 Use Case – Delivery Management..... | 12 |
| Figure 2.1.1.8 Use Case – Manage Customer Inquiries and Feedback..... | 13 |
| Figure 2.1.2.1.a Activity Diagram – Customer Handling (Customer)..... | 14 |
| Figure 2.1.2.1.b Activity Diagram – Customer Handling (Admin) | 15 |
| Figure 2.1.2.2 Activity Diagram – Admin Access (Admin)..... | 16 |
| Figure 2.1.2.3 Activity Diagram – Drug Stock Handling (Admin) | 17 |
| Figure 2.1.2.4 Activity Diagram – Purchase an Items (Customer)..... | 18 |
| Figure 2.1.2.5.a Activity Diagram –Drug Item Reservation (Customer)..... | 19 |
| Figure 2.1.2.5.b Activity Diagram – Drug Item Reservation (Admin)..... | 20 |
| Figure 2.1.2.6.a Activity Diagram – Access Purchase History (Customer)..... | 21 |
| Figure 2.1.2.6.b Activity Diagram – Access Purchase History (Admin)..... | 22 |
| Figure 2.1.2.7.a Activity Diagram – Delivery Management (Customer)..... | 23 |
| Figure 2.1.2.7.b Activity Diagram – Delivery Management (Admin)..... | 24 |
| Figure 2.1.2.8.a Activity Diagram – Manage Customer Inquiries & Feedbacks (Customer)..... | 25 |
| Figure 2.1.2.8.b Activity Diagram – Manage Customer Inquiries & Feedbacks (Admin)..... | 26 |
| Figure 2.2.1 High-Level Architecture Diagrams..... | 27 |
| Figure 2.2.2 ER Diagram..... | 28 |
| Figure 2.2.3.1 User Interface- Customer Login (Customer)..... | 29 |
| Figure 2.2.3.2 User Interface- Customer Registration (Customer)..... | 29 |
| Figure 2.2.3.3 User Interface- Customer Edit Profile & Generate Report (Customer)..... | 30 |
| Figure 2.2.3.4 User Interface- Edit Profile (Customer)..... | 30 |
| Figure 2.2.3.5 User Interface- Retrieve All Registered Customers (Admin) | 31 |
| Figure 2.2.3.6 User Interface- Generated Report with All Customers (Admin)..... | 31 |
| Figure 2.2.3.7 User Interface- Customer Generated Report (Customer) | 32 |
| Figure 2.2.3.8 User Interface- Welcome Page for Administrator (Admin)..... | 33 |
| Figure 2.2.3.9 User Interface- Admin Login (Admin) | 33 |
| Figure 2.2.3.10 User Interface- Retrieve All Registered Sub Administrator's (Admin)..... | 33 |
| Figure 2.2.3.11 User Interface- Add Sub Administrators to the System (Admin) | 34 |
| Figure 2.2.3.12 User Interface- Update Sub Admin Data (Admin) | 34 |
| Figure 2.2.3.13 User Interface- Delete Registered Sub Admin from the System (Admin) | 34 |
| Figure 2.2.3.14 User Interface- Search Admin from the System (Admin)..... | 35 |
| Figure 2.2.3-15 User Interface- Admin Profile & System Logout Area (Admin)..... | 35 |

| | |
|------------------------------------------------------------------------------------------------|----|
| Figure 2.2.3-16 User Interface- Filtering & Generate Report (Admin)..... | 36 |
| Figure 2.2.3-17 User Interface- Generate Log Report (Admin)..... | 36 |
| Figure 2.2.3-18 User Interface- view Drug Stock (Admin) | 37 |
| Figure 2.2.3-19 User Interface- Retrieve All Stocks from the DB & Generate Report (Admin)..... | 37 |
| Figure 2.2.3-20 User Interface- Add New Stock Items (Admin)..... | 38 |
| Figure 2.2.3-21 User Interface- Update Stock Item Details (Admin)..... | 38 |
| Figure 2.2.3-22 User Interface- Generate Stock Report (Admin) | 39 |
| Figure 2.2.3-23 User Interface- Add Items to Cart (Customer)..... | 40 |
| Figure 2.2.3-24 User Interface- Empty Cart Activity (Customer) | 40 |
| Figure 2.2.3-25 User Interface- Customers Purchase Order List (Customer)..... | 41 |
| Figure 2.2.3-26 User Interface- Generate Customer Invoice (Customer)..... | 41 |
| Figure 2.2.3-27 User Interface- Successfully Downloaded Status of the Invoice (Customer) | 42 |
| Figure 2.2.3-28 User Interface- Upload Prescription (Customer) | 43 |
| Figure 2.2.3-29 User Interface- Upload Prescription Validation (Customer) | 43 |
| Figure 2.2.3-30 User Interface- Upload Successful Status (Customer)..... | 43 |
| Figure 2.2.3-31 User Interface- Change Details of the Uploaded Prescription (Customer)..... | 44 |
| Figure 2.2.3-32 User Interface- Retrieve All Uploaded Prescription (Admin)..... | 44 |
| Figure 2.2.3-33 User Interface- Decide Validation of the Uploaded Prescription (Admin)..... | 44 |
| Figure 2.2.3-34 User Interface- Invalid Prescription Table (Admin)..... | 45 |
| Figure 2.2.3-35 User Interface- Invalid Prescription Details (Admin)..... | 45 |
| Figure 2.2.3-36 User Interface- Valid Prescription Table (Admin)..... | 45 |
| Figure 2.2.3-37 User Interface- Valid Prescription Detail (Admin) | 46 |
| Figure 2.2.3-38 User Interface- Generate Report Area (Admin)..... | 46 |
| Figure 2.2.3-39 User Interface- Generate Prescription Summery Report (Admin)..... | 46 |
| Figure 2.2.3-40 User Interface- Customer Favorite Item List (Customer)..... | 47 |
| Figure 2.2.3-41 User Interface- Customer Transaction History List (Customer) | 47 |
| Figure 2.2.3-42 User Interface- Search Specific Customers in Admin Panel (Admin) | 47 |
| Figure 2.2.3-43 User Interface- Generate Customer Transaction History Report (Admin)..... | 48 |
| Figure 2.2.3-44 User Interface- Generate Report Area (Admin)..... | 48 |
| Figure 2.2.3-45 User Interface-Get Customer Location & Order Detail Summery (Customer)..... | 49 |
| Figure 2.2.3-46 User Interface- Add Optional Location Details (Customer)..... | 49 |
| Figure 2.2.3-47 User Interface- Update Optional Details (Customer)..... | 50 |
| Figure 2.2.3-48 User Interface- Update & Comfirm Location Information (Customer) | 50 |
| Figure 2.2.3-49 User Interface- Retrieve All Customer Order Details (Admin)..... | 51 |
| Figure 2.2.3-50 User Interface- Filter & generate Report Area (Admin)..... | 51 |
| Figure 2.2.3-51 User Interface- Generate Delivery Report (Admin)..... | 52 |
| Figure 2.2.3-52 User Interface- Generated Delivery Report (Admin)..... | 52 |
| Figure 2.2.3-53 User Interface- Add Customer Inquiry (Customer)..... | 53 |
| Figure 2.2.3-54 User Interface- Add Customer Feedback (Customer)..... | 53 |
| Figure 2.2.3-55 User Interface- Edit & Delete Customer Inquiries (Customer)..... | 53 |

| | |
|-----------------------------------------------------------------------------------------|----|
| Figure 2.2.3-56 User Interface- Edit Customer Inquiry Inputs (Customer)..... | 54 |
| Figure 2.2.3-57 User Interface- Event Management Conference details (Customer)..... | 54 |
| Figure 2.2.3-58 User Interface- Event Management Wedding details (Customer)..... | 66 |
| Figure 2.2.3-59 User Interface- Event Management User profile (Customer) | 67 |
| Figure 2.2.3-60 User Interface- Event Management Book a party (Customer)..... | 67 |
| Figure 2.2.3-61 User Interface- Event Management Book a wedding (Customer) | 68 |
| Figure 2.2.3-62 User Interface- Event Management Book a conference (Customer)..... | 68 |
| Figure 2.2.3-63 User Interface- Event Management View event (Customer) | 69 |
| Figure 2.2.3-64 User Interface- Menu Management Menu card (Customer) | 70 |
| Figure 2.2.3-65 User Interface- Menu Management Search food name (Customer)..... | 71 |
| Figure 2.2.3-66 User Interface- Menu Management Menu management dashboard (Admin)..... | 72 |
| Figure 2.2.3-67 User Interface- Menu Management Menu category page (Admin) | 72 |
| Figure 2.2.3-68 User Interface- Menu Management New category (Admin)..... | 73 |
| Figure 2.2.3-69 User Interface- Menu Management Food item page (Admin)..... | 73 |
| Figure 2.2.3-70 User Interface- Menu Management Add new food form (Admin) | 74 |
| Figure 2.2.3-71 User Interface- Menu Management Food details update (Admin)..... | 74 |
| Figure 2.2.3-72 User Interface- Menu Management Generate report (Admin)..... | 75 |
| Figure 2.2.3-73 User Interface- Transport Management Packages page (Customer)..... | 76 |
| Figure 2.2.3-74 User Interface- Transport Management Transport packages (Admin)..... | 76 |
| Figure 2.2.3-75 User Interface-Inventory Management Inventory list (Admin) | 77 |
| Figure 2.2.3-76 User Interface- Inventory Management Add new item (Admin)..... | 78 |
| Figure 2.2.3-77 User Interface- Inventory Management Update inventory list (Admin)..... | 78 |
| Figure 2.2.3-78 User Interface- Inventory Management Search item (Admin)..... | 79 |
| Figure 2.2.3-79 User Interface- Inventory Management Inventory report (Admin)..... | 79 |

List of Acronyms and Abbreviations

| Abbreviation | Description |
|--------------|---------------------------------------|
| ER | Entity Relation |
| DB | Database |
| UI | User Interface |
| ITP | Information Technology Project |

1. Introduction

1.1 Problem Statement

Because of the rapid growth of Covid 19 patients in the country, consumerism of medicine in local pharmacies have increased. Because of that it is hard to maintain the social distance among customers. Therefore, there's a huge risk of increasing the chances of virus spreading.

As for the safety reasons the owner of the pharmacy has been decided to limit the employees in each branch therefore the company's service efficiency has reduced. This is negatively affecting company's economy.

As the pharmacy branch network is quite large, there is difficulty in management due to this pandemic situation.

1.1.1 Solutions

Due to these reasons, we are planning to handle pharmacy procedure through a web base application. Therefore, this system will be created concerning the safety of citizens due to the prevailing Covid 19 pandemic in the country, further maintaining and controlling social distance in order to prevent the growth of the virus.

1.1.2 Benefits

- This system will help to ease up the business management and will improve sales that have been dropped.
- Company owner can easily manage every branch through the system, thus reducing the time waste.
- Overall pharmacy activities will be efficient.
- Because this is an online system, whole managing processes can be done by a limited number of employees. Therefore, additional costs will be reduced.
- Customers can safely order their drug items and can be delivered to their doorstep easily.

1.2 Product Scope

As mentioned above, this web application was developed to overcome with the customer's issues.

This application containing main 8 system functionalities. That are,

- a. Customer handling
- b. Admin access
- c. Drug stock handling
- d. Purchase an item
- e. Drug item reservation
- f. Access purchase history
- g. Item delivery
- h. Manage customer inquiries and feedbacks

1.2.1 Customer Handling

In this web application, customers can login to the system after the initial registration. Customers can edit their profile details and a report can be generated based on their profile details. During registration and login process, all customer Inputs are checked and validated by the system. As for admins, they can make changes to users profiles such as update or delete according to users request. Admins can access specific profile info by searching customers name, and report can be generated based on those details.

1.2.2 Admin Access

According to the developed web application, each subbranch has an admin (sub-admin), all subbranches are handle by their head admin (System owner). When head of admin login to the system he/she can add or update sub administrator's profile details to the system and each sub admins can update their activity details from the system (login details, profile details, etc...). Head of admin can generate an admin log report for get information about the login activities and remove sub administrators from the system.

1.2.3 Drug Stock Handling

Drug stock handling function has been developed for the admin side of this web application. Admin can add, Update, delete and search any products withing this function. Also admin can generate two main reports from drug stock handling side. Those are availability report and summary report. Admin can check availability and total details by generating these reports.

1.2.4 Purchase An Item

In this function, a customer can add items to the cart or search items from the system UI. Added Item quantity can be changed, or those items can be completely removed from the cart. Finally, an invoice will be automatically generated for the order by the system.

1.2.5 Drug Item Reservation

If a customer needs to purchase drugs prescribed by the doctor, then for those customers can easily upload their prescriptions to the system. A pharmacy staff member(admin) can access those uploaded prescriptions and send drugs items to those customers. Also, customers can either delete or edit their uploaded prescriptions. Admins can search and view customer's uploaded prescriptions. After inspecting each prescription, admin can mark those prescriptions as faulty or valid. All prescriptions can be sorted out as pending, valid or invalid, and admins can generate a report based on that.

1.2.6 Access Purchase History

Basically, that function is access purchase history. Customers can re-order or add item to the favorite list. Through the favorite list customer can update, remove, search and add that items to the cart. Here also admin can search specific customer details and admin can generate report as a pdf.

1.2.7 Item Delivering

System retrieved customers default location details and order summary to deliver the order. The customer has the ability to add and update optional details. All the optional details of the customers in the admin panel have been retrieved in a table. And also all the orders and location details of the customers are retrieved in a table. The admin has the ability to delete the details of both the optional details and the order table if required. System will generate a finalized customer's location report using order table (used by delivery person).

1.2.8 Manage Customer Inquiries & Feedbacks

In Manage Inquiries and Feedbacks there are two main functions, 1st function is Inquiry and 2nd function is Feedback. In the Inquiry section customers can add inquiries. Those added inquiries can be edited or deleted. In feedback section, customers can add feedbacks according to their satisfaction with the service. As for the admin part admins can see all inquiries and feedbacks on admin's panel and admin can view, Delete inquiries and feedback separately. Also, admin can generate inquiry report. In the admin panel, admin can search inquiries and feedback separately.

1.3 Project Report Structure

Introduction:

This section is focused on information about client's background. All clients' issues and solutions for those issues are discussed in this section.

Methodology:

This methodology is consisting of four main sub-sections namely,

1. Requirement Analysis
2. Design
3. Implementation
4. Testing

The first phase, Requirement Analysis consists with two diagrams, Use case diagram and Activity diagram. These diagrams show the dynamic behavior of the system. Requirement of the stakeholders for the project is also covered in this phase. The Design phase is consisting of System overview, ER diagram, and User Interfaces which represents the design aspect of the system. Implementation phase describes about implementation of the web application, database information, tools and technology used to develop this project. The Testing phase consists of all the test cases done for each function of the system and outcomes for the test cases.

2. Methodology

2.1 Requirements and Analysis

2.1.1.1 Use Case Diagram for Customer Handling

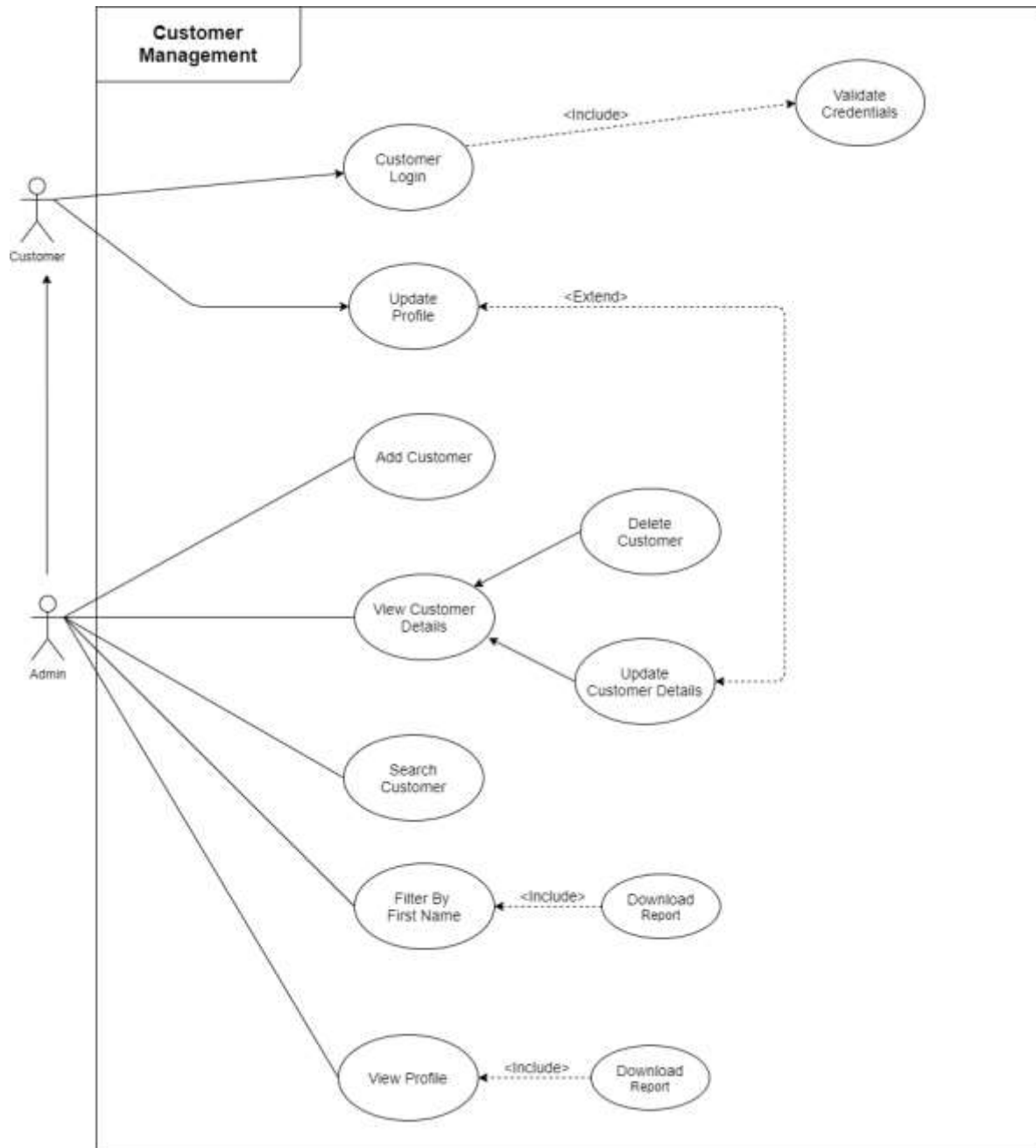


Figure - 2.1.1.1 Use Case Diagram for Customer Handling

2.1.1.2 Use Case Diagram for Admin Access

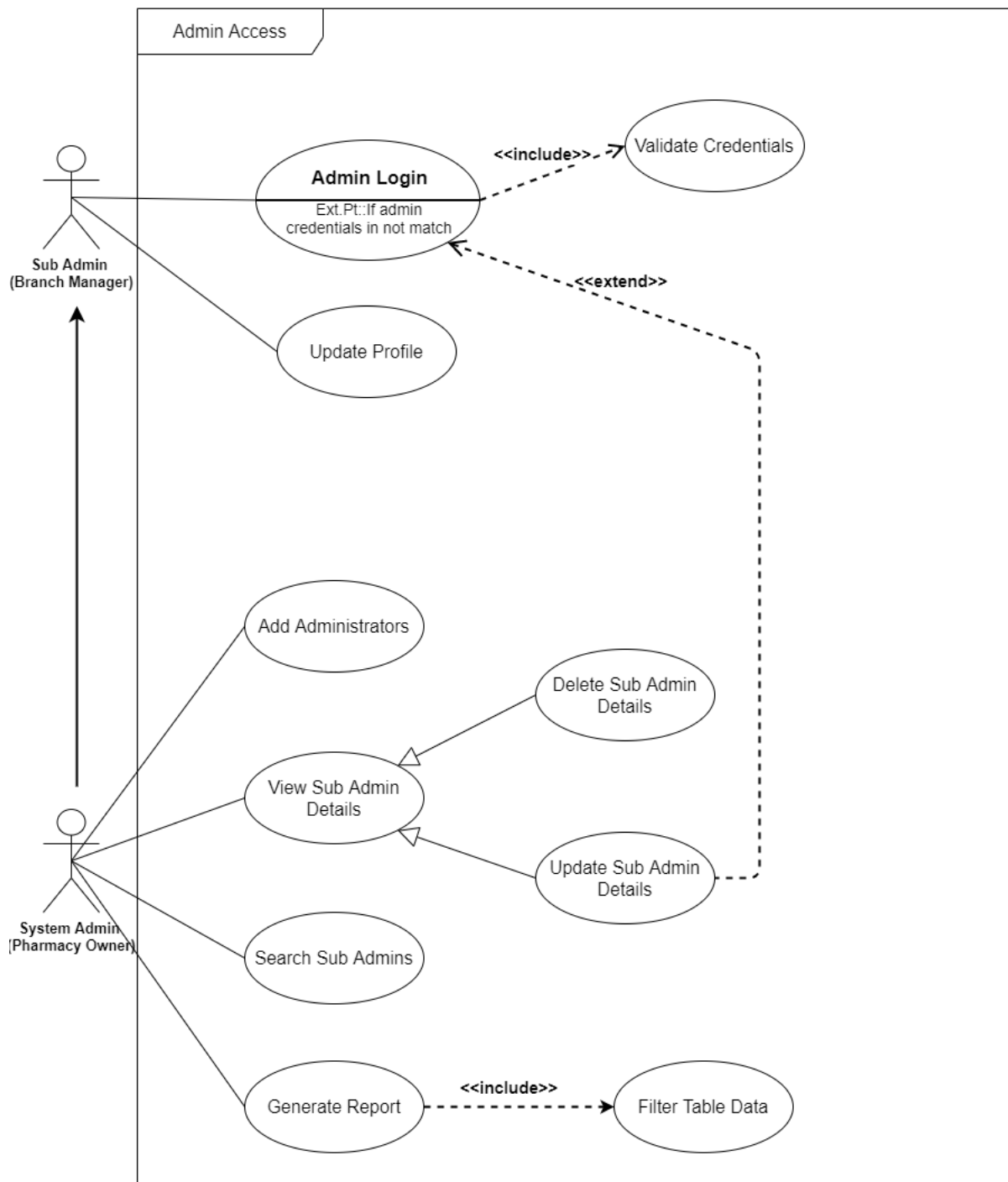


Figure - 2.1.1.2 Use Case Diagram for Admin Access

2.1.1.3 Use Case Diagram for Drug Stock Handling

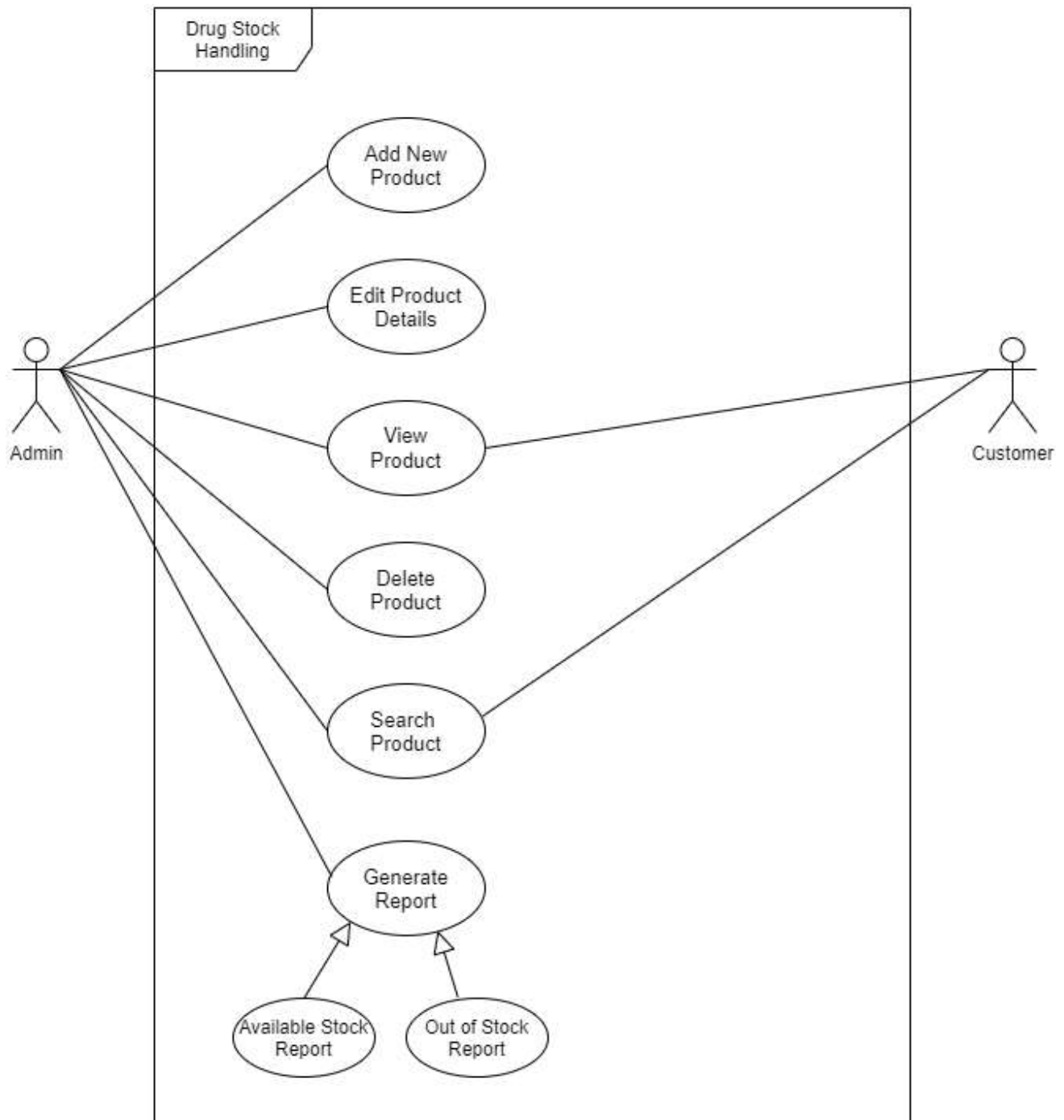


Figure - 2.1.1.3 Use Case Diagram for Drug Stock Handling

2.1.1.4 Use Case Diagram for Purchase an item

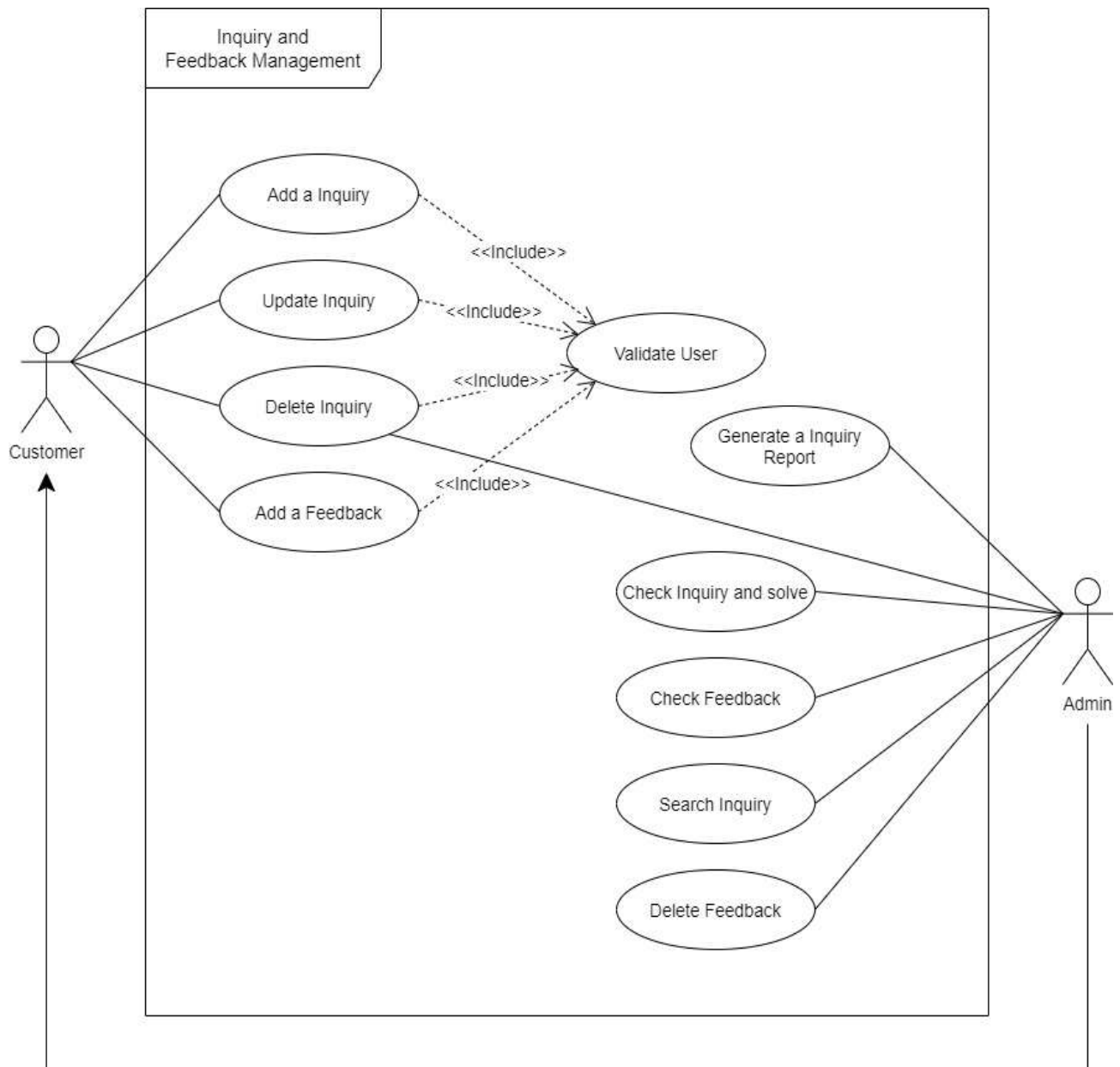


Figure - 2.1.1.4 Use Case Diagram for Purchase an item

2.1.1.5 Use Case Diagram for Drug Item Reservation



Figure - 2.1.1.5 Use Case Diagram for Drug Item Reservation

2.1.1.6 Use Case Diagram for Access Purchase History

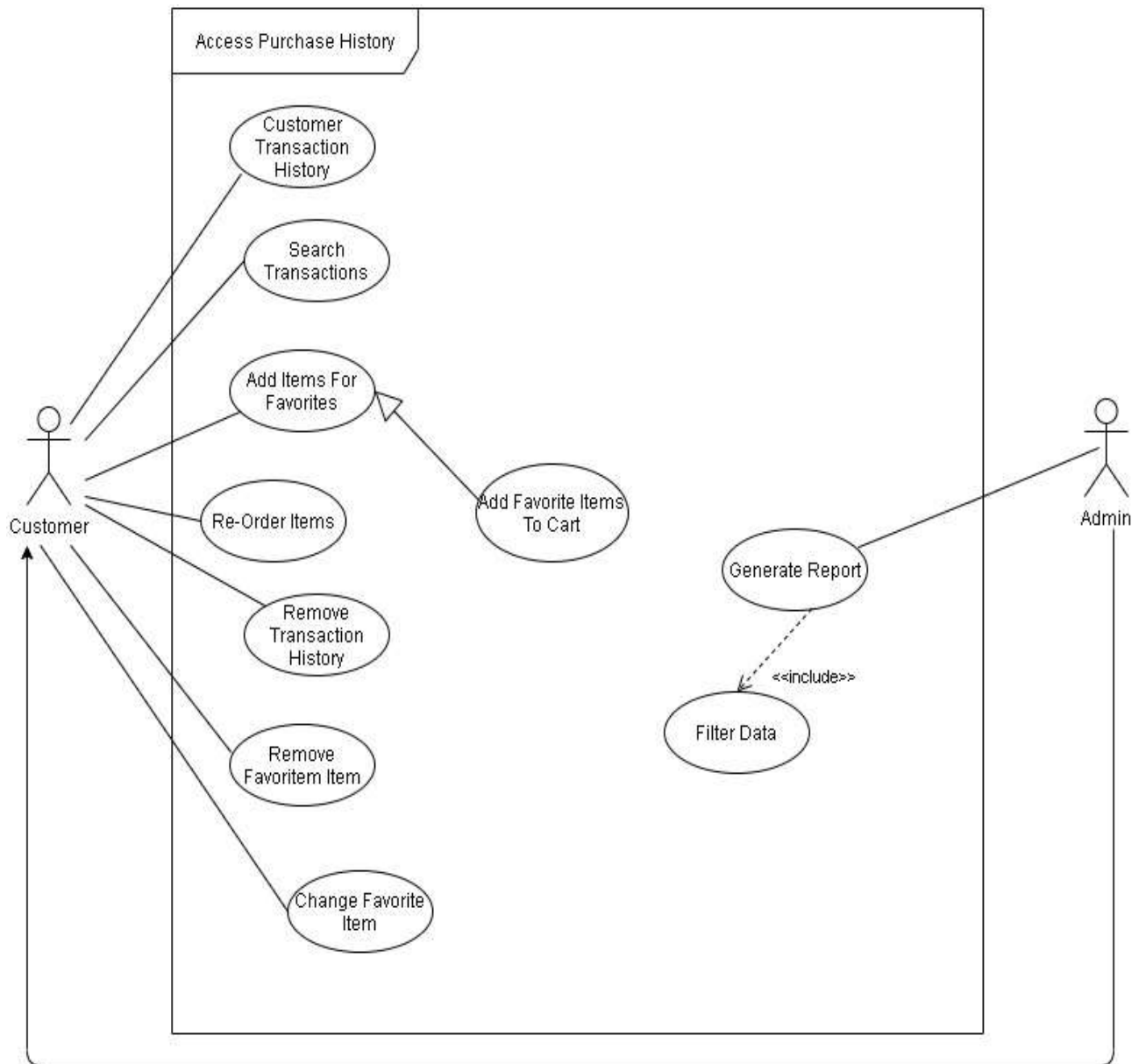


Figure - 2.1.1.6 Use Case Diagram for Access Purchase History

2.1.1.7 Use Case Diagram for Delivery Management

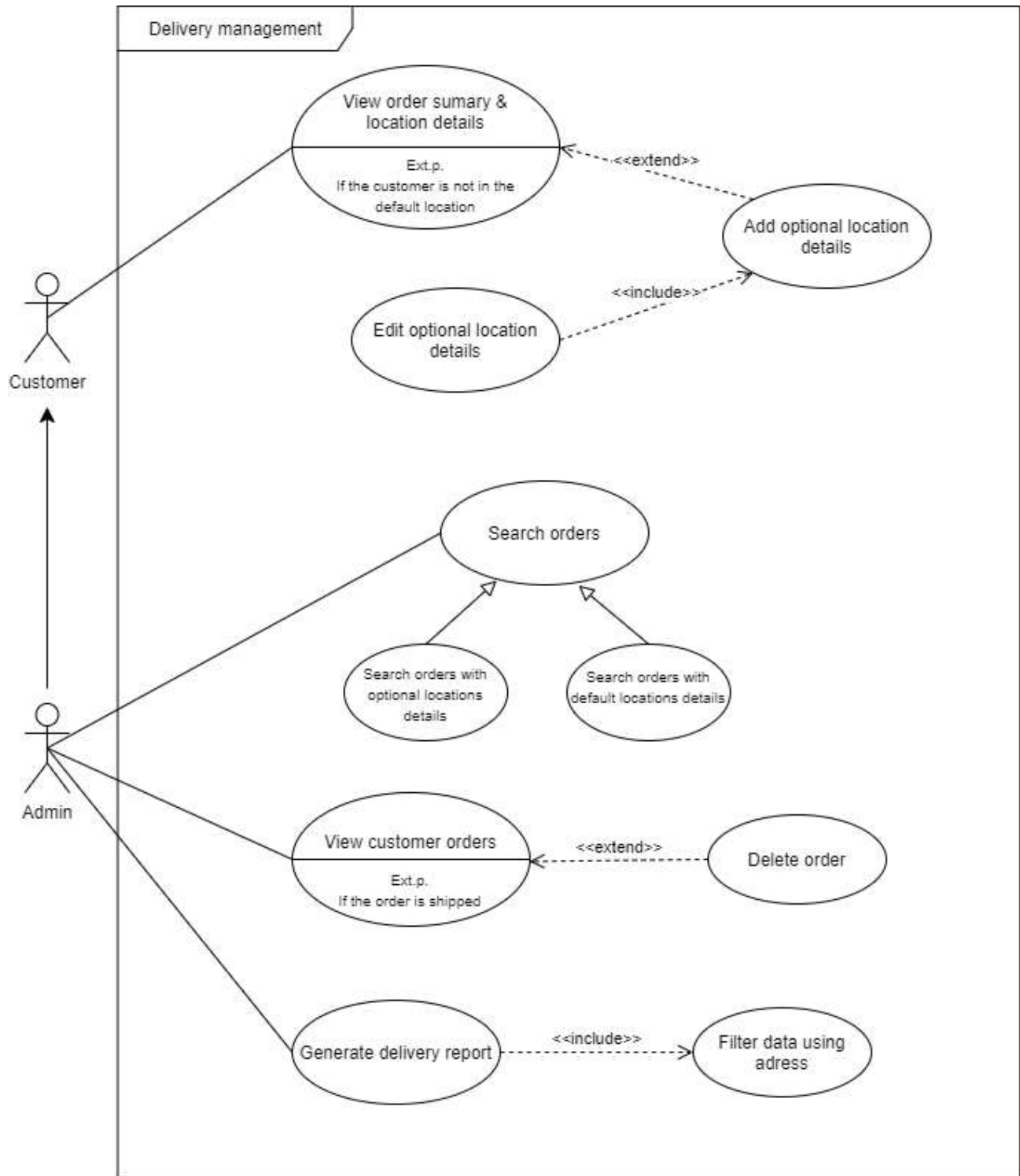


Figure - 2.1.1.7 Use Case Diagram for Delivery Management

2.1.1.8 Use Case Diagram for Manage Customer Inquiries & Feedback

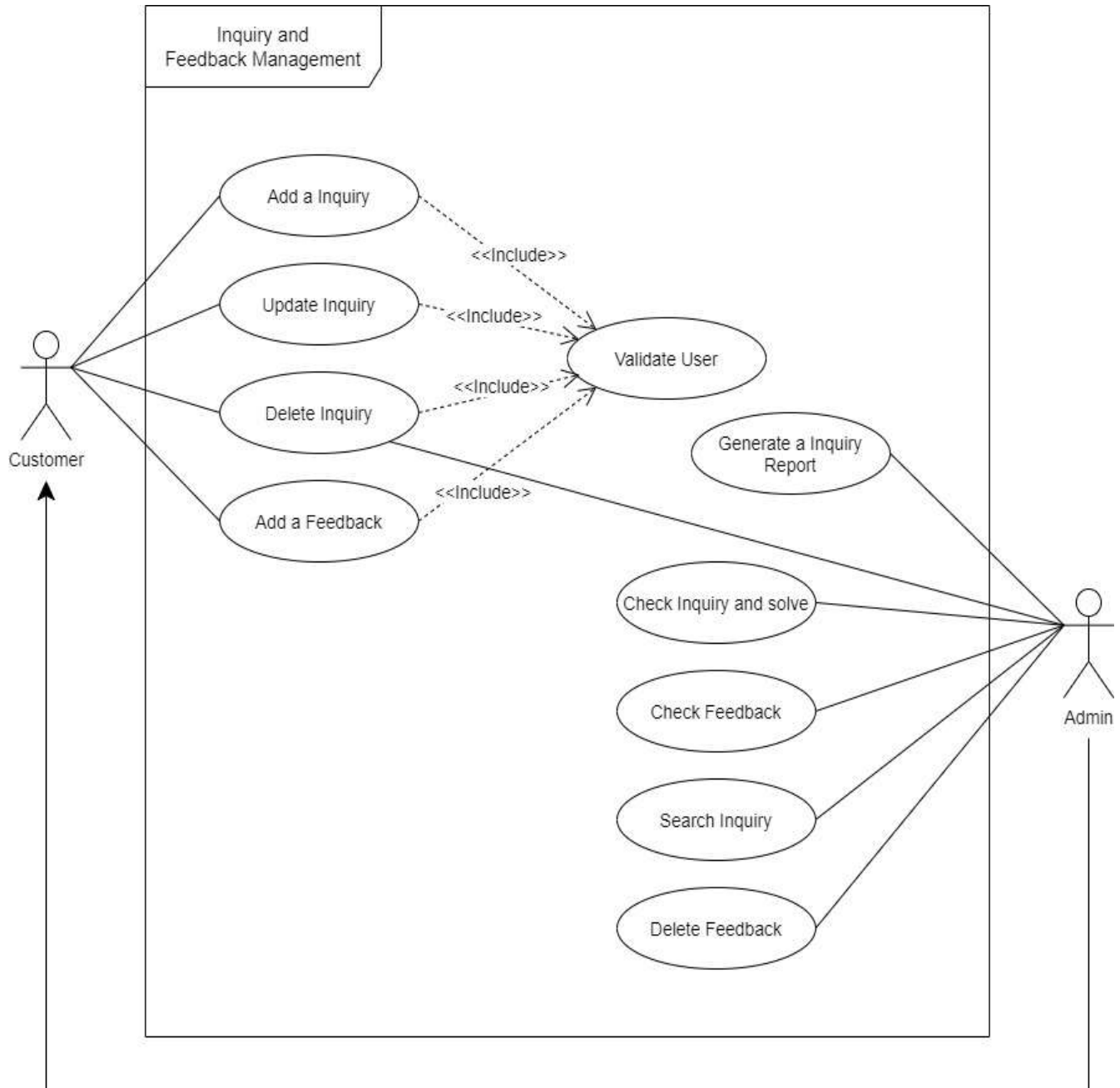


Figure - 2.1.1.8 Use Case Diagram for Manage Customer Inquiries & Feedback

2.1.2.1.a Activity Diagram for Customer Handling (Customer)

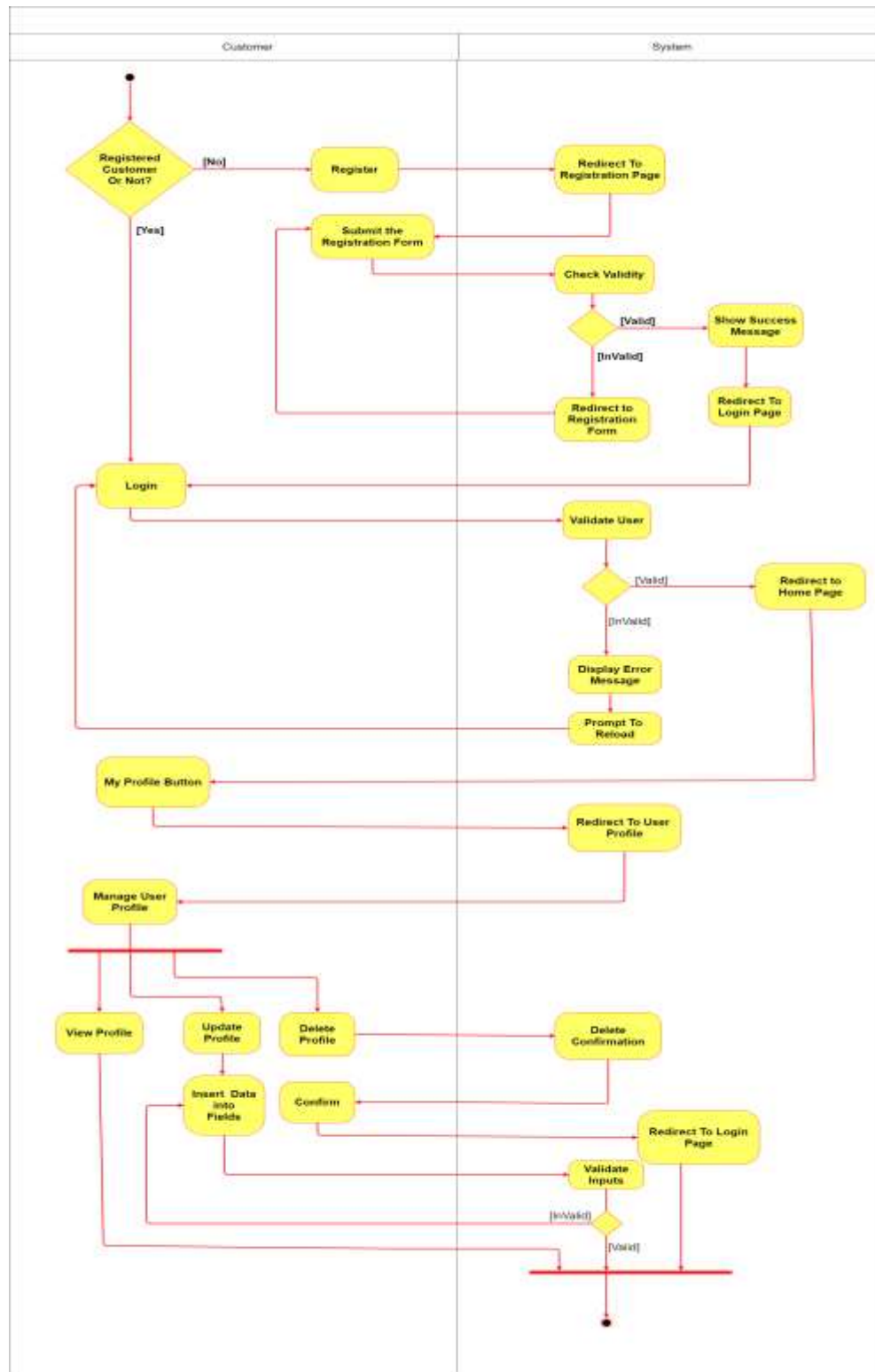


Figure - 2.1.2.1.a Activity Diagram for Customer Handling (Customer)

2.1.2.1.b Activity Diagram for Customer Handling (Admin)

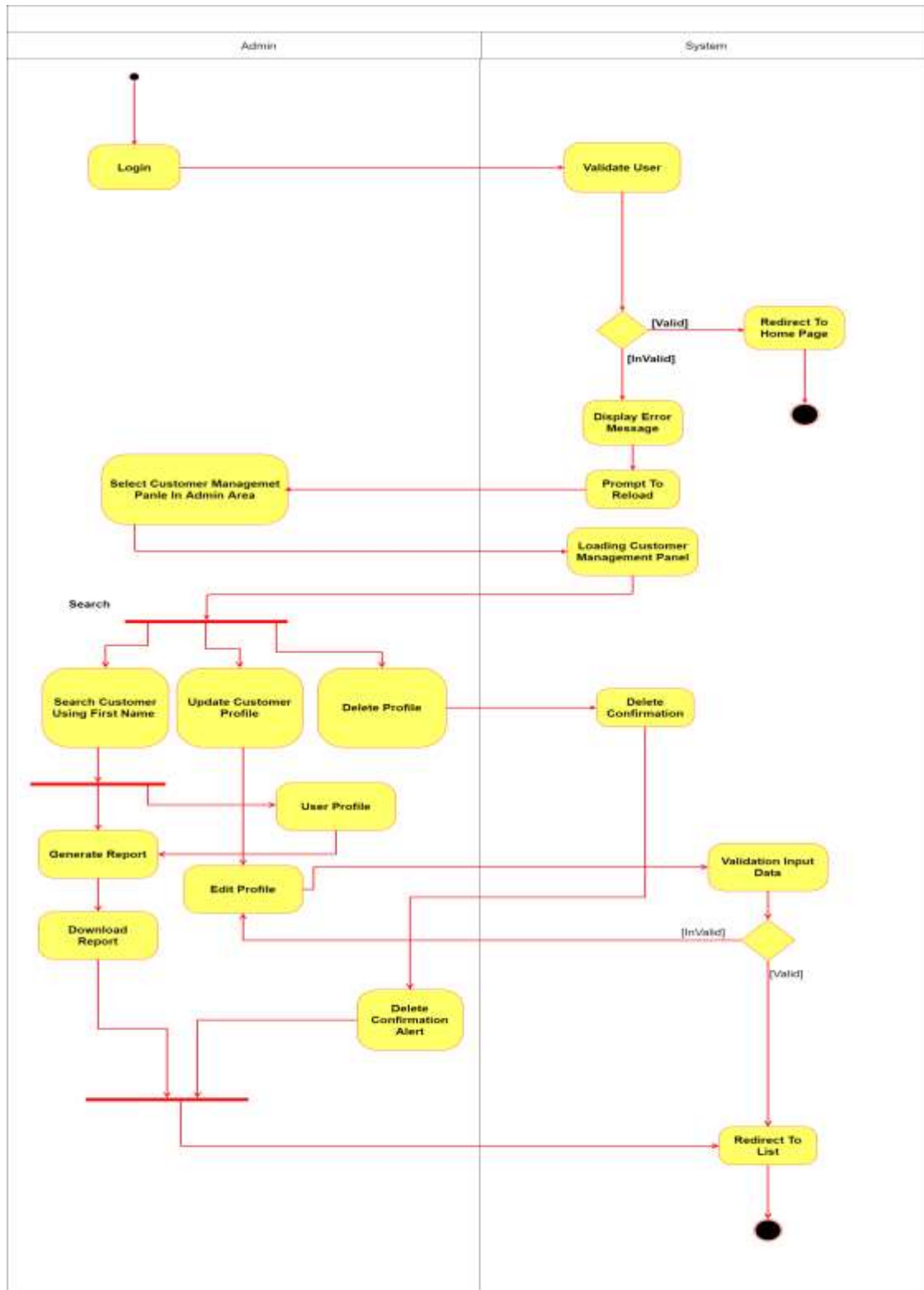


Figure - 2.1.2.1.b Activity Diagram for Customer Handling (Admin)

2.1.2.2 Activity Diagram for Admin Access (Admin)

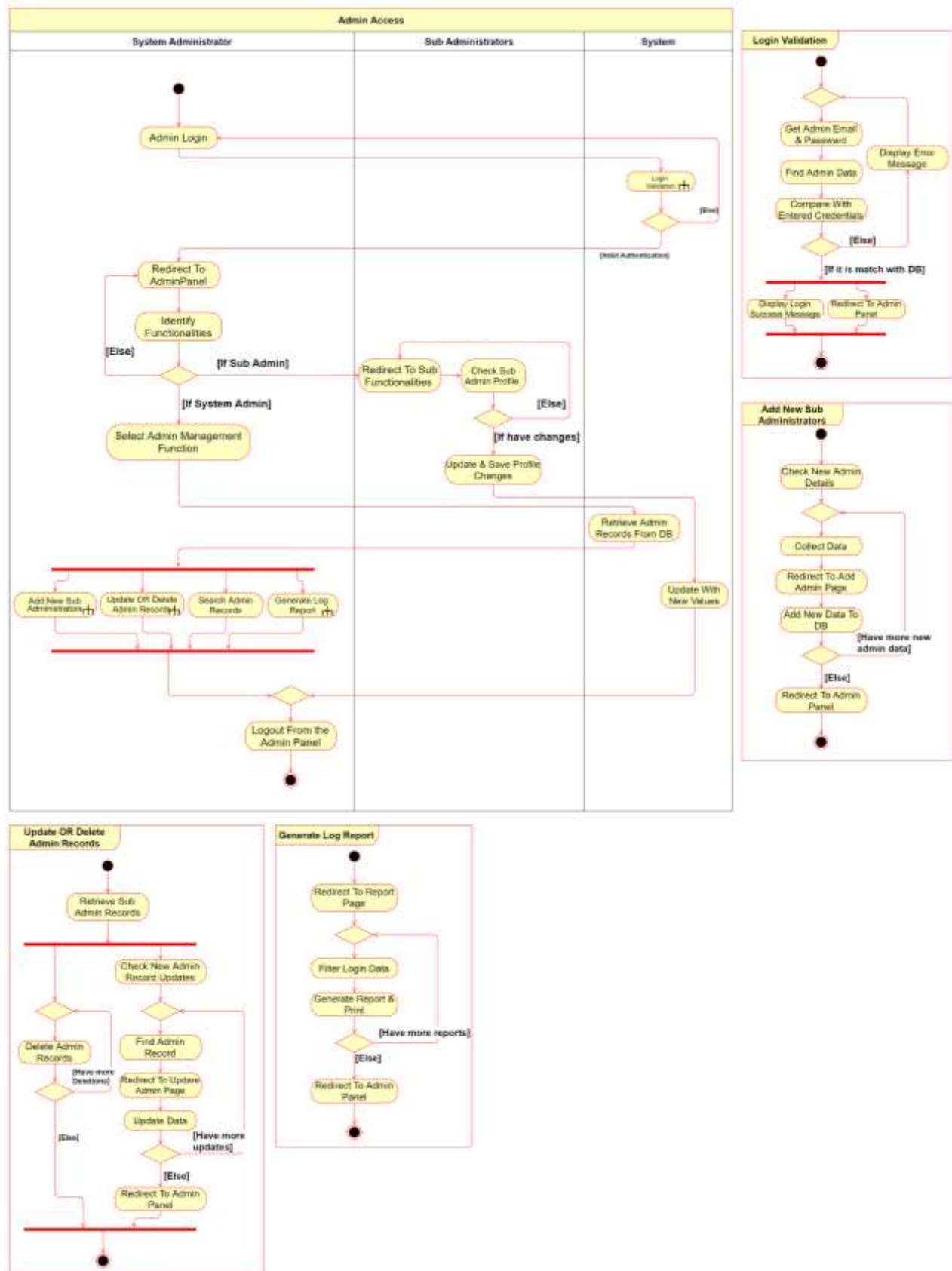


Figure - 2.1.2.2 Activity Diagram for Admin Access (Admin)

2.1.2.3 Activity Diagram for Drug Stock Handling (Admin)

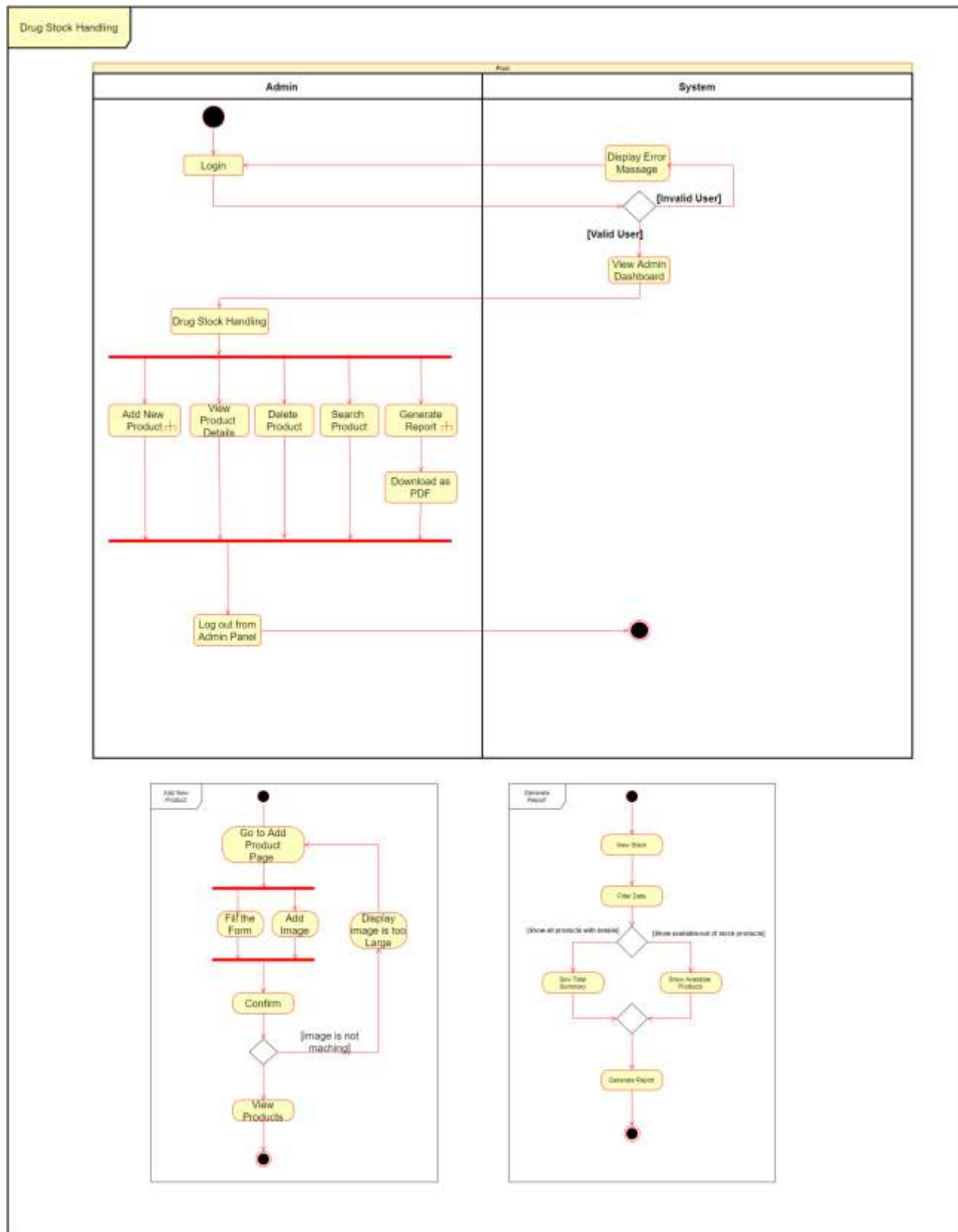


Figure - 2.1.2.3 Activity Diagram for Drug Stock Handling (Admin)

2.1.2.4 Activity Diagram for Purchase An Items (Customer)

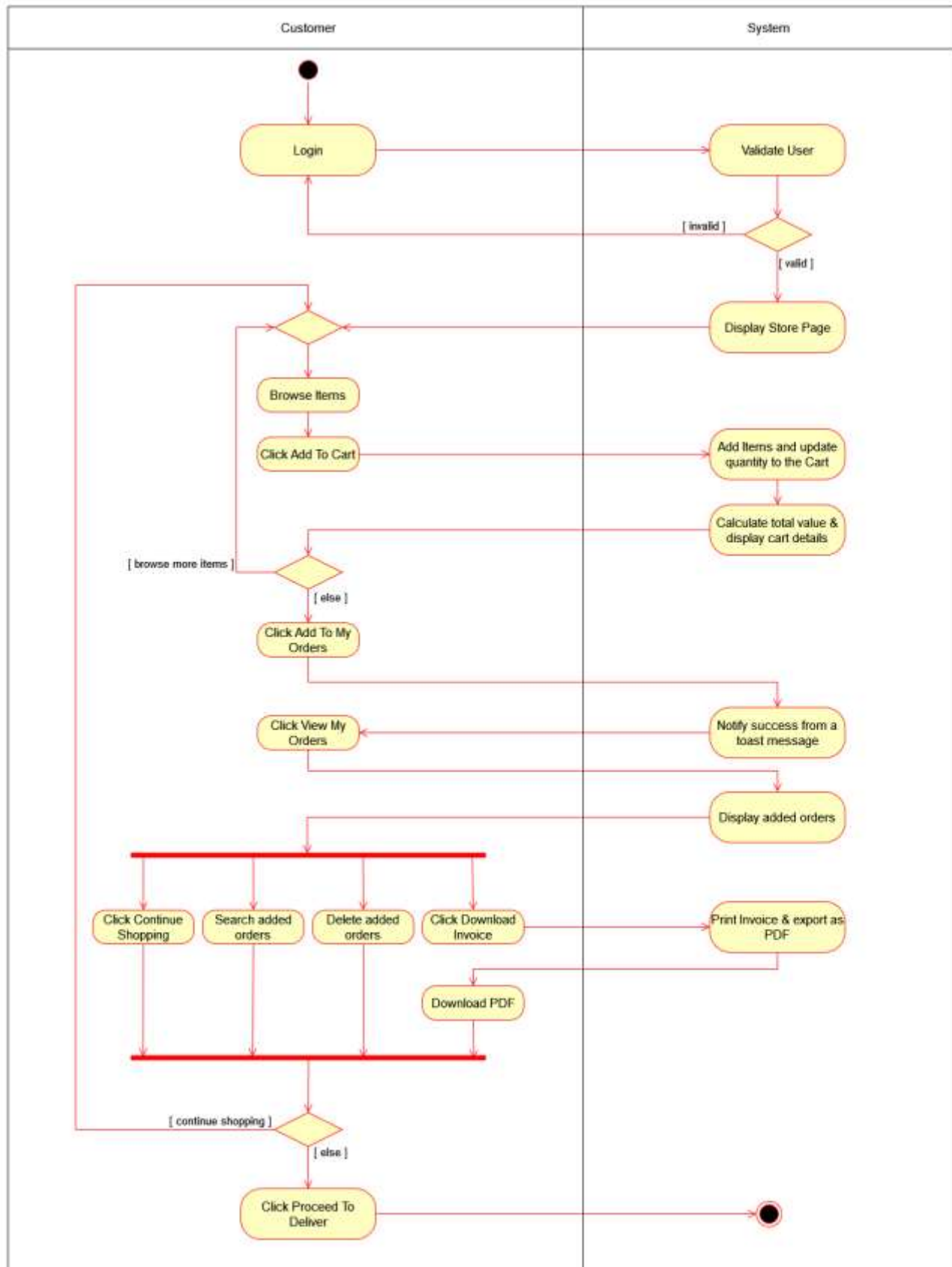


Figure - 2.1.2.4 Activity Diagram for Purchase an Items (Customer)

2.1.2.5.a Activity Diagram for Drug Item Reservation (Customer)

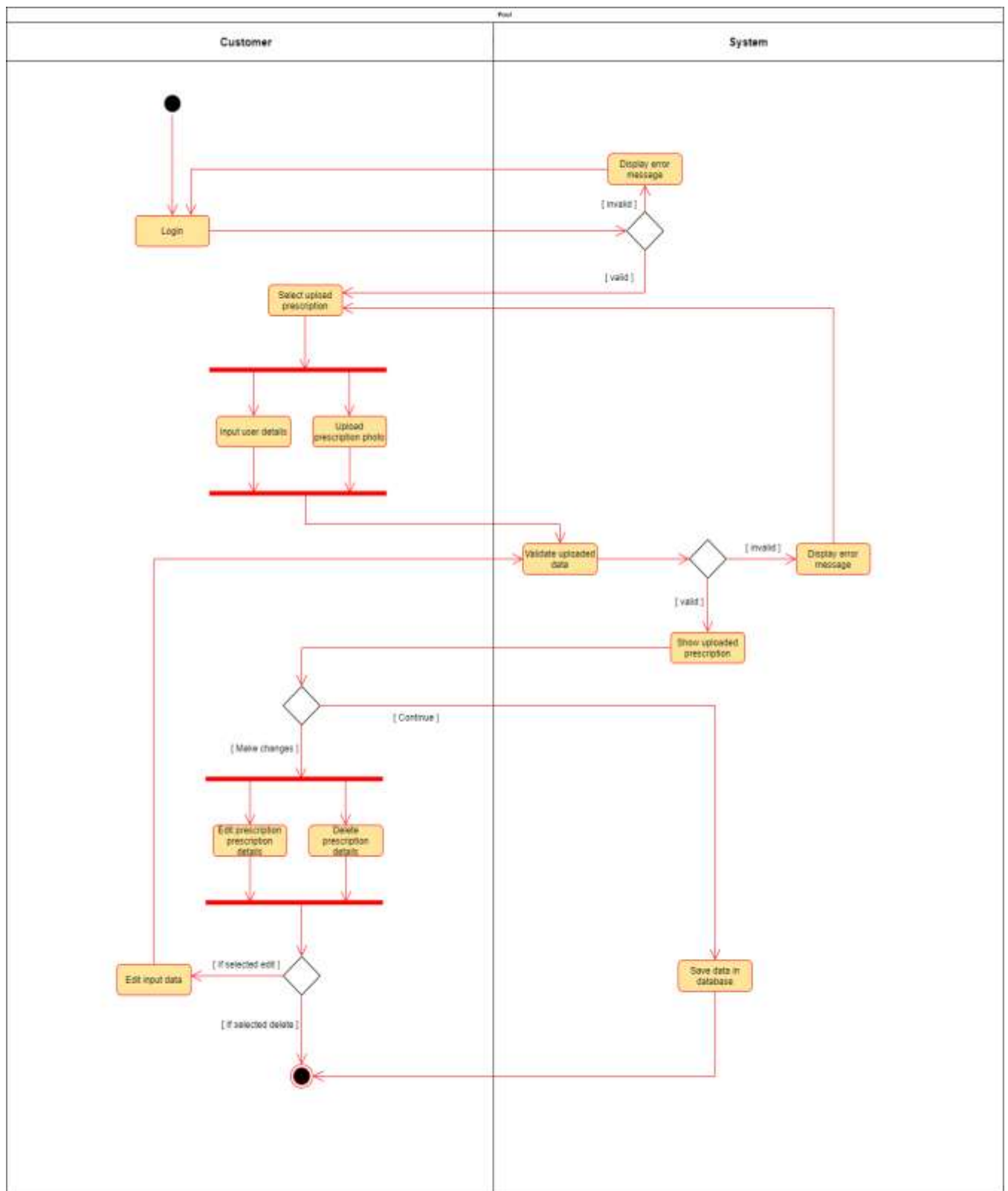


Figure - 2.1.2.5.a Activity Diagram for Drug Item Reservation (Customer)

2.1.2.5.b Activity Diagram for Drug Item Reservation (Admin)

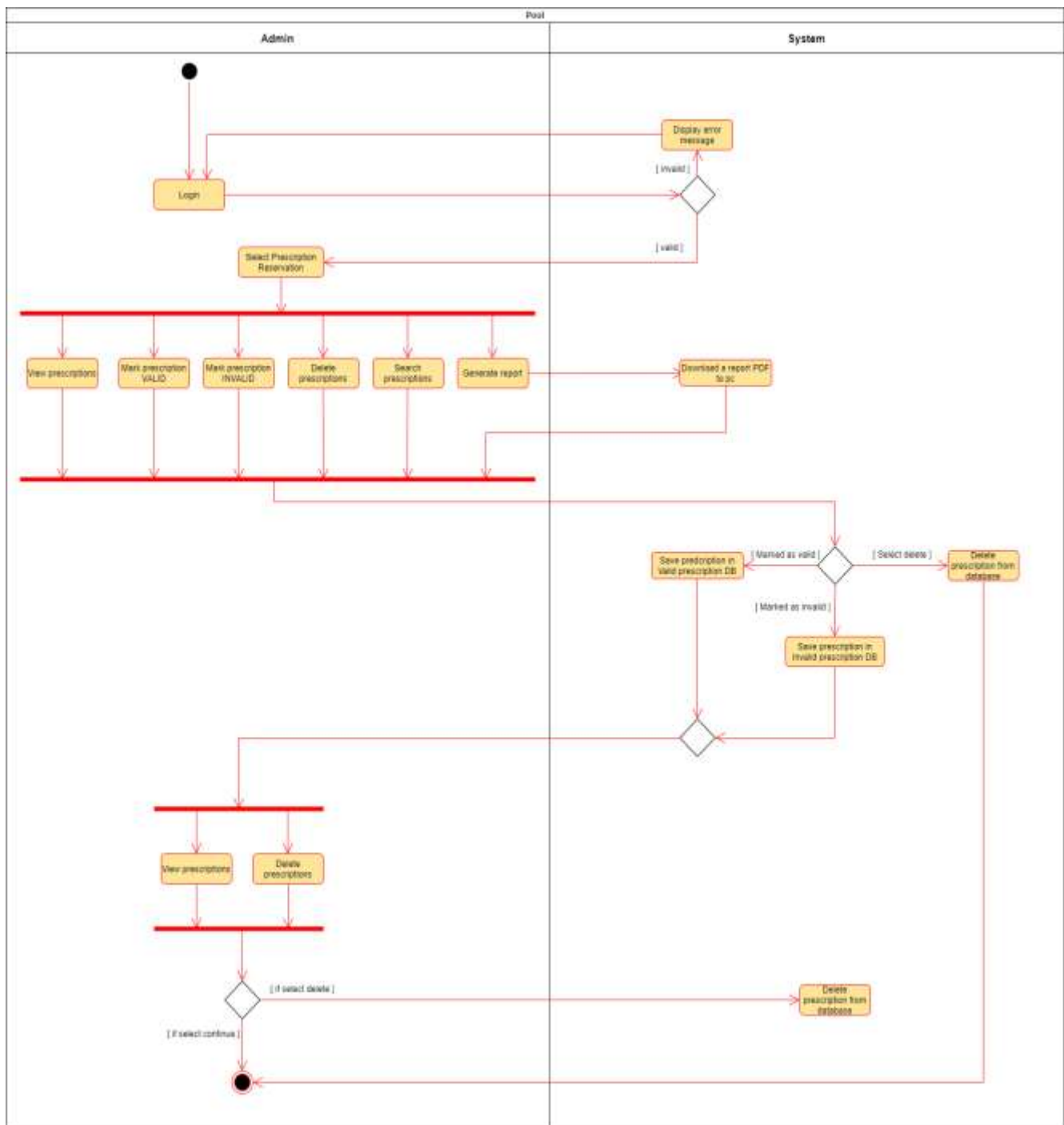


Figure - 2.1.2.5.b Activity Diagram for Drug Item Reservation (Admin)

2.1.2.6.a Activity Diagram for Access Purchase History (Customer)

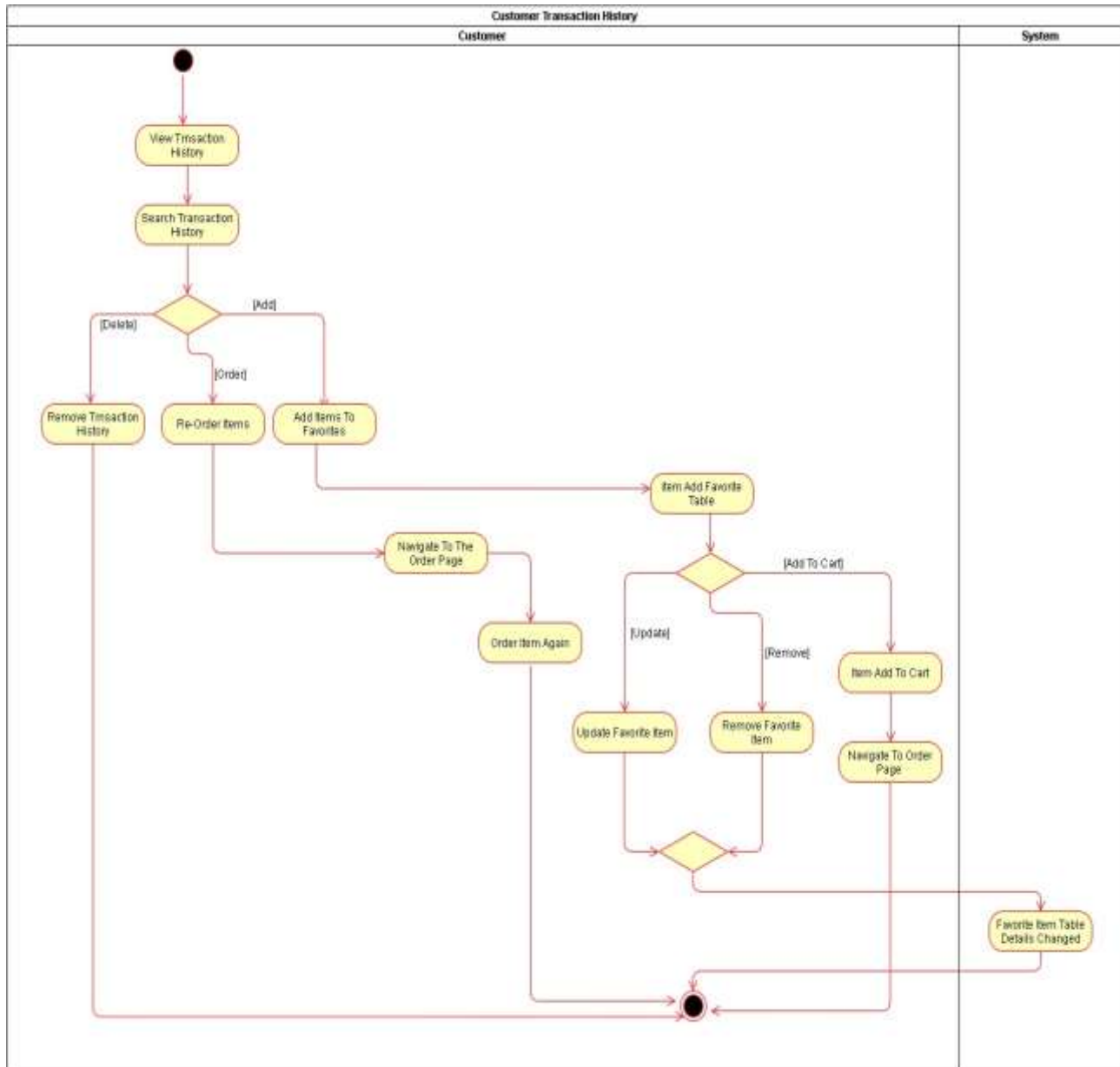


Figure - 2.1.2.6.a Activity Diagram for Access Purchase History (Customer)

2.1.2.6.b Activity Diagram for Access Purchase History (Admin)

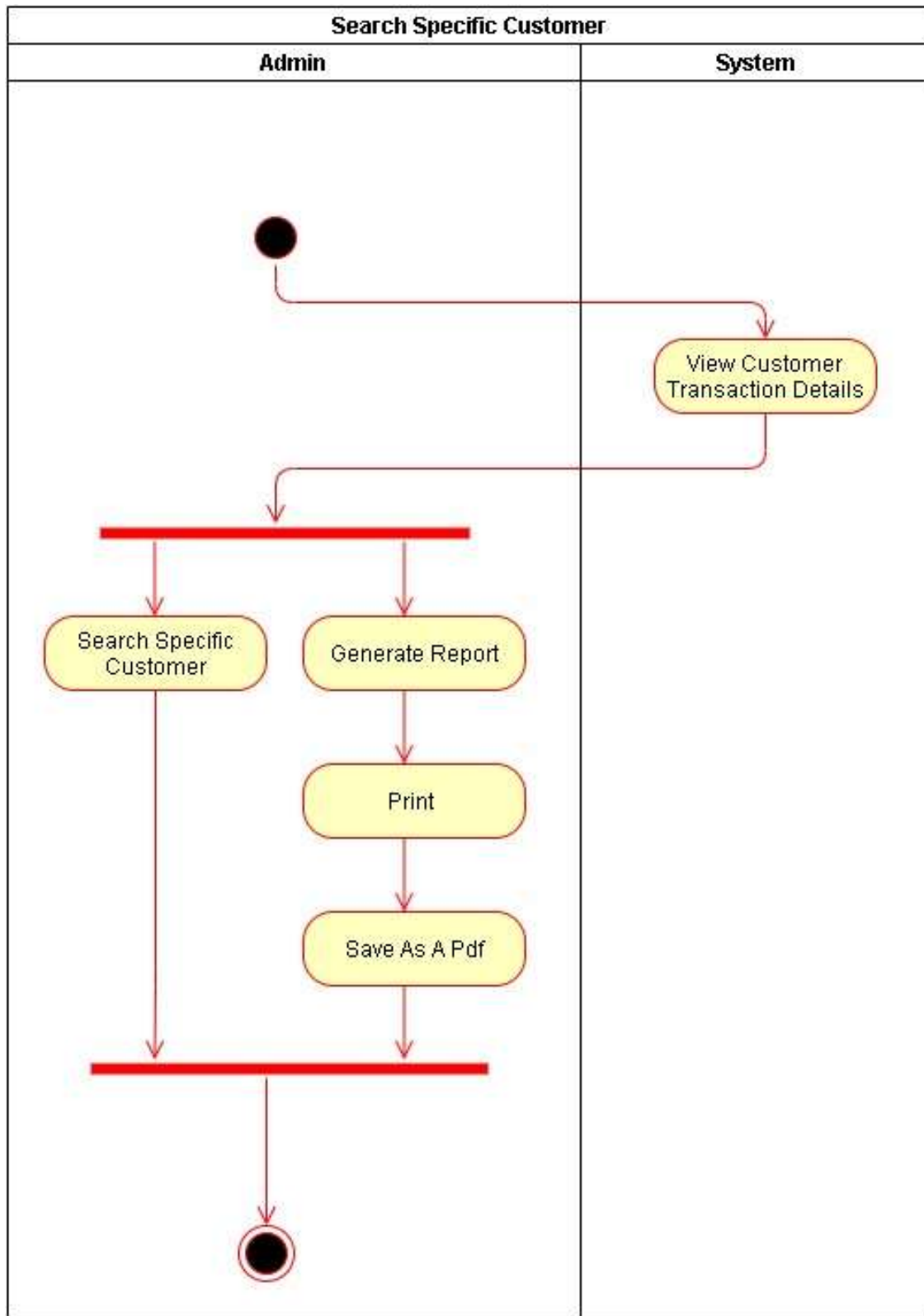
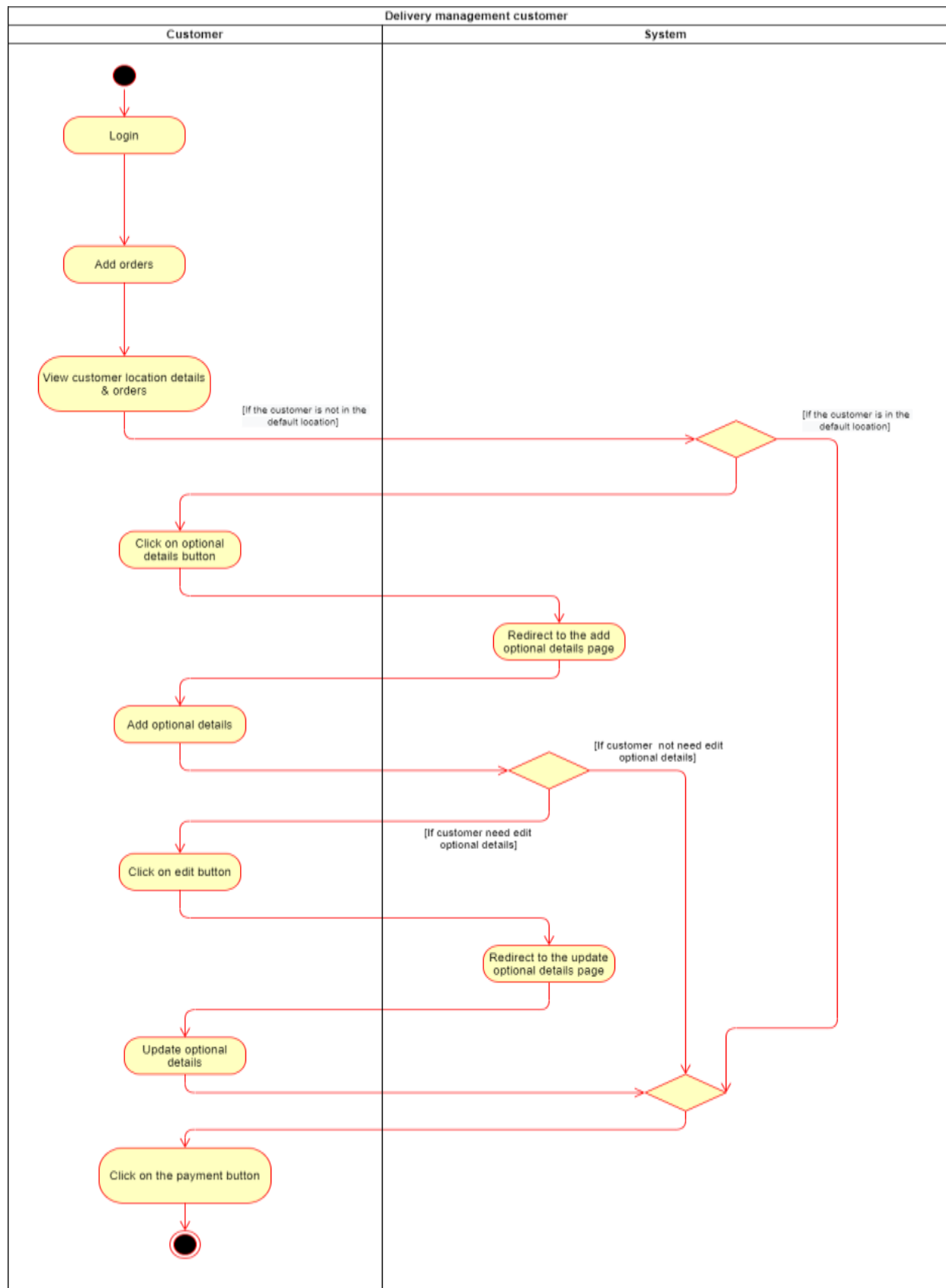


Figure - 2.1.2.6.b Activity Diagram for Access Purchase History (Admin)

2.1.2.7.a Activity Diagram for Delivery Management (Customer)



2.1.2.7.b Activity Diagram for Delivery Management (Admin)

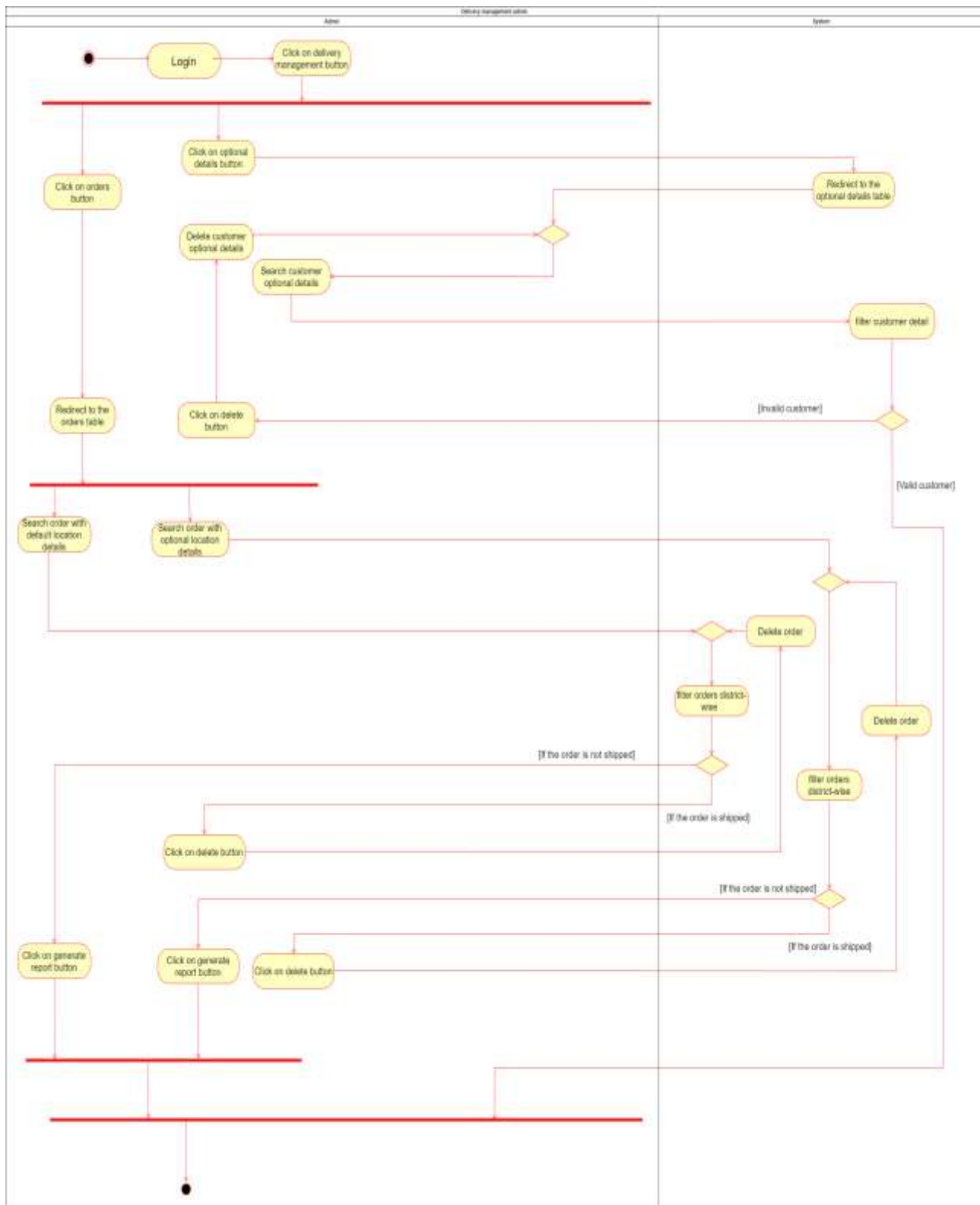


Figure - 2.1.2.7.b Activity Diagram for Delivery Management (Admin)

2.1.2.8.a Activity Diagram for Manage Customer Inquiries and Feedbacks (Customer)

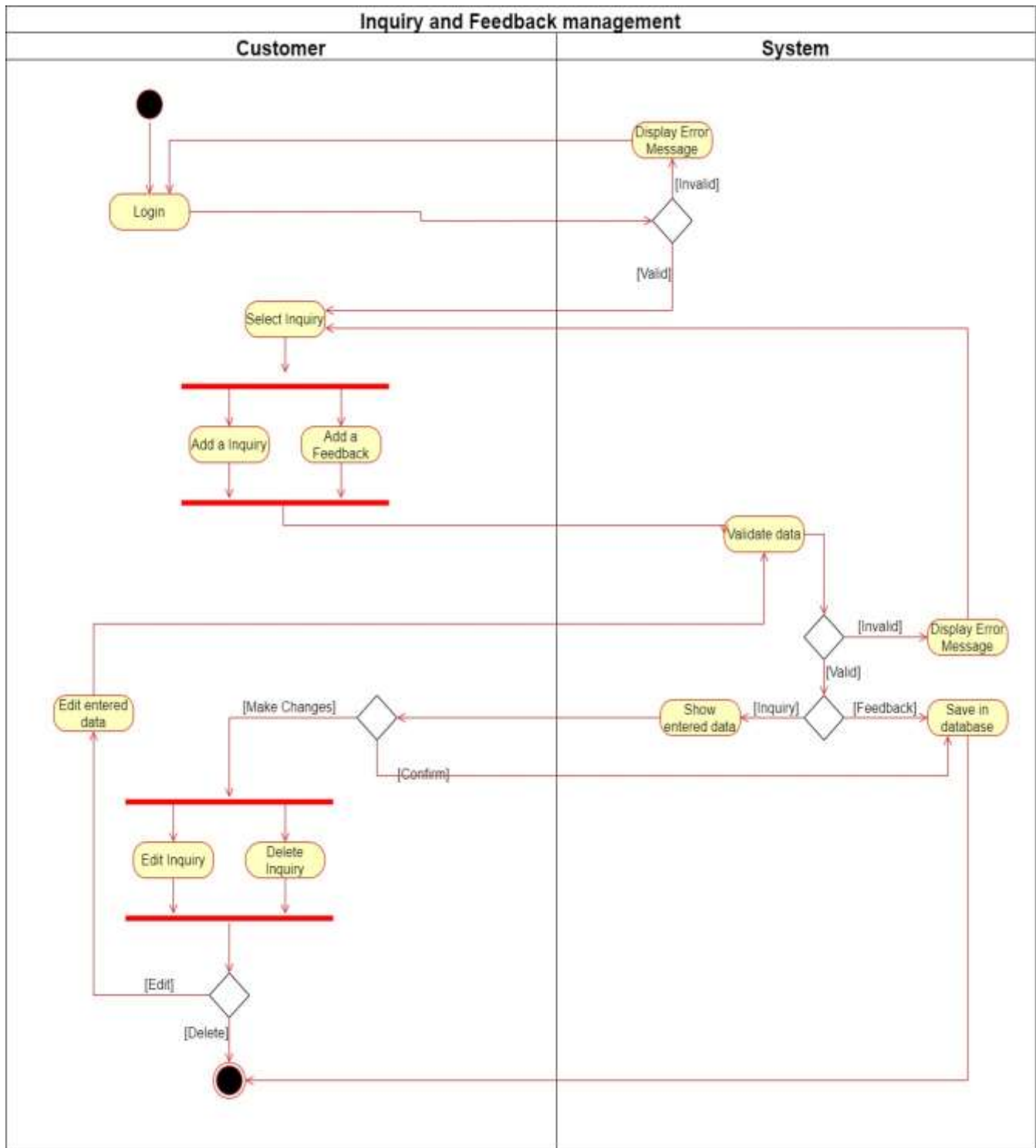


Figure - 2.1.2.8.a Activity Diagram for Manage Customer Inquiries and Feedbacks (Customer)

2.1.2.8.b Activity Diagram for Manage Customer Inquiries and Feedbacks (Admin)

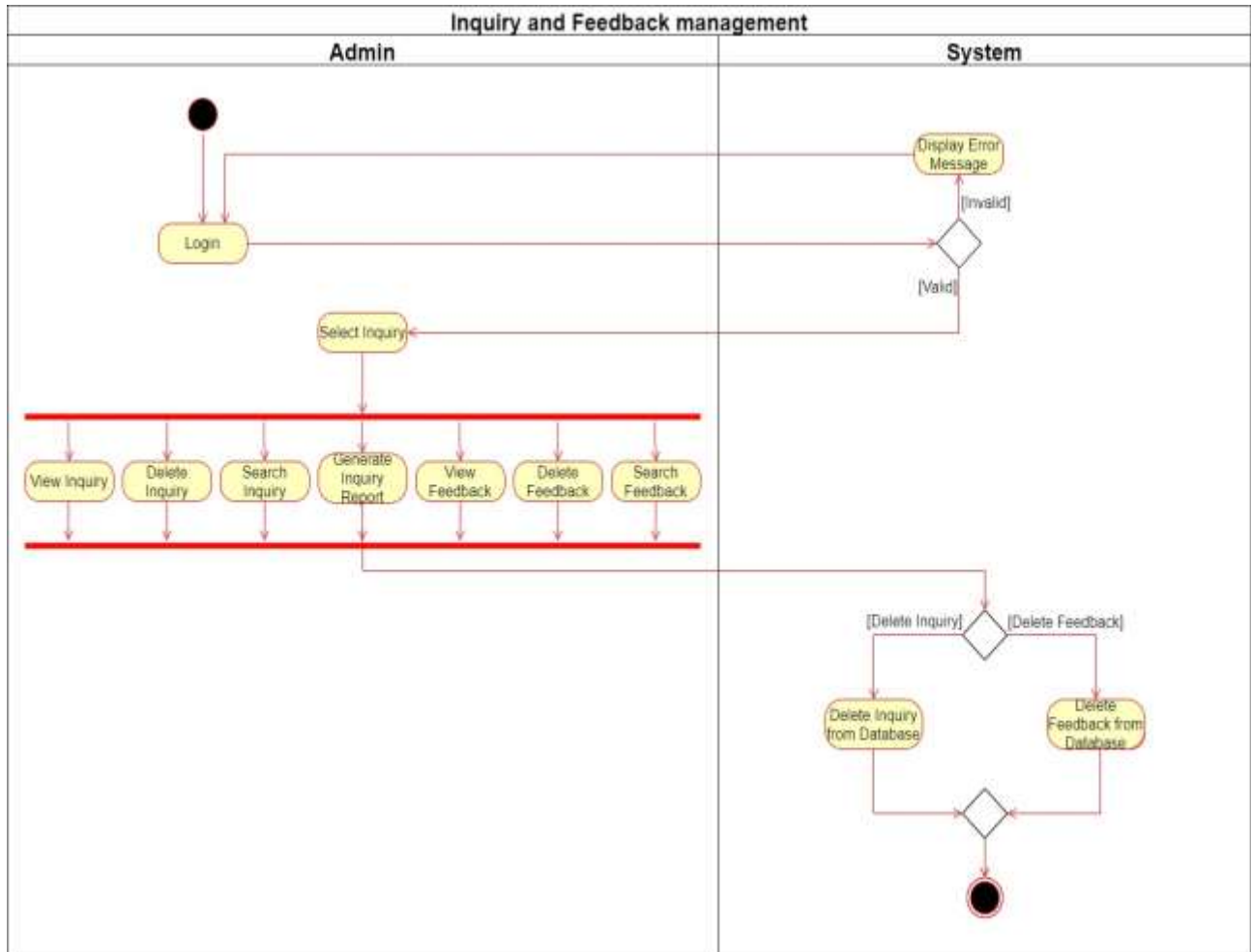


Figure - 2.1.2.8.b Activity Diagram for Manage Customer Inquiries and Feedbacks (Admin)

2.2 Design

2.2.1 High-Level Architecture Diagram

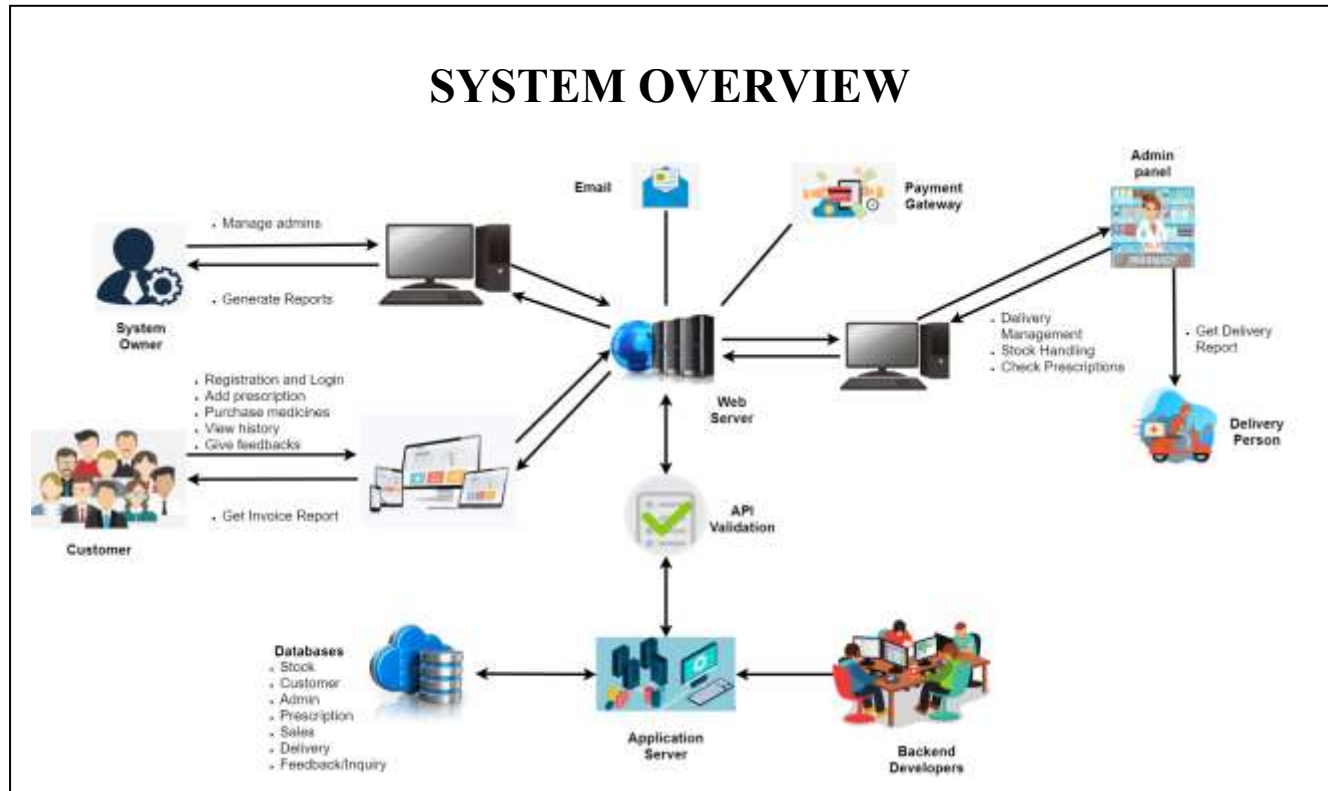


Figure - 2.2.1 High-Level Architecture Diagram

The ER diagram illustrates the database structure for a pharmacy management system. It includes the following entities and their attributes:

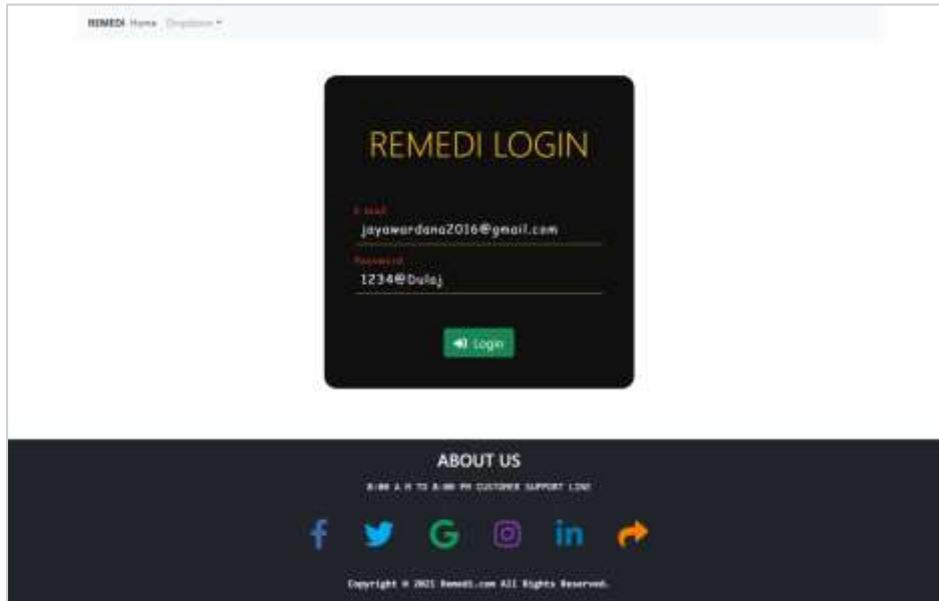
- USER**: Male, Female, Age, Gender, Tel_No, Mail, Sec.
- ADMINISTRATOR**: Admin_Username, Admin_Password, Admin_ID.
- REPORT**: R_Info, R_Date, Report_ID.
- CUSTOMER**: C_ID, P_Name, L_Name, C_Address, C_Username, C_Password, C_Rating.
- DRUG_ITEMS**: P_ID, P_Name, P_Category, P_Price, P_Stock, P_Quantity, P_Unit.
- STOCK**: S_Quantity, S_Username, Stock_ID, S_Location.
- ORDER**: Order_ID, Order_Date, Order_Time, Order_Status, Order_Amount, Order_Quantity, Order_Location, Order_Priority, Order_Type, Order_Reason, Order_Comment, Order_Note, Order_Review, Order_Rating, Order_Feedback, Order_Inquiry, Order_Response, Order_Purchase, Order_History, Order_Favorite, Order_Delivery, Order_Option, Order_Address, Order_Tel_No.
- DELIVER**: Delivery_ID, Delivery_Status, Delivery_Location, Delivery_Time, Delivery_Reason, Delivery_Comment, Delivery_Note, Delivery_Review, Delivery_Rating, Delivery_Feedback, Delivery_Inquiry, Delivery_Response, Delivery_Purchase, Delivery_History, Delivery_Favorite, Delivery_Delivery, Delivery_Option, Delivery_Address, Delivery_Tel_No.

Relationships and Cardinalities:

- ADMINISTRATOR** (1) **GENERATE** **REPORT** (M)
- ADMINISTRATOR** (1) **HANDLE** **STOCK** (M)
- CUSTOMER** (1) **PLICE** **ORDER** (1)
- ORDER** (1) **GENERATE** **INVOICE** (1)
- ORDER** (1) **GENERATE** **PURCHASE HISTORY** (M)
- ORDER** (1) **GENERATE** **FAVORITE** (M)
- ORDER** (1) **GENERATE** **DELIVER** (1)
- ORDER** (1) **GENERATE** **CART_OPTION** (1)
- ORDER** (1) **GENERATE** **PRESCRIPTION_OPTION** (1)
- ORDER** (1) **GENERATE** **WALLET** (1)
- ORDER** (1) **GENERATE** **INVOICE** (1)
- ORDER** (1) **GENERATE** **PURCHASE HISTORY** (M)
- ORDER** (1) **GENERATE** **FAVORITE** (M)
- ORDER** (1) **GENERATE** **DELIVER** (1)
- ORDER** (1) **GENERATE** **CART_OPTION** (1)
- ORDER** (1) **GENERATE** **PRESCRIPTION_OPTION** (1)
- ORDER** (1) **GENERATE** **WALLET** (1)
- ORDER** (1) **GENERATE** **INVOICE** (1)
- ORDER** (1) **GENERATE** **PURCHASE HISTORY** (M)
- ORDER** (1) **GENERATE** **FAVORITE** (M)
- ORDER** (1) **GENERATE** **DELIVER** (1)
- ORDER** (1) **GENERATE** **CART_OPTION** (1)
- ORDER** (1) **GENERATE** **PRESCRIPTION_OPTION** (1)
- ORDER** (1) **GENERATE** **WALLET** (1)
- ORDER** (1) **GENERATE** **INVOICE** (1)
- ORDER** (1) **GENERATE** **PURCHASE HISTORY** (M)
- ORDER** (1) **GENERATE** **FAVORITE** (M)
- ORDER** (1) **GENERATE** **DELIVER** (1)
- ORDER** (1) **GENERATE** **CART_OPTION** (1)
- ORDER** (1) **GENERATE** **PRESCRIPTION_OPTION** (1)
- ORDER** (1) **GENERATE** **WALLET** (1)
- ORDER** (1) **GENERATE** **INVOICE** (1)
- ORDER** (1) **GENERATE** **PURCHASE HISTORY** (M)
- ORDER** (1) **GENERATE** **FAVORITE** (M)
- ORDER** (1) **GENERATE** **DELIVER** (1)
- ORDER** (1) **GENERATE** **CART_OPTION** (1)
- ORDER** (1) **GENERATE** **PRESCRIPTION_OPTION** (1)
- ORDER** (1) **GENERATE** **WALLET** (1)
- ORDER** (1) **GENERATE** **INVOICE** (1)
- ORDER** (1) **GENERATE** **PURCHASE HISTORY** (M)
- ORDER** (1) **GENERATE** **FAVORITE** (M)
- ORDER** (1) **GENERATE** **DELIVER** (1)
- ORDER** (1) **GENERATE** **CART_OPTION** (1)
- ORDER** (1) **GENERATE** **PRESCRIPTION_OPTION** (1)
- ORDER** (1) **GENERATE** **WALLET** (1)
- ORDER** (1) **GENERATE** **INVOICE** (1)
- ORDER** (1) **GENERATE** **PURCHASE HISTORY** (M)
- ORDER** (1) **GENERATE** **FAVORITE** (M)
- ORDER** (1) **GENERATE** **DELIVER** (1)
- ORDER** (1) **GENERATE** **CART_OPTION** (1)
- ORDER** (1) **GENERATE** **PRESCRIPTION_OPTION** (1)
- ORDER** (1) **GENERATE** **WALLET** (1)
- ORDER** (1) **GENERATE** **INVOICE** (1)
- ORDER** (1) **GENERATE** **PURCHASE HISTORY** (M)
- ORDER** (1) **GENERATE** **FAVORITE** (M)
- ORDER** (1) **GENERATE** **DELIVER** (1)
- ORDER** (1) **GENERATE** **CART_OPTION** (1)
- ORDER** (1) **GENERATE** **PRESCRIPTION_OPTION** (1)
- ORDER** (1) **GENERATE** **WALLET** (1)
- ORDER** (1) **GENERATE** **INVOICE** (1)
- ORDER** (1) **GENERATE** **PURCHASE HISTORY** (M)
- ORDER** (1) **GENERATE** **FAVORITE** (M)
- ORDER** (1) **GENERATE** **DELIVER** (1)
- ORDER** (1) **GENERATE** **CART_OPTION** (1)
- ORDER** (1) **GENERATE** **PRESCRIPTION_OPTION** (1)
- ORDER** (1) **GENERATE** **WALLET** (1)
- ORDER** (1) **GENERATE** **INVOICE** (1)
- ORDER** (1) **GENERATE** **PURCHASE HISTORY** (M)
- ORDER** (1) **GENERATE** **FAVORITE** (M)
- ORDER** (1) **GENERATE** **DELIVER** (1)
- ORDER** (1) **GENERATE** **CART_OPTION** (1)
- ORDER** (1) **GENERATE** **PRESCRIPTION_OPTION** (1)
- ORDER** (1) **GENERATE** **WALLET** (1)
- ORDER** (1) **GENERATE** **INVOICE** (1)
- ORDER** (1) **GENERATE** **PURCHASE HISTORY** (M)
- ORDER** (1) **GENERATE** **FAVORITE** (M)
- ORDER** (1) **GENERATE** **DELIVER** (1)
- ORDER** (1) **GENERATE** **CART_OPTION** (1)
- ORDER** (1) **GENERATE** **PRESCRIPTION_OPTION** (1)
- ORDER** (1) **GENERATE** **WALLET** (1)
- ORDER** (1) **GENERATE** **INVOICE** (1)
- ORDER** (1) **GENERATE** **PURCHASE HISTORY** (M)
- ORDER** (1) **GENERATE** **FAVORITE** (M)
- ORDER** (1) **GENERATE** **DELIVER** (1)
- ORDER** (1) **GENERATE** **CART_OPTION** (1)
- ORDER** (1) **GENERATE** **PRESCRIPTION_OPTION** (1)
- ORDER** (1) **GENERATE** **WALLET** (1)
- ORDER** (1) **GENERATE** **INVOICE** (1)
- ORDER** (1) **GENERATE** **PURCHASE HISTORY** (M)
- ORDER** (1) **GENERATE** **FAVORITE** (M)
- ORDER** (1) **GENERATE** **DELIVER** (1)
- ORDER** (1) **GENERATE** **CART_OPTION** (1)
- ORDER** (1) **GENERATE** **PRESCRIPTION_OPTION** (1)
- ORDER** (1) **GENERATE** **WALLET** (1)
- ORDER** (1) **GENERATE** **INVOICE** (1)
- ORDER** (1) **GENERATE** **PURCHASE HISTORY** (M)
- ORDER** (1) **GENERATE** **FAVORITE** (M)
- ORDER** (1) **GENERATE** **DELIVER** (1)
- ORDER** (1) **GENERATE** **CART_OPTION** (1)
- ORDER** (1) **GENERATE** **PRESCRIPTION_OPTION** (1)
- ORDER** (1) **GENERATE** **WALLET** (1)
- ORDER** (1) **GENERATE** **INVOICE** (1)
- ORDER** (1) **GENERATE** **PURCHASE HISTORY** (M)
- ORDER** (1) **GENERATE** **FAVORITE** (M)
- ORDER** (1) **GENERATE** **DELIVER** (1)
- ORDER** (1) **GENERATE** **CART_OPTION** (1)
- ORDER** (1) **GENERATE** **PRESCRIPTION_OPTION** (1)
- ORDER** (1) **GENERATE** **WALLET** (1)
- ORDER** (1) **GENERATE</**

2.2.3 User Interfaces

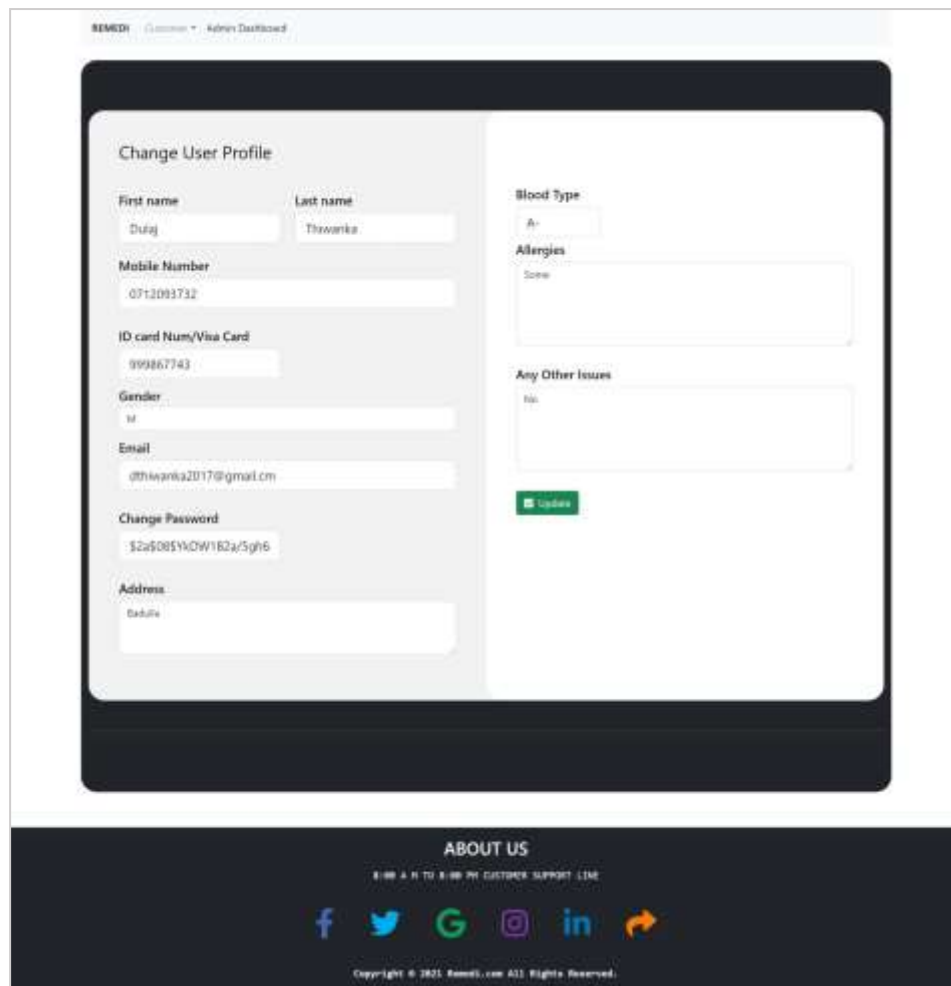
2.2.3.1 User Interface for Customer Login (Customer)



The image shows a web interface for customer login. At the top, there is a navigation bar with "REMEDI Home" and a dropdown arrow. The main content area features a dark blue box with the title "REMEDI LOGIN" in yellow. Below the title, there are two input fields: "Email" with the value "jayawardana2016@gmail.com" and "Password" with the value "1234@Dulaj". A green "Login" button is positioned below the password field. The footer is dark blue and contains the text "ABOUT US", "8:00 A.M TO 8:00 PM CUSTOMER SUPPORT LINE", social media icons for Facebook, Twitter, Google+, Instagram, LinkedIn, and a share icon, and the copyright notice "Copyright © 2021 Remedi.com All Rights Reserved."

Figure - 2.2.3.1 User Interface For Customer Login (Customer)

2.2.3.2 User Interface for Customer Registration (Customer)



The image shows a web interface for customer registration, titled "Change User Profile". It is a form with two columns. The left column contains fields for "First name" (Dulaj), "Last name" (Thiwanka), "Mobile Number" (0712093732), "ID card Num/Visa Card" (999867743), "Gender" (M), "Email" (dthiwanka2017@gmail.com), "Change Password" (\$2a\$08\$YkDw162a/5gh6), and "Address" (Dula). The right column contains fields for "Blood Type" (A-), "Allergies" (None), and "Any Other Issues" (No). A green "Update" button is located at the bottom right of the form. The footer is dark blue and contains the text "ABOUT US", "8:00 A.M TO 8:00 PM CUSTOMER SUPPORT LINE", social media icons for Facebook, Twitter, Google+, Instagram, LinkedIn, and a share icon, and the copyright notice "Copyright © 2021 Remedi.com All Rights Reserved."

Figure - 2.2.3.2 User Interface For Customer Registration (Customer)

2.2.3.3 User Interface for Customer Edit Profile & Generate Report (Customer)

The screenshot displays the 'Customer Admin Dashboard' for a user named Dulaj Thiwanka. On the left, there is a profile card with a placeholder image and the name 'Dulaj Thiwanka'. To the right, a form contains the following fields: First Name (Dulaj), Last Name (Thiwanka), Email (dthiwanka2017@gmail.com), Mobile (0760548067), ID/VISA (5352260158), Address (Baddula), Gender (M), and Blood Type (B-). Below these fields are two buttons: 'Edit' and 'Generate Report'. At the bottom of the dashboard, there is an 'ABOUT US' section with a support line (8:00 A.M TO 8:00 PM), social media icons for Facebook, Twitter, Google+, Instagram, LinkedIn, and a share icon, and a copyright notice for 2021 Remedi.com.

Figure - 2.2.3.3 User Interface for Customer Edit Their Profile & Generate Report (Customer)

2.2.3.4 User Interface for Customer Edit Profile (Customer)

The screenshot shows the 'REMEDI REGISTRATION' form. It is divided into two main sections: 'General Information' and 'Contact Details'. The 'General Information' section includes fields for First name (Thiwanka), Last name (Jayawardana), Mobile Number (0760548067), ID card Name/Visa Card (5352260158), Gender (Male), Email (jayawardana2016@gmail.com), Type Password (1234@Dulaj), Repeat Password (1234@Dulaj), and Address (Baddula). The 'Contact Details' section includes a dropdown for Blood Type (B-), a text area for Allergies (No Allergies), and a text area for Any Other Issues (No Issues). There is a 'Save' button at the bottom right of the form. The bottom of the page features an 'ABOUT US' section with a support line (8:00 A.M TO 8:00 PM), social media icons, and a copyright notice for 2021 Remedi.com.

Figure - 2.2.3.4 User Interface for Customer Edit Profile (Customer)

2.2.3.5 User Interface for Retrieve All Registered Customers (Admin)

REMEDII Customer Admin Dashboard

All Customers

Search Here

| # | First Name | Last Name | E-mail | Telephone Num | ID/VISA | Gender | Address | Blood Type | Allergies | Issues | Functions |
|---|--------------|-------------|----------------------------|---------------|--------------|--------|------------|------------|-----------|--------|--------------------------------------------------------------------------|
| 1 | Dulaj | Thiwanika | dthiwanika2017@gmail.com | 0712093732 | 999867743 | M | Badulla | A | Some | No | <input checked="" type="checkbox"/> Edit <input type="checkbox"/> Delete |
| 2 | Anuka | Ransika | anuka123@gmail.com | 076054859 | 995867242 | M | Kandy | O | No | No | <input checked="" type="checkbox"/> Edit <input type="checkbox"/> Delete |
| 3 | janith | Dilshan | mail@mail.com | 0760548087 | 789456253 | M | badulla | B+ | No | NO | <input checked="" type="checkbox"/> Edit <input type="checkbox"/> Delete |
| 4 | dula | thiwa | nadun31@gmail.com | 1234567890 | 2001003022 | male | gampaha | O+ | no | no | <input checked="" type="checkbox"/> Edit <input type="checkbox"/> Delete |
| 5 | 200100302232 | IT20129576 | dulthiwanika2015@gmail.com | 0712093732 | 200100302232 | Male | Badulla | O | No | NO | <input checked="" type="checkbox"/> Edit <input type="checkbox"/> Delete |
| 6 | harshana | rajaapaksha | hashanharindu@gmail.com | 0223454321 | 32435345 | male | sandalanka | O | No | No | <input checked="" type="checkbox"/> Edit <input type="checkbox"/> Delete |
| 7 | Thiwanika | Jeyawandana | jeyawandana016@gmail.com | 0760548087 | 2001003022 | Male | Badulla | A+ | No | No | <input checked="" type="checkbox"/> Edit <input type="checkbox"/> Delete |

[Create New Customer](#) [Generate Report](#)

ABOUT US
8:00 A.M TO 8:00 PM CUSTOMER SUPPORT LINE

[f](#) [t](#) [G](#) [i](#) [in](#) [r](#)

Copyright © 2021 Remedii.com All Rights Reserved.

Figure - 2.2.3.5 User Interface for Retrieve All Registration Customers (Admin)

2.2.3.6 User Interface for Generated Report with All Customers (Admin)


REMEDII
Colombo
Sri Lanka
DATE:- 2021-10-10
TIME:- 22:18:22

Customers

| fname | lname | email | tpinum | idvissa | address |
|--------------|-------------|----------------------------|------------|--------------|------------|
| Dulaj | Thiwanika | dthiwanika2017@gmail.com | 0712093732 | 999867743 | Badulla |
| Anuka | Ransika | anuka123@gmail.com | 076054859 | 995867242 | Kandy |
| janith | Dilshan | mail@mail.com | 0760548087 | 789456253 | badulla |
| dula | thiwa | nadun31@gmail.com | 1234567890 | 2001003022 | gampaha |
| 200100302232 | IT20129576 | dulthiwanika2015@gmail.com | 0712093732 | 200100302232 | Badulla |
| harshana | rajaapaksha | hashanharindu@gmail.com | 0223454321 | 32435345 | sandalanka |

Figure - 2.2.3.6 User Interface for Generated Report with All Customer (Admin)

2.2.3.7 User Interface for Customer Generated Report (Customer)



Dulaj Thiwanka

First Name
Dulaj

Last Name
Thiwanka

E mail
dthiwanka2017@gmail.cm

Mobile
0712093732

ID/VISA
999867743

Address
Badulla

Gender
M

Blood Type
A-

Allergies and Issues
Allergies :- Some | Issues :-No

Figure - 2.2.3.7 User Interface for Customer Generated Report (Customer)

Admin Access

2.2.3.8 User Interface for Welcome Page for Administrator's (Admin)

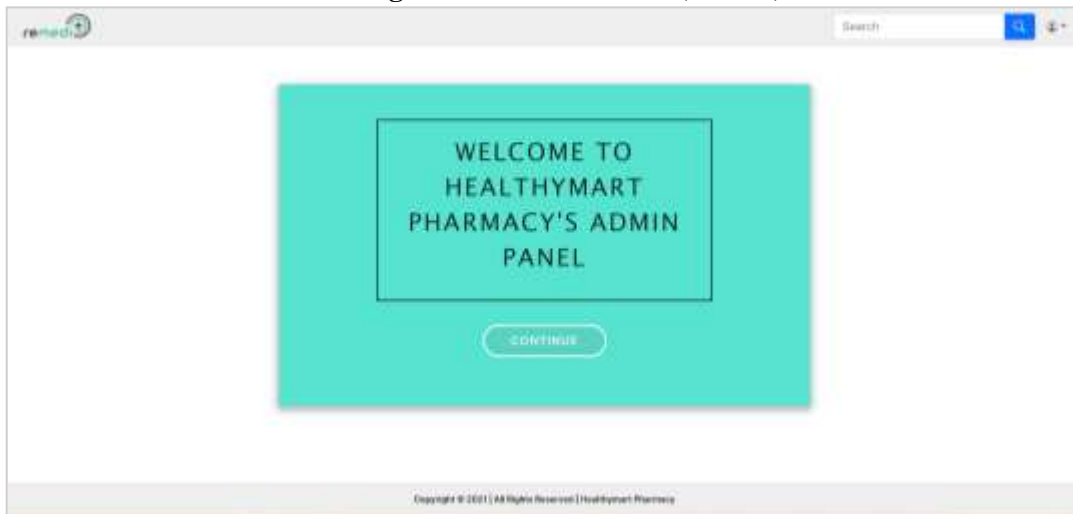


Figure - 2.2.3.8 User Interface for Welcome Page for Administrator's (Admin)

2.2.3.9 User Interface for Admin Login (Admin)

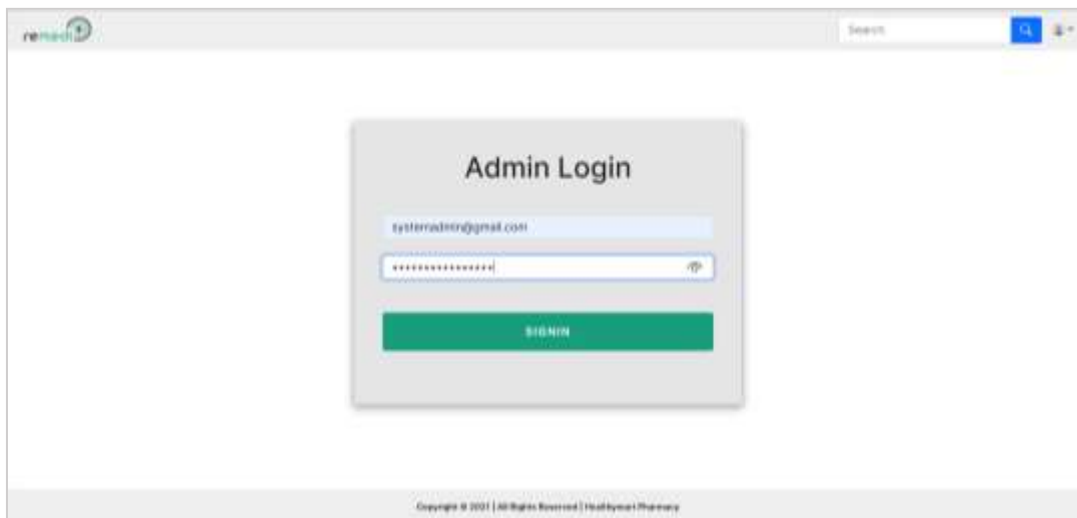


Figure - 2.2.3.9 User Interface for Admin Login (Admin)

2.2.3.10 User Interface for Retrieve All Registered Sub Administrators (Admin)

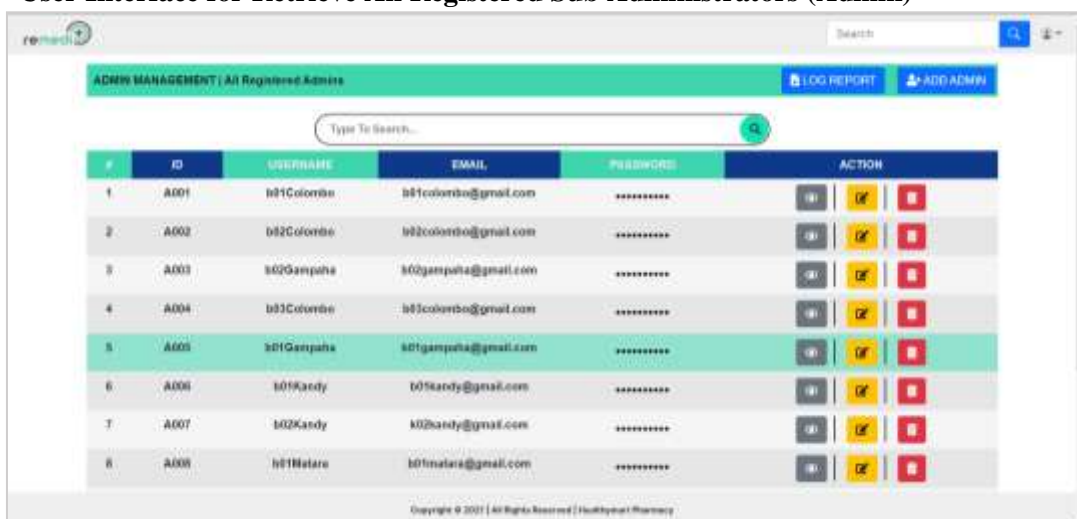


Figure - 2.2.3.10 User Interface for Retrieve All Registered Sub Administrator's (Admin)

2.2.3.11 User Interface for Add Sub Administrator's to the System (Admin)

Figure - 2.2.3.11 User Interface for Retrieve All Registered Sub Administrator's (Admin)

2.2.3.12 User Interface for Update Sub Admin Data (Admin)

Figure - 2.2.3.12 User Interface for Update Sub Admin Data (Admin)

2.2.3.13 User Interface for Delete Registered Sub Admins from the System (Admin)

| # | ID | USERNAME | EMAIL | PASSWORD | ACTION |
|---|-------|------------|----------------------|----------|--------------------------|
| 1 | A001 | b01Colombo | b01colombo@gmail.com | ***** | [Trash] [Check] [Delete] |
| 2 | A002 | b02Colombo | b02colombo@gmail.com | ***** | [Trash] [Check] [Delete] |
| 3 | A003 | b01Gampaha | b01gampaha@gmail.com | ***** | [Trash] [Check] [Delete] |
| 4 | A006 | b01Kandy | b01kandy@gmail.com | ***** | [Trash] [Check] [Delete] |
| 5 | A007 | b02Kandy | b02kandy@gmail.com | ***** | [Trash] [Check] [Delete] |
| 6 | A009 | b01Matara | b01matara@gmail.com | ***** | [Trash] [Check] [Delete] |
| 7 | A009 | b02Matara | b02matara@gmail.com | ***** | [Trash] [Check] [Delete] |
| 8 | A0110 | b01Galle | b01galle@gmail.com | ***** | [Trash] [Check] [Delete] |

Figure - 2.2.3.13 User Interface for Delete Registered Sub Admins from the System (Admin)

2.2.3.14 User Interface for Search Admins from the System (Admin)

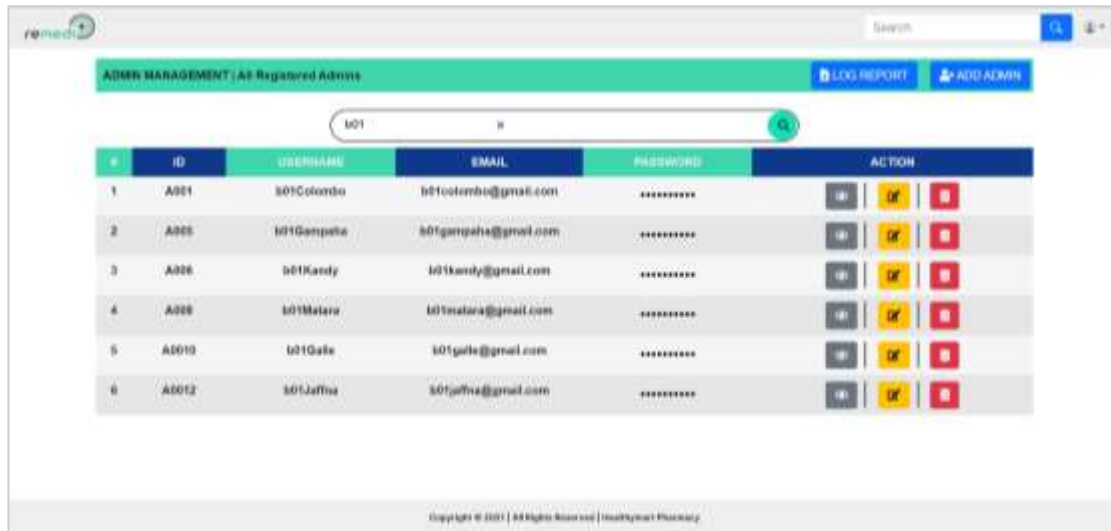


Figure - 2.2.3.14 User Interface for Search Admins from the System (Admin)

2.2.3.15 User Interface for System Admin Profile & System Logout Area (Admin)

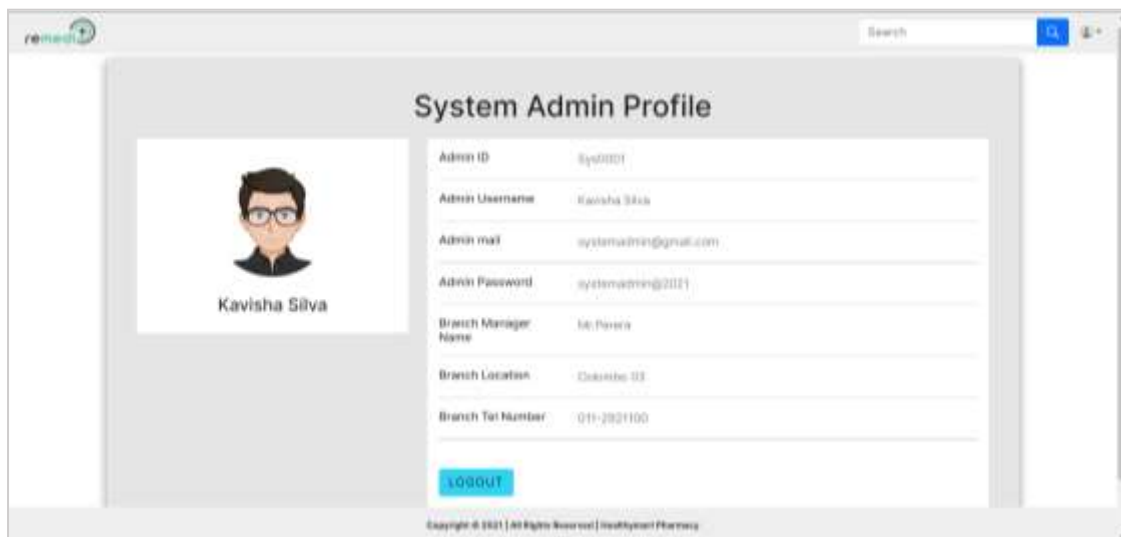


Figure - 2.2.3.15 User Interface for System Admin Profile & System Logout Area (Admin)

2.2.3.16 User Interface for Filtering & Generate Log Report (Admin)

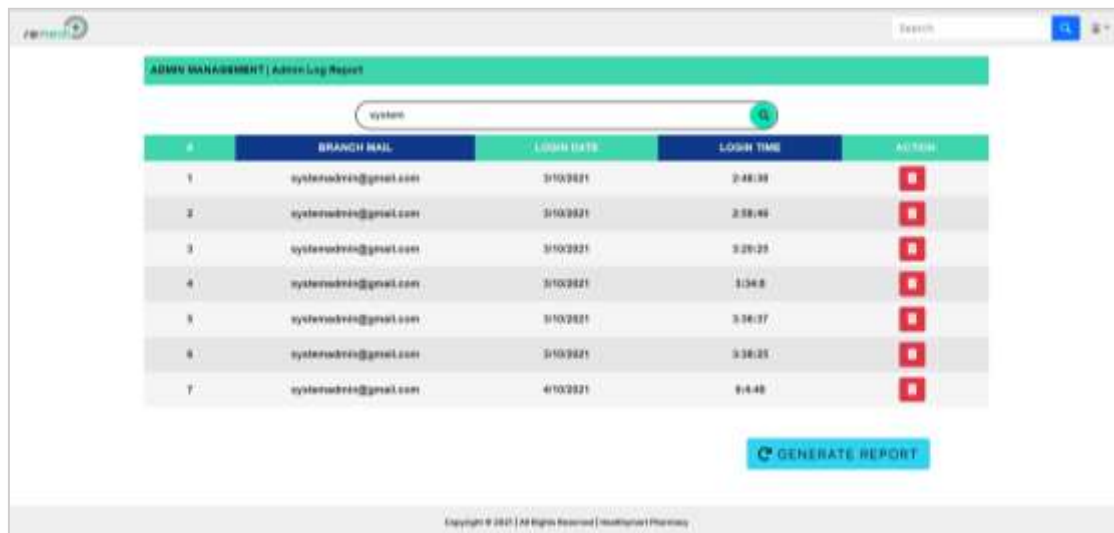


Figure - 2.2.3.16 User Interface for Filtering & Generate Log Report (Admin)

2.2.3.17 User Interface for Generated Log Report (Admin)

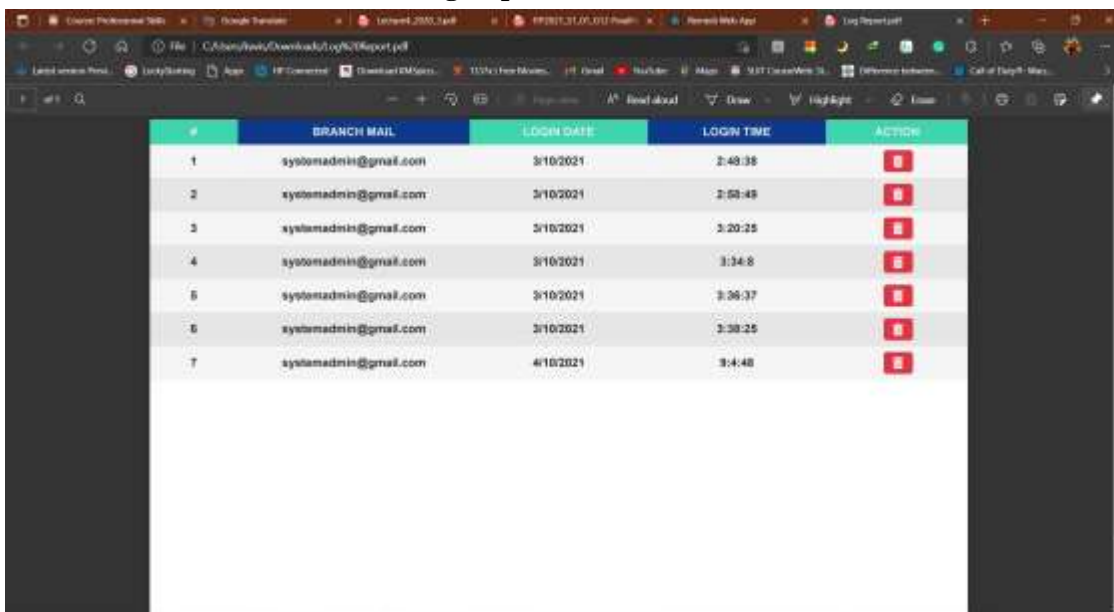


Figure - 2.2.3.17 User Interface for Generated Log Report (Admin)

Drug Stock Handling

2.2.3.18 User Interface for View Drug Stocks (Admin)

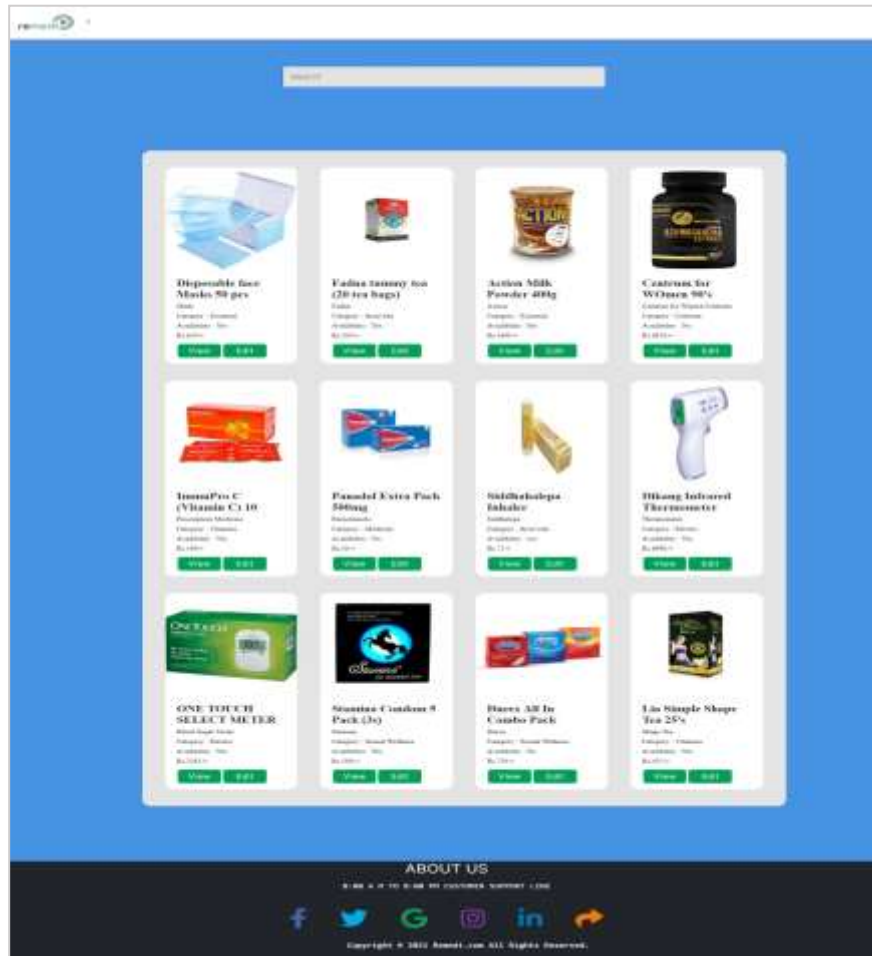


Figure - 2.2.3.18 User Interface for View Drug Stocks (Admin)

2.2.3.19 User Interface for Retrieve All Stocks from the DB & Generate Report (Admin)



Figure - 2.2.3.19 User Interface for Retrieve All Stocks from the DB & Generate Report (Admin)

2.2.3.20 User Interface for Add New Stock Items (Admin)

The screenshot displays a web application interface for adding new stock items. The main content area is a light gray box titled "Create New Post" centered on a blue background. It contains several input fields: "Topic" (placeholder: "Enter Topic"), "Post Description" (placeholder: "Enter description"), "Post Category" (placeholder: "Enter Category"), "Post availability" (placeholder: "Enter availability"), and "Post price" (placeholder: "Enter Price"). Below these is a "Choose File" button with the text "No file chosen" and a green "SAVE" button. The footer is a dark blue bar with the text "ABOUT US", "8:00 A.M. TO 8:00 PM CUSTOMER SUPPORT LINE", social media icons for Facebook, Twitter, Google+, Instagram, LinkedIn, and a share icon, and the copyright notice "Copyright © 2021 Remedi.com All Rights Reserved."

Figure - 2.2.3.20 User Interface for Add New Stock Items (Admin)

2.2.3.21 User Interface for Update Stock Item Details (Admin)

The screenshot displays a web application interface for updating stock item details. The main content area is a light gray box titled "Edit Item" centered on a blue background. It contains several input fields: "Topic" (placeholder: "Disposable face Masks 10 pcs"), "Post Description" (placeholder: "Mask"), "Post Category" (placeholder: "Essential"), "Availability" (placeholder: "Yes"), and "price" (placeholder: "650"). Below these is a "Choose File" button with the text "No file chosen" and a green "UPDATE" button. The footer is a dark blue bar with the text "ABOUT US", "8:00 A.M. TO 8:00 PM CUSTOMER SUPPORT LINE", social media icons for Facebook, Twitter, Google+, Instagram, LinkedIn, and a share icon, and the copyright notice "Copyright © 2021 Remedi.com All Rights Reserved."

Figure - 2.2.3.21 User Interface for Update Stock Item Details (Admin)

ID/VISA
999867743

Address
Badulla

Gender
M

Blood Type
A-

Drug Stock

REMEDI
Colombo
Sri Lanka
DATE:- 2021-10-11
TIME:- 16:46:55

| Product Name | Description | Categorey | Availability | Price |
|------------------------------------|------------------------------|-----------|--------------|-------|
| Disposable face Masks 50 pcs | Mask | Essential | Yes | 650 |
| Fadna tummy tea (20 tea bags) | Fadna | Ayurveda | Yes | 200 |
| Action Milk Powder 400g | Astron | Essential | Yes | 1600 |
| Centrum for WOMen 90's | Centrum for Women Centrum | Centrum | No | 6850 |
| ImmuPro C (Vitamin C) 10 | Prescription Medicine | Vitamins | Yes | 190 |
| Panadol Extra Pack 500mg | Parasitomole | Medicine | No | 20 |
| Siddhahalepa Inhaler | Siddhalepa | Ayurveda | yes | 75 |
| Dikang Infrared Thermometer | Thermometer | Electric | Yes | 6990 |
| ONE TOUCH BLOOD SUGAR TESTER | Blood Sugar Tester | Electric | Yes | 2385 |

Figure - 2.2.3.22 User Interface for Generated Stock Report (Admin)

Purchase An Item

2.2.3.23 User Interface for Add Items to Cart (Customer)

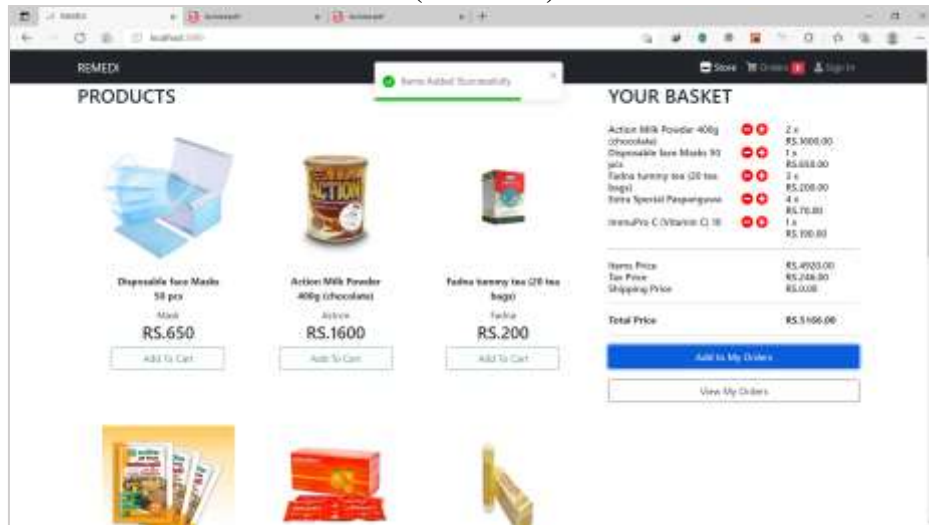


Figure - 2.2.3.23 User Interface for Add Items to Cart (Customer)

2.2.3.24 User Interface for Empty Cart Activity (Customer)

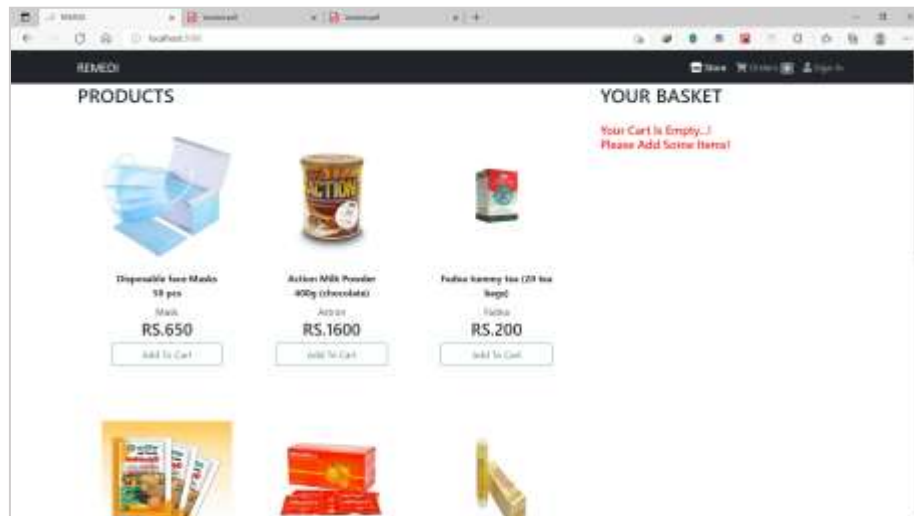


Figure - 2.2.3.24 User Interface for Empty Cart Activity (Customer)

2.2.3.25 User Interface for Customer's Purchase Order List (Customer)

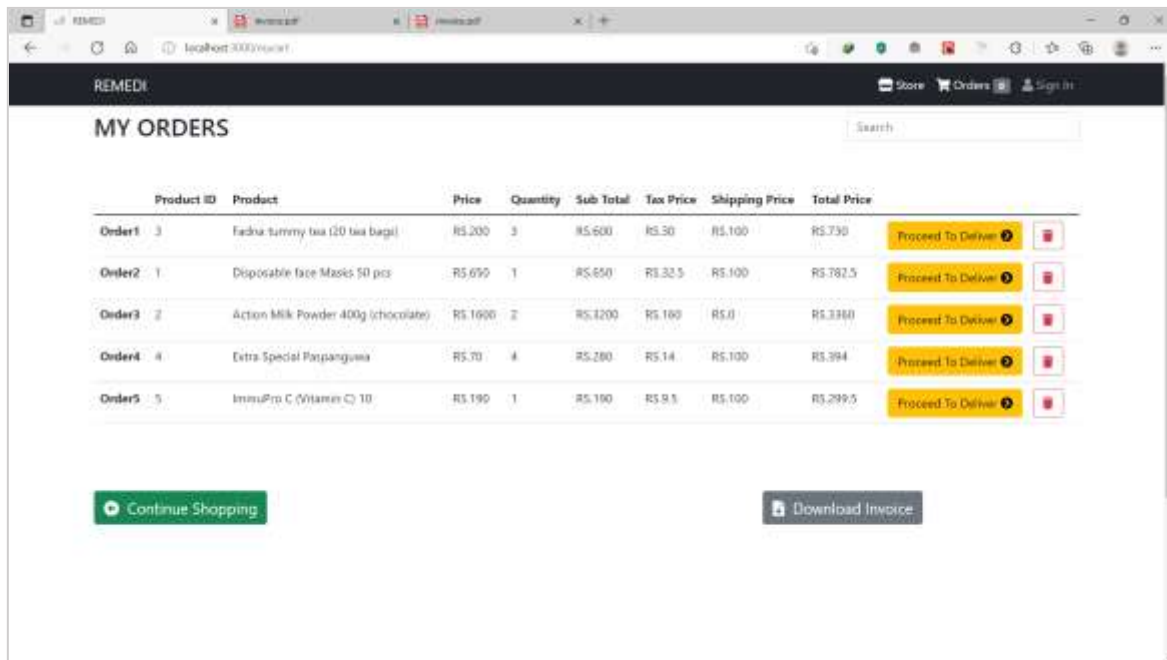


Figure - 2.2.3.25 User Interface for Customer's Purchase Order List (Customer)

2.2.3.26 User Interface for Generated Customer Invoice (Customer)

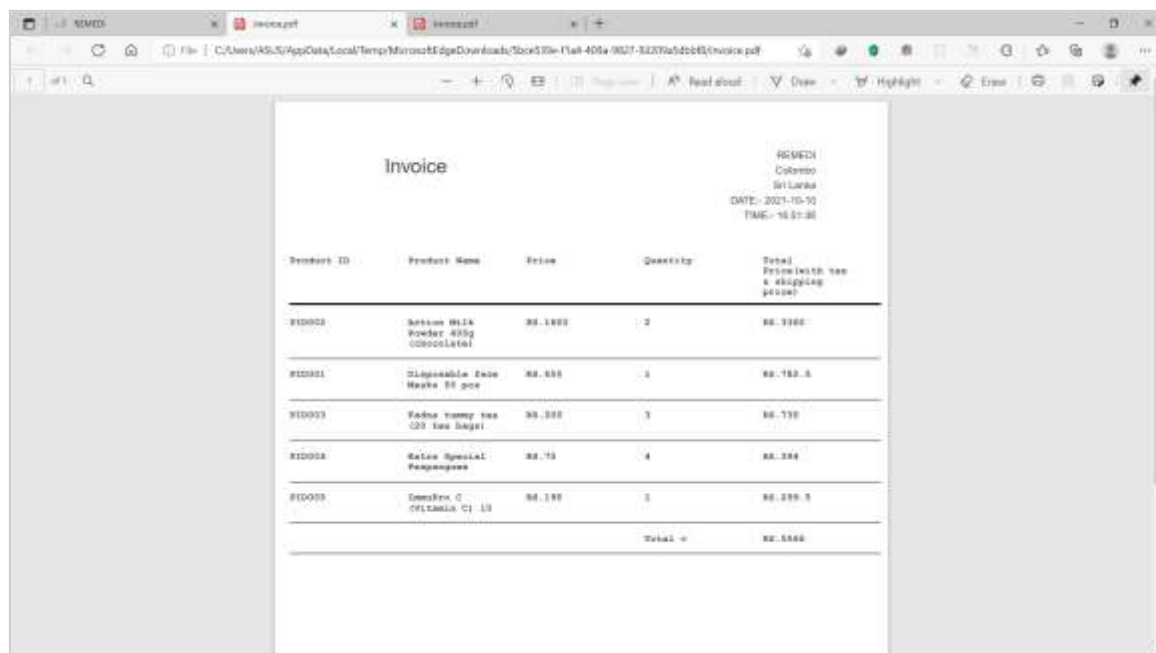


Figure - 2.2.3.26 User Interface for Generated Customer Invoice (Customer)

2.2.3.27 User Interface for Successfully Downloaded Status of the Invoice (Customer)

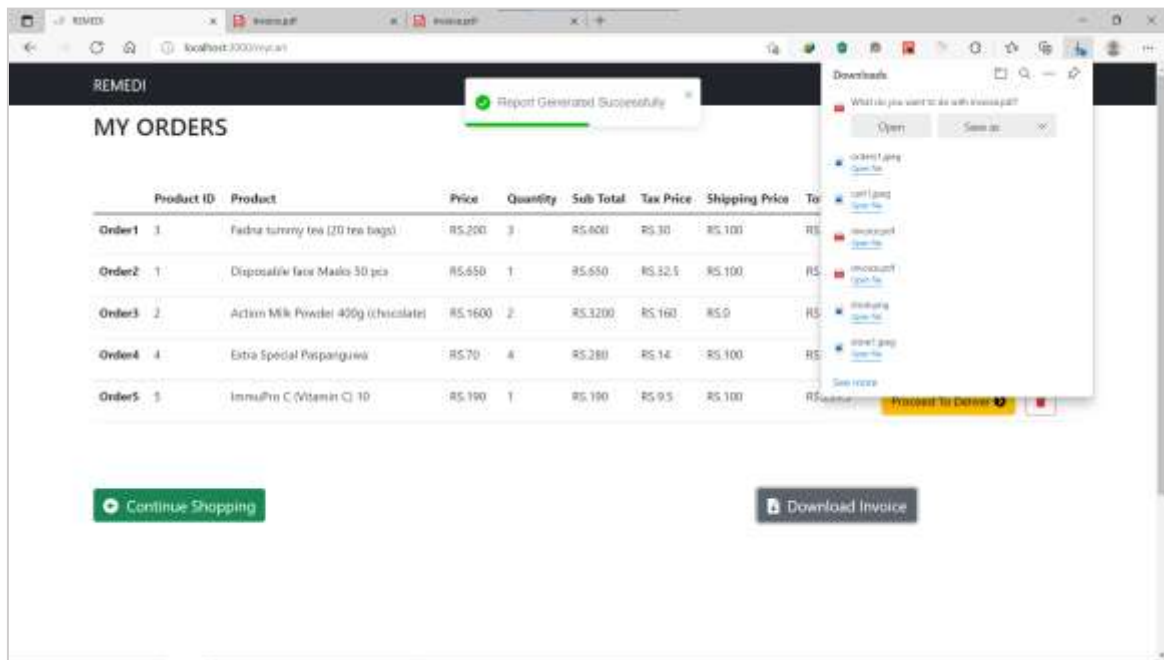


Figure - 2.2.3.27 User Interface for Successfully Downloaded Status of the Invoice (Customer)

Drug Item Reservation

2.2.3.28 User Interface for Upload Prescription (Customer)

REMEDY

Home Cart Sign In

Upload Prescription File

Customer ID:

Customer Name:

Phone Number:

Enter prescription details:

Choose file | prescription.png

Upload Images below 30mb

Upload

ABOUT US

8:00 A.M TO 8:00 PM CUSTOMER SUPPORT LINE

f t G i in

Figure - 2.2.3.28 User Interface for Upload Prescription (Customer)

2.2.3.29 User Interface for Upload Prescription Validations (Customer)

REMEDY

Home Cart Sign In

Required to fill all fields

Upload Prescription File

Customer ID:

Customer Name:

Phone Number:

Enter prescription details:

Choose file | jpp.png

Upload Images below 30mb

Upload

ABOUT US

8:00 A.M TO 8:00 PM CUSTOMER SUPPORT LINE

f t G i in

Figure - 2.2.3.29 User Interface for Upload Prescription Validation (Customer)

2.2.3.30 User Interface for Upload Successful Status (Customer)

REMEDY

Home Cart Sign In

UPLOAD SUCCESSFUL !

Customer ID:

Customer Name:

Phone Number:

Customer:

Upload Images below 30mb

2022-10-07 10:45:40 (GMT)

Dear Anthony, Please

15x Paracetamol #12

Grip-tabs 1 tab 4 times a day

OK Cancel

ABOUT US

Figure - 2.2.3.30 User Interface for Upload Successful Status (Customer)

2.2.3.31 User Interface for Change Details of the Uploaded Prescription (Customer)

REMEDY

Home Cart Sign In

Edit Prescription Details

Customer ID:

Customer Name:

Phone Number:

Enter prescription details:

Choose file: No file chosen

Upload images below 5MB

Upload

ABOUT US

9:00 A.M TO 8:00 PM CUSTOMER SUPPORT LINE

f t G i in

Figure - 2.2.3.31 User Interface for Change Details of the Uploaded Prescription (Customer)

2.2.3.32 User Interface for Retrieve All Uploaded Prescriptions (Admin)

REMEDY

Search

All Prescription Details

+ Add New Prescription

- Delete Prescription

| S.No | Customer ID | Customer Name | Phone Number | Action |
|------|-------------|------------------|--------------|---------|
| 1 | 123456 | John | 9876543210 | Details |
| 2 | 123456 | John-Doe | 9876543210 | Details |
| 3 | 123456 | John | 9876543210 | Details |
| 4 | 123456 | Sajin Ramalingam | 9776717676 | Details |
| 5 | 123456 | Wendy Doe | 9776717676 | Details |
| 6 | 123456 | Wendy Ramalingam | 9776717676 | Details |

+ Add New Prescription

ABOUT US

9:00 A.M TO 8:00 PM CUSTOMER SUPPORT LINE

f t G i in

Figure - 2.2.3.32 User Interface for Retrieve All Uploaded Prescriptions (Admin)

2.2.3.33 User Interface for Decide Validation of the Uploaded Prescription (Admin)

REMEDY

CUSTOMER PRESCRIPTION

Customer ID: 123456
Customer Name: Sajin Ramalingam
Phone Number: 9776717676
Prescription: [Handwritten Prescription]

Validate

Reject

ABOUT US

9:00 A.M TO 8:00 PM CUSTOMER SUPPORT LINE

f t G i in

Figure - 2.2.3.33 User Interface for Decide Validation of the Uploaded Prescription (Admin)

2.2.3.34 User Interface for Invalid Prescription Table (Admin)

Invalid Prescriptions Details

Search

| # | Customer ID | Customer Name | Prescription | Action |
|---|-------------|---------------|--------------|------------------------|
| 1 | 100001 | John | 10000001 | Delete |
| 2 | 100002 | Robert | 10000002 | Delete |
| 3 | 100003 | Robert | 10000003 | Delete |

ABOUT US

8:00 A.M. TO 5:00 PM CUSTOMER SUPPORT LINE

f t G i in

Copyright © 2021 Remedi.com All Rights Reserved.

Figure - 2.2.3.34 User Interface for Invalid Prescription Table (Admin)

2.2.3.35 User Interface for Invalid Prescription Details (Admin)

MARKED AS INVALID

Customer ID: 100001
 Customer Name: John
 Phone Number: 2122333445
 Customer Prescription Details: Test 03
 Upload Date: 2021-06-15 07:09:46:112

PEDIATRICS UNLIMITED
 1000 University Drive
 Wellington, NM 86250

Date: March 10, 2008
 Patient Name: Kevin Zadnick
 Address: 1000 University Drive
 DOB: July 18, 1978
 Allergies: NKA
 Weight: 16 pounds
 RX: Ferrous Sulfate 4 mL PO TID
 Dispense one bottle
 Refill: 6 months
 Dr. Montgomery

ABOUT US

8:00 A.M. TO 5:00 PM CUSTOMER SUPPORT LINE

Figure - 2.2.3.35 User Interface for Invalid Prescription Details (Admin)

2.2.3.36 User Interface for Valid Prescription Table (Admin)

Valid Prescriptions Details

Search

| # | Customer ID | Customer Name | Prescription | Action |
|---|-------------|---------------|--------------|------------------------|
| 1 | 100001 | Robert | 10000001 | Delete |
| 2 | 100002 | Robert | 10000002 | Delete |
| 3 | 100003 | Robert | 10000003 | Delete |
| 4 | 100004 | Robert | 10000004 | Delete |

ABOUT US

8:00 A.M. TO 5:00 PM CUSTOMER SUPPORT LINE

f t G i in

Copyright © 2021 Remedi.com All Rights Reserved.

Figure - 2.2.3.36 User Interface for Valid Prescription Table (Admin)

2.2.3.37 User Interface for Valid Prescription Detail (Admin)

MARKED AS VALID

Customer ID: 123456
 Customer Name: John Doe
 Phone Number: 011-12345678
 Customer Prescription: 123456789
 Address: 12345678901234567890

PEDIATRIC UNLIMITED
 1000 University Drive
 Wellington, New Zealand

Date: March 10, 2021
 Patient Name: John Doe
 Address: 1234567890
 DOB: 12/12/21
 Allergies: None
 Weight: 10.000000
 RX: Paracetamol 500mg 4 ml PO TID
 Dispense in bottle: 1000
 Refills: 1 month
 Dr. Montgomery

ABOUT US
 1234567890123456789012345678901234567890

Figure - 2.2.3.37 User Interface for Valid Prescription Detail (Admin)

2.2.3.38 User Interface for Generate Report Area (Admin)

All Prescription Details

| ID | Name | Address | Status |
|----|----------|------------|----------|
| 1 | John Doe | 1234567890 | 12/12/21 |
| 2 | John Doe | 1234567890 | 12/12/21 |
| 3 | John Doe | 1234567890 | 12/12/21 |
| 4 | John Doe | 1234567890 | 12/12/21 |
| 5 | John Doe | 1234567890 | 12/12/21 |
| 6 | John Doe | 1234567890 | 12/12/21 |

ABOUT US
 1234567890123456789012345678901234567890

Copyright © 2021. All rights reserved. All Rights Reserved.

Figure - 2.2.3.38 User Interface for Generate Report Area (Admin)

2.2.3.39 User Interface for Generated Prescription Summery Report (Admin)

Prescription Status Report

REMED
 Colombo
 Sri Lanka
 DATE:- 2021-10-10
 TIME:- 22:29:18

| Prescription types | Number of Prescriptions |
|-----------------------|-------------------------|
| Pending Prescription | 6 |
| Solved Prescription | 4 |
| Unsolved Prescription | 3 |

Total number of prescriptions = 13

Figure - 2.2.3.39 User Interface for Generated Prescription Summery Report (Admin)

Access Purchase History

2.2.3.40 User Interface for Customer Favorite Item List (Customer)

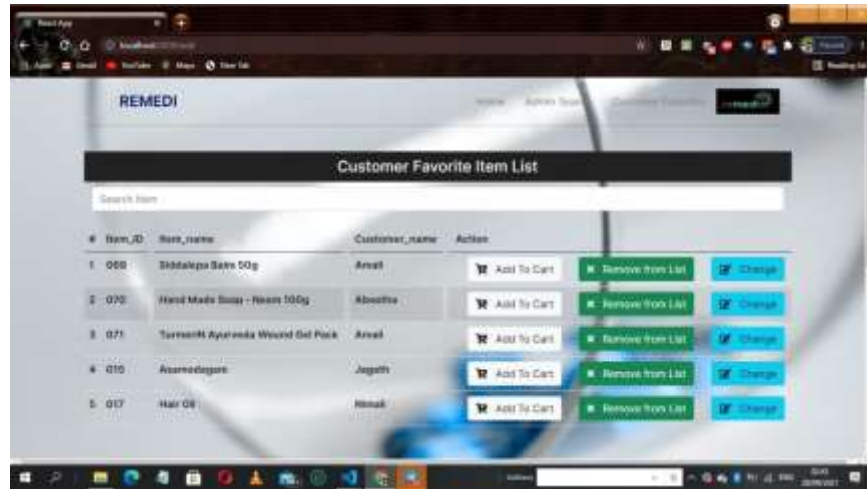


Figure - 2.2.3.40 User Interface for Customer Favorite Item List (Customer)

2.2.3.41 User Interface for Customer Transaction History List (Customer)



Figure - 2.2.3.41 User Interface for Customer Transaction History List (Customer)

2.2.3.42 User Interface for Search Specific Customers in Admin Panel (Admin)

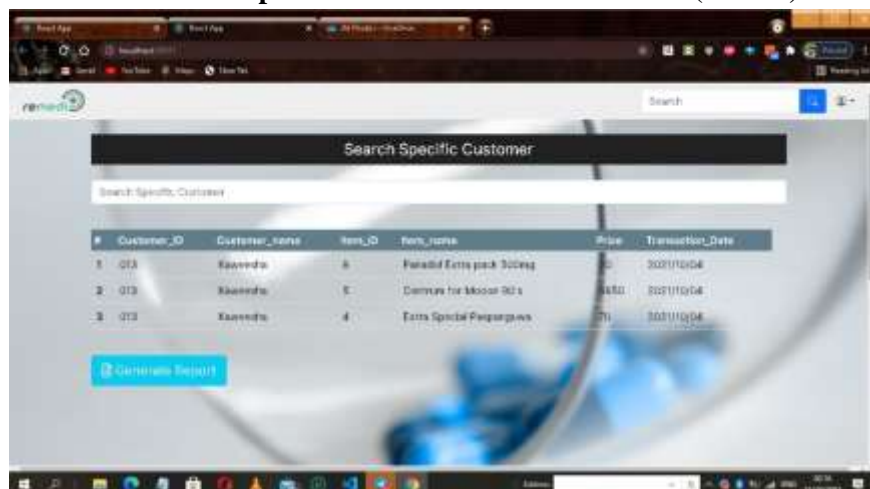
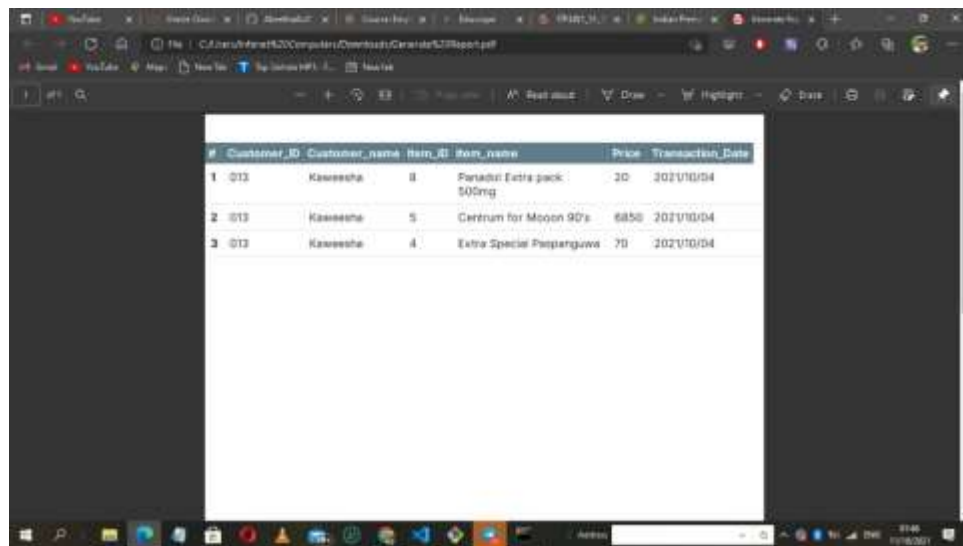


Figure - 2.2.3.42 User Interface for Search Specific Customers in Admin Panel (Admin)

2.2.3.43 User Interface for Generated Customer Transaction History Report (Admin)



| # | Customer_ID | Customer_name | Item_ID | Item_name | Price | Transaction_Date |
|---|-------------|---------------|---------|----------------------------|-------|------------------|
| 1 | 013 | Kawesha | 8 | Paracet Extra pack : 500mg | 20 | 2021/10/04 |
| 2 | 013 | Kawesha | 5 | Gerdium for Moon 90's | 6850 | 2021/10/04 |
| 3 | 013 | Kawesha | 4 | Extra Special Paspanguwa | 70 | 2021/10/04 |

Figure - 2.2.3.43 User Interface for Generated Customer Transaction History Report (Admin)

2.2.3.44 User Interface for Generate Report Area (Admin)

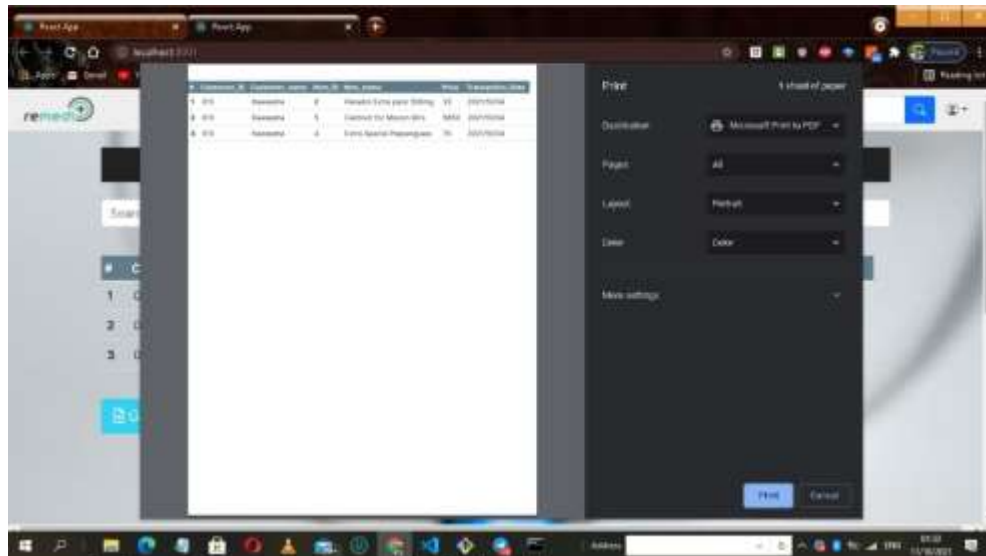
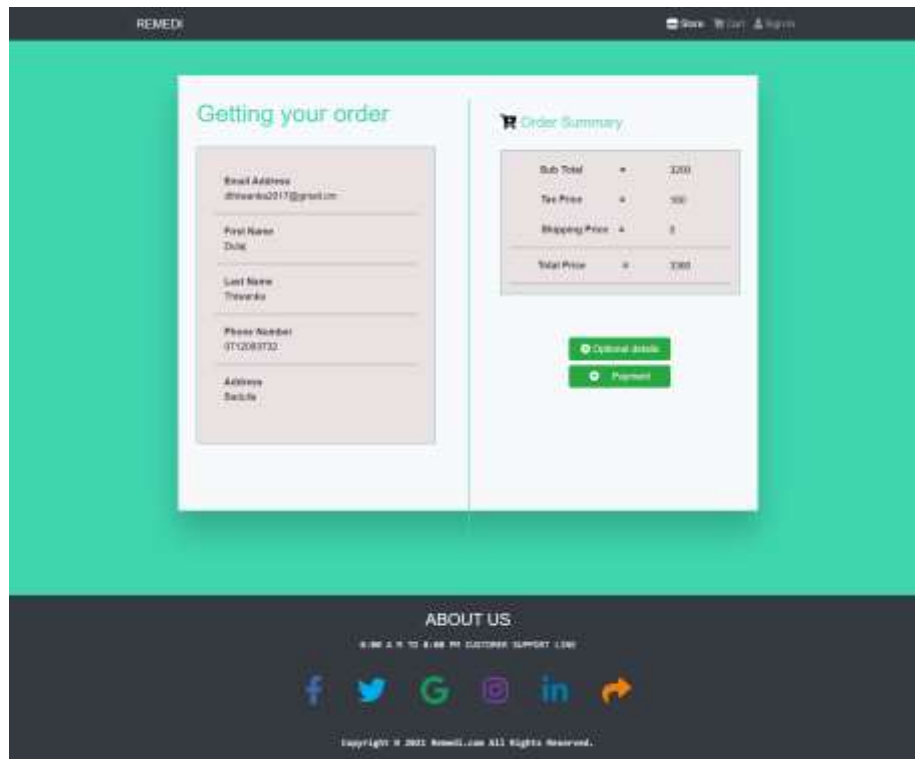


Figure - 2.2.3.44 User Interface for Generate Report Area (Admin)

Item Delivery

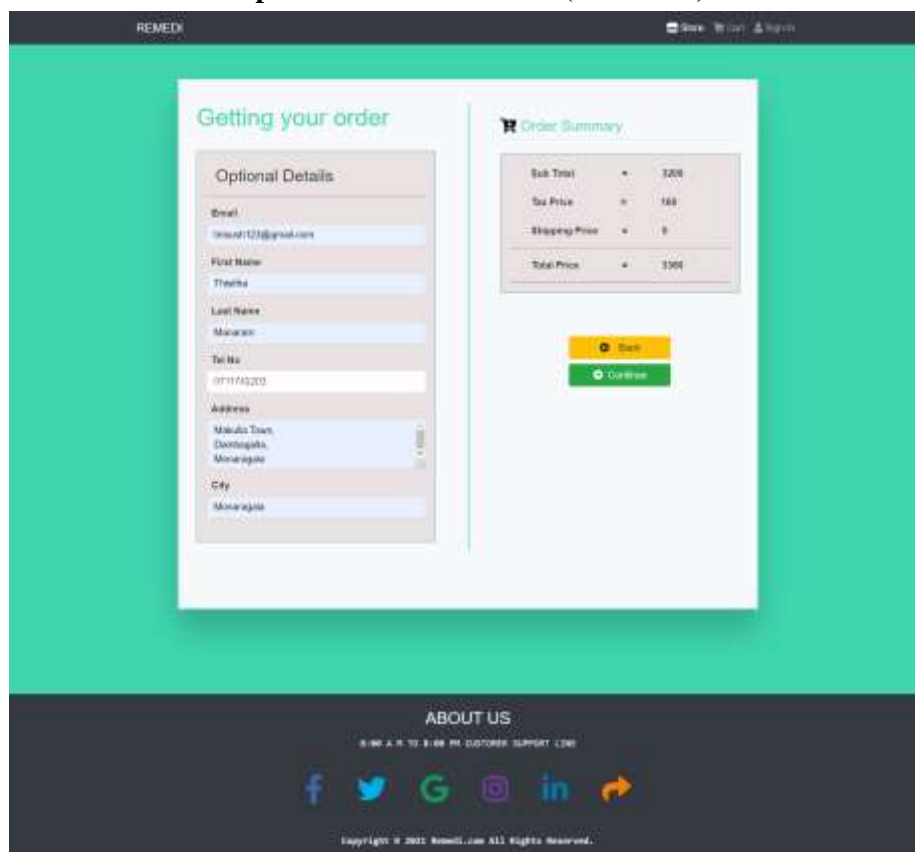
2.2.3.45 User Interface for Get Customer Location & Order Detail Summery (Customer)



The screenshot displays a web application interface for a customer to retrieve their order details and location. The interface is set against a teal background. At the top, a dark header bar contains the 'REMEDI' logo, a shopping cart icon, and links for 'Store', 'Cart', and 'Login'. The main content area is divided into two columns. The left column, titled 'Getting your order', contains a form with input fields for 'Email Address' (pre-filled with 'thiruvadu2017@gmail.com'), 'First Name' (pre-filled with 'Dileep'), 'Last Name' (pre-filled with 'Thiruvadu'), 'Phone Number' (pre-filled with '0112080732'), and 'Address' (pre-filled with 'Bachula'). The right column, titled 'Order Summary', features a table with the following data: Sub Total (1200), Tax Price (500), Shipping Price (0), and Total Price (1700). Below the table are two green buttons labeled 'Optional Details' and 'Payment'. At the bottom of the page, a dark footer section includes the text 'ABOUT US', '8:00 A.M TO 8:00 PM CUSTOMER SUPPORT LINE', social media icons for Facebook, Twitter, Google+, Instagram, LinkedIn, and a share icon, and a copyright notice: 'Copyright © 2021 Remedi.com All Rights Reserved.'

Figure - 2.2.3.45 User Interface for Get Customer Location & Order Detail Summery (Customer)

2.2.3.46 User Interface for Add Optional Location Details (Customer)



The screenshot displays a web application interface for a customer to add optional location details. The interface is set against a teal background. At the top, a dark header bar contains the 'REMEDI' logo, a shopping cart icon, and links for 'Store', 'Cart', and 'Login'. The main content area is divided into two columns. The left column, titled 'Getting your order', contains a form with input fields for 'Email' (pre-filled with 'thiruvadu2017@gmail.com'), 'First Name' (pre-filled with 'Thiruvadu'), 'Last Name' (pre-filled with 'Thiruvadu'), 'Phone Number' (pre-filled with '0112080732'), and 'Address' (pre-filled with 'Bachula Town, Doodhagala, Monargala'). The right column, titled 'Order Summary', features a table with the following data: Sub Total (1200), Tax Price (100), Shipping Price (0), and Total Price (1300). Below the table are two buttons labeled 'Back' and 'Continue'. At the bottom of the page, a dark footer section includes the text 'ABOUT US', '8:00 A.M TO 8:00 PM CUSTOMER SUPPORT LINE', social media icons for Facebook, Twitter, Google+, Instagram, LinkedIn, and a share icon, and a copyright notice: 'Copyright © 2021 Remedi.com All Rights Reserved.'

Figure - 2.2.3.46 User Interface for Add Optional Location Details (Customer)

2.2.3.47 User Interface for Update Optional Location Details (Customer)

REMEMDI

More Cart Support

Optional Details

Email
Insoah123@gmail.com

First Name
Thadde

Last Name
Mwanam

Telephone Number
711742083

Address
Mukulu Town, Dar es Salaam, Mwanam

City
Mwanam

Save Cancel

ABOUT US

8:00 A.M TO 8:00 PM CUSTOMER SUPPORT LINE

f t G i in

Copyright © 2021 Remedi.com All Rights Reserved.

Figure - 2.2.3.47 User Interface for Update Optional Location Details (Customer)

2.2.3.48 User Interface for Update & Confirm Location Information (Customer)

REMEMDI

More Cart Support

Optional Details

Email
Insoah123@gmail.com

First Name
Thadde

Last Name
Mwanam

Telephone Number
711742083

Address
Mukulu Town, Dar es Salaam, Mwanam

City
Mwanam

Update

ABOUT US

8:00 A.M TO 8:00 PM CUSTOMER SUPPORT LINE

f t G i in

Copyright © 2021 Remedi.com All Rights Reserved.

Figure - 2.2.3.48 User Interface for Update & Confirm Location Information (Customer)

2.2.3.49 User Interface for Retrieve All Customer Order (Admin)

REMEMDI

DELIVERY MANAGEMENT

Orders Optional Details

ALL OPTIONAL DELIVERY DETAILS

SEARCH

| Number | E-mail | First Name | Last Name | Phone Number | Address | City | Action |
|--------|------------------|------------|-----------|--------------|-------------------------------|--------|--------|
| 1 | remedi@gmail.com | Theresa | Manoran | 91042302 | Melaka Town, Seremban, Melaka | Melaka | Delete |
| 2 | remedi@gmail.com | Julia | Manoran | 91042302 | Melaka Town, Seremban, Melaka | Melaka | Delete |
| 3 | remedi@gmail.com | Theresa | Manoran | 91042302 | Melaka Town, Seremban, Melaka | Melaka | Delete |
| 4 | remedi@gmail.com | Theresa | Manoran | 91042302 | Melaka Town, Seremban, Melaka | Melaka | Delete |
| 5 | remedi@gmail.com | Theresa | Manoran | 91042302 | Melaka Town, Seremban, Melaka | Melaka | Delete |
| 6 | remedi@gmail.com | Theresa | Manoran | 91042302 | Melaka Town, Seremban, Melaka | Melaka | Delete |

ABOUT US

8:00 A.M TO 8:00 PM CUSTOMER SUPPORT LINE

f t G i in

Copyright © 2021 Remedi.com All Rights Reserved.

Figure - 2.2.3.49 User Interface for Retrieve All Customer Order (Admin)

2.2.3.50 User Interface for Filter & Generate Report Area (Admin)

REMEMDI

DELIVERY MANAGEMENT

Orders Optional Details

ALL ORDERS

SEARCH

| Number | E-mail | First Name | Last Name | Phone Number | Address | Sub Total | Tax Price | Shipping Price | Total Price | Action |
|--------|------------------|------------|-----------|--------------|-------------------------------|-----------|-----------|----------------|-------------|--------|
| 1 | remedi@gmail.com | Theresa | Manoran | 91042302 | Melaka Town, Seremban, Melaka | Rm 200 | Rm 10 | Rm 50 | Rm 260 | Delete |
| 2 | remedi@gmail.com | Julia | Manoran | 91042302 | Melaka Town, Seremban, Melaka | Rm 200 | Rm 10 | Rm 50 | Rm 260 | Delete |
| 3 | remedi@gmail.com | Theresa | Manoran | 91042302 | Melaka Town, Seremban, Melaka | Rm 200 | Rm 10 | Rm 50 | Rm 260 | Delete |
| 4 | remedi@gmail.com | Theresa | Manoran | 91042302 | Melaka Town, Seremban, Melaka | Rm 200 | Rm 10 | Rm 50 | Rm 260 | Delete |
| 5 | remedi@gmail.com | Theresa | Manoran | 91042302 | Melaka Town, Seremban, Melaka | Rm 200 | Rm 10 | Rm 50 | Rm 260 | Delete |
| 6 | remedi@gmail.com | Theresa | Manoran | 91042302 | Melaka Town, Seremban, Melaka | Rm 200 | Rm 10 | Rm 50 | Rm 260 | Delete |
| 7 | remedi@gmail.com | Theresa | Manoran | 91042302 | Melaka Town, Seremban, Melaka | Rm 200 | Rm 10 | Rm 50 | Rm 260 | Delete |
| 8 | remedi@gmail.com | Theresa | Manoran | 91042302 | Melaka Town, Seremban, Melaka | Rm 200 | Rm 10 | Rm 50 | Rm 260 | Delete |

Generate Report

ABOUT US

8:00 A.M TO 8:00 PM CUSTOMER SUPPORT LINE

f t G i in

Copyright © 2021 Remedi.com All Rights Reserved.

Figure - 2.2.3.50 User Interface for Filter & Generate Report Area (Admin)

2.2.3.51 User Interface for Generate Delivery Report (Admin)

| Sl. No. | 1 | 2 | 3 | 4 | 5 | 6 |
|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Customer | remedi@remedi.com | remedi@remedi.com | remedi@remedi.com | remedi@remedi.com | remedi@remedi.com | remedi@remedi.com |
| Product Name | Apple | Apple | Apple | Apple | Apple | Apple |
| Product Price | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 |
| Product Quantity | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 |
| Product Total | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 |
| Product Tax | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 |
| Product Shipping | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 |
| Product Total | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 |

Figure - 2.2.3.51 User Interface for Generate Delivery Report (Admin)

2.2.3.52 User Interface for Generated Delivery Report (Admin)

| Sl. No. | 1 | 2 | 3 | 4 | 5 | 6 |
|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Customer | remedi@remedi.com | remedi@remedi.com | remedi@remedi.com | remedi@remedi.com | remedi@remedi.com | remedi@remedi.com |
| Product Name | Apple | Apple | Apple | Apple | Apple | Apple |
| Product Price | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 |
| Product Quantity | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 |
| Product Total | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 |
| Product Tax | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 |
| Product Shipping | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 |
| Product Total | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 |

Figure - 2.2.3.52 User Interface for Generated Delivery Report (Admin)

2.2.3.53 User Interface for Add Customer Inquiry (Customer)



The screenshot displays a web application interface for adding a customer inquiry. At the top, there are two green buttons labeled 'Inquiry' and 'Feedback'. Below these is the title 'Customer Inquiries'. The form contains several input fields: 'Name' (with placeholder 'Enter Name'), 'User ID' (with placeholder 'Enter User ID'), 'Telephone Number' (with placeholder 'Enter Telephone Number'), and 'Description' (with placeholder 'Enter Description'). A green 'Save' button is positioned at the bottom of the form. The footer section, titled 'ABOUT US', includes the text '8:00 A.M. TO 8:00 PM CUSTOMER SUPPORT LINE', social media icons for Facebook, Twitter, Google+, Instagram, LinkedIn, and a share icon, and the copyright notice 'Copyright © 2021 Remell.com All Rights Reserved.'

Figure - 2.2.3.52 User Interface for Add Customer Inquiry (Customer)

2.2.3.54 User Interface for Add Customer Feedback (Customer)



The screenshot displays a web application interface for adding customer feedback. At the top, there are two green buttons labeled 'Inquiry' and 'Feedback'. Below these is the title 'Customer Feedback'. The form contains several input fields: 'Name' (with placeholder 'Enter Name'), 'User ID' (with placeholder 'Enter User ID'), and 'Description' (with placeholder 'Enter Description'). A green 'Save' button is positioned at the bottom of the form. The footer section, titled 'ABOUT US', includes the text '8:00 A.M. TO 8:00 PM CUSTOMER SUPPORT LINE', social media icons for Facebook, Twitter, Google+, Instagram, LinkedIn, and a share icon, and the copyright notice 'Copyright © 2021 Remell.com All Rights Reserved.'

Figure - 2.2.3.52 User Interface for Add Customer Feedback (Customer)

2.2.3.55 User Interface for Edit & Delete Customer Inquiries (Customer)



The screenshot displays a web application interface for editing and deleting customer inquiries. At the top, the name 'Janith' is displayed. Below this is a table with the following data:

| Name | Janith |
|------------------|--------------------|
| User ID | 43010 |
| Telephone Number | 713/00004 |
| Description | Need assist needed |

Below the table are three buttons: 'Edit' (yellow), 'Delete' (red), and 'Cancel' (green). The footer section, titled 'ABOUT US', includes the text '8:00 A.M. TO 8:00 PM CUSTOMER SUPPORT LINE', social media icons for Facebook, Twitter, Google+, Instagram, LinkedIn, and a share icon, and the copyright notice 'Copyright © 2021 Remell.com All Rights Reserved.'

Figure - 2.2.3.52 User Interface for Edit & Delete Customer Inquiries (Customer)

2.2.3.56 User Interface for (Customer)

The screenshot displays a web application interface for editing a post. The main content area is a light gray box with a blue border, set against a blue background. It contains the following elements:

- Edit Post**: A title at the top of the form.
- Name**: A text input field with the value "John".
- User ID**: A text input field with the value "8298".
- Telephone Number**: A text input field with the value "7000000000".
- Description**: A text input field with the value "Here didn't record".
- Update**: A green button with a white checkmark icon and the text "Update".

Below the main form, there is a dark gray footer section with the following content:

- ABOUT US**: A heading.
- 9:00 A.M TO 9:00 PM CUSTOMER SUPPORT LINE**: A line of text.
- Social Media Icons**: A row of icons for Facebook, Twitter, Google+, Instagram, LinkedIn, and a share icon.
- Copyright © 2021 Ramed.com All Rights Reserved.**: A line of text at the bottom.

2.2.3.57 User Interface for Display Delete Notification (Customer)

The screenshot displays a web application interface with a delete notification and a list of posts. The main content area is a light gray box with a blue border, set against a blue background. It contains the following elements:

- Notification**: A white box with a blue border and a blue close button. It contains the text "Successfully Deleted" and "Delete Successfully".
- Post List**: A table with the following data:

| ids | |
|-----|----|
| 10 | 10 |
| 20 | 20 |
| 30 | 30 |
| 40 | 40 |

- Buttons**: A row of three buttons: "Edit" (yellow), "Delete" (red), and "Confirm" (green).

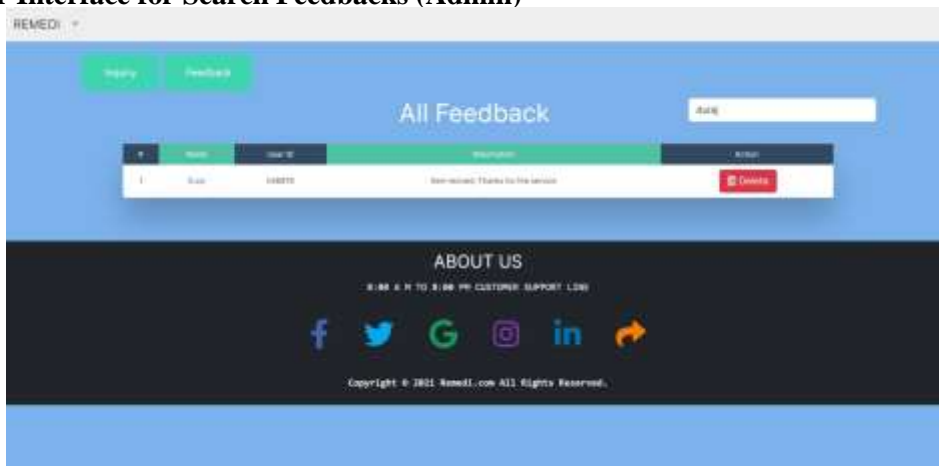
Below the main form, there is a dark gray footer section with the following content:

- ABOUT US**: A heading.
- 9:00 A.M TO 9:00 PM CUSTOMER SUPPORT LINE**: A line of text.
- Social Media Icons**: A row of icons for Facebook, Twitter, Google+, Instagram, LinkedIn, and a share icon.
- Copyright © 2021 Ramed.com All Rights Reserved.**: A line of text at the bottom.

2.2.3.58 User Interface for Retrieve Feedbacks (Admin)



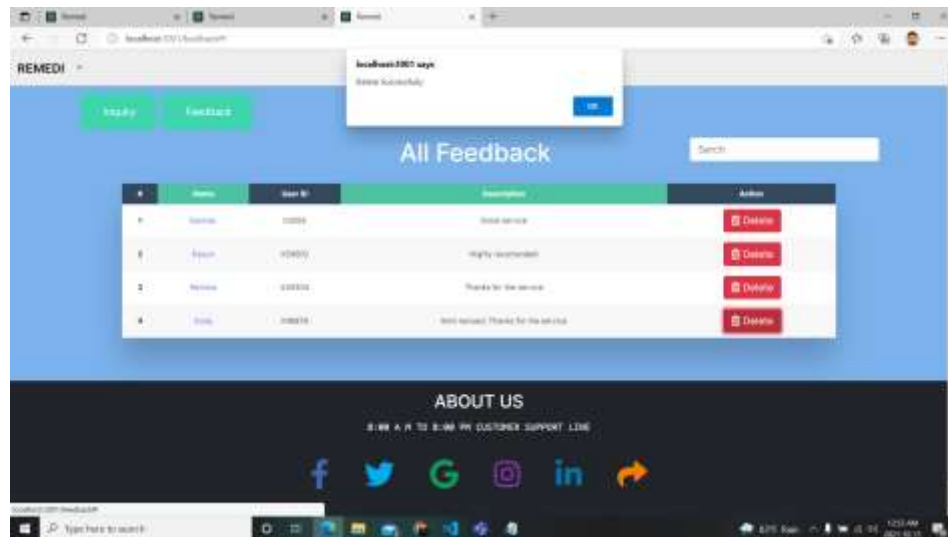
2.2.3.59 User Interface for Search Feedbacks (Admin)



2.2.3.60 User Interface for View Feedbacks (Admin)



2.2.3.61 User Interface for Delete Feedbacks (Admin)



2.2.3.62 User Interface for Customer Inquiry Panel (Admin)



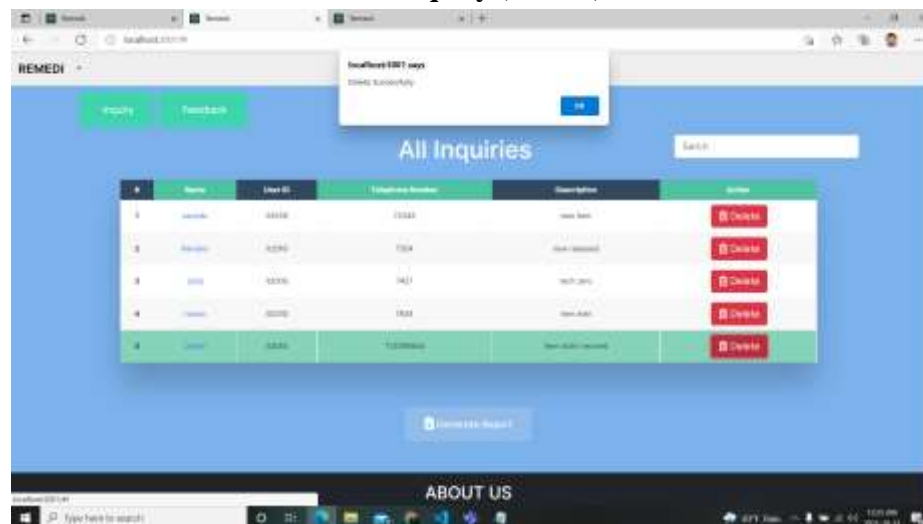
2.2.3.63 User Interface for Search Inquiries (Admin)



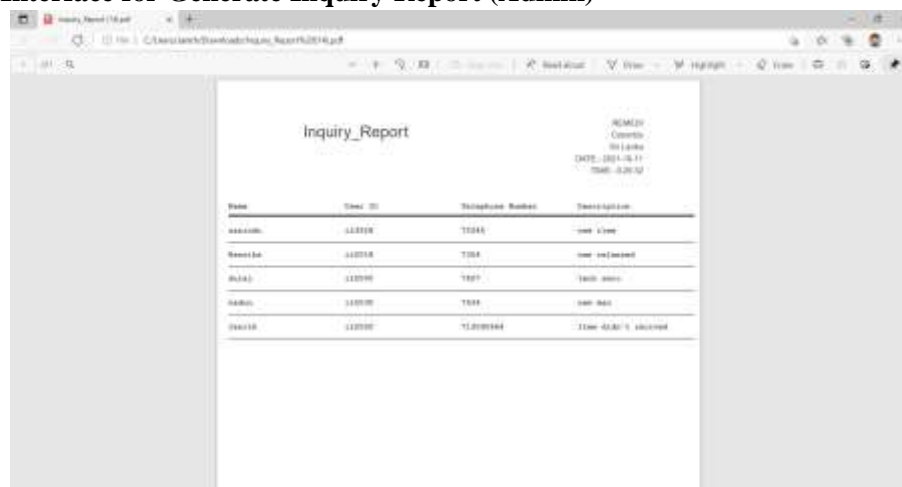
2.2.3.64 User Interface for View Customer Inquiry (Admin)



2.2.3.65 User Interface for Delete Customer Inquiry (Admin)



2.2.3.66 User Interface for Generate Inquiry Report (Admin)



2.3 Implementation

The web application of Healthymart pharmacy online pharmaceutical ordering system was developed using MERN Stack technology. The MERN Stack uses four technologies as MongoDB, Express, React and Node. The Implementation environment software is made in Visual code. Visual code provides a user-friendly environment for project development.

Choice of Programming Language

MERN Stack technology has been used. JavaScript and JSON is used in MERN technology and MongoDB is used as a database document.

- The MERN design makes it simple to build a three-tier architecture (frontend, backend, and database) using only JavaScript and JSON.
- The document model in MongoDB is simple to learn and use for developers, while still delivering all of the capabilities needed to handle the most complicated requirements at any scale.

Technology

- MongoDB - document database
- Express(.js) - Node.js web framework
- React(.js) - a client-side JavaScript framework
- Node(.js) - the premier JavaScript web server

2.4 Testing

Customer Handling

| Test ID | Test Input | Expected Output | Actual Output | Result (Pass/Fail) | Description |
|---------|------------------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------|--------------------|-----------------------------------------------------------------------------------------------|
| | Fill all the input fields without filling First-Name | Pop up Please fill the First Name warning on first name input field | Pop up Please fill the First Name warning on first name input field | Pass | To Successfully Register to the system customer need to full-fill the Form. |
| | Enter Numbers as input Fields in Form | Pop-up warning message to show incorrect input. | Pop-up warning message to show incorrect input. | Pass | There are no input Fields to Get Numbers as input. |
| | In the Form User Input 2 different Inputs to Password and Retype Password | The Form Will Pop a Toast Message Password are Incorrect | The Form Will Pop a Toast Message Password are Incorrect | Pass | To successfully Register to the System User Must Enter Same Password to Retype Password Area. |
| | In the Customer Sie Profile Update Area Customer Input Invalid Inputs to the Form. | Popup, Please Enter Valid Details as an Alert (Toast Message) | Successfully Updated | Fail | To successfully Update The customer Details Customer Must Enter Valid Inputs. |
| | In the Admin User Update Area Admin Input Invalid Inputs to the Form. | Popup, Please Enter Valid Details as an Alert (Toast Message) | Popup, Please Enter Valid Details as an Alert (Toast Message) | Pass | To successfully Update The customer Details Admin Must Enter Valid Inputs |

Admin Access

| Test ID | Test Input | Expected Output | Actual Output | Result (Pass/Fail) | Description |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------|
| OPOS_KA1 | USERNAME: systemadmin@gmail.com PASSWORD: systemadmin@2021 | Redirect to admin panel with displaying 'Login Successful' toast message | Redirect to admin panel with displaying 'Login Successful' toast message | Pass | Validate System admin login with valid credentials |
| OPOS_KA2 | USERNAME: systemadmin@gmail.com PASSWORD: systemadmin | Display warning toast message with 'Invalid system admin authentication' message | Display warning toast message with 'Invalid system admin authentication' message | Pass | Validate System admin login with invalid credentials |
| OPOS_KA3 | USERNAME: system@gmail.com PASSWORD: systemadmin@2021 | Display warning toast message with 'Please enter authorized email' message | Display error toast message with 'Invalid system admin authentication' message | Fail | Validate System admin login with invalid email |
| OPOS_KA4 | BRANCH ID: A0014 BRANCH USERNAME: b03jaffna BRANCH EMAIL: b03jaffna@gmail.com PASSWORD: Branch03@j CONFIRM PASSWORD: Branch03@j | System should display success toast message 'New admin data successfully inserted' with creating a new admin in the DB and redirect to the admin panel | System should display success toast message 'New admin data successfully inserted' with creating a new admin in the DB and redirect to the admin panel | Pass | Validate new admin create function with inserting valid data |
| OPOS_KA5 | BRANCH ID: A0014 BRANCH USERNAME: b03jaffna BRANCH EMAIL: b03jaffna@gmail.com PASSWORD: Branch03@j CONFIRM PASSWORD: Branch03j | Display warning toast message called 'Password Mismatch' and reload same page | Display warning toast message called 'Password Mismatch' and reload same page | Pass | Validate new admin create function with inserting two different passwords |

| | | | | | |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------|------|------------------------------------------------------------------|
| OPOS_KA6 | Submit empty form BRANCH ID: BRANCH USERNAME: BRANCH EMAIL: PASSWORD: CONFIRM PASSWORD: | Display warning toast message called 'Required to fill all fields' | Display warning toast message called 'Required to fill all fields' | Pass | Validate new admin create function with submit empty fields form |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------|------|------------------------------------------------------------------|

Drug Stock Handling

| Test ID | Test Input | Expected Output | Actual Output | Result (Pass/Fail) | Description |
|----------|-----------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------|-----------------------------------------------------------------------------------------------|
| OPOS_SD1 | Fill all input fields without Image uploading | Pop-up warning message, to upload image | Pop-up warning message, to upload image | Pass | To check the required fields, all fields should be filled with image. |
| OPOS_SD2 | Enter invalid details to Product name (Fill with numbers) | Pop-up warning message to show incorrect input. | Successfully added | Fail | To check whether input validations are properly working |
| OPOS_SD3 | Upload Image in different types | Only PNG and JPEG formats images can be uploaded | Only PNG and JPEG formats images can be uploaded | Pass | To check the types of images that are uploaded to the system. |
| OPOS_SD4 | Edit the availability of the product | Successfully updated and display pop-up message | Successfully updated and display pop-up message | Pass | To check update function of the product |
| OPOS_SD5 | Add new products more than 30 | Successfully uploaded, No any limits | Successfully uploaded | Pass | To check if there is a limit of number of image uploading. (to check Payload too large error) |

Purchase an Item

| Test ID | Test Input | Expected Output | Actual Output | Result (Pass/Fail) | Description |
|----------|---------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|--------------------|----------------------------------------------------------|
| OPOS_NP1 | Add items to the cart | View the added items in right side corner. | View the added items in right side corner. | Pass | Check whether items are adding to the cart successfully. |
| OPOS_NP2 | Click + icon 5 times of the cart item | Cart item quantity & total price is updated successfully. | Cart item quantity & total price is updated successfully. | Pass | Check the success of update item quantity function. |
| OPOS_NP3 | Delete Orders | Notify Order Deleted via a toast message | Notify Order Deleted via a toast message | Pass | Check the success of delete order function. |

Drug Item Reservation

| Test ID | Test Input | Expected Output | Actual Output | Result (Pass/Fail) | Description |
|----------|-----------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------|
| OPOS_RD1 | Only upload photo of a prescription without entering customer details | Pop up warning message | Pop up warning message | Pass | To check if the system accepts null input values |
| OPOS_RD2 | Enter invalid details for customer input details | Not accepting invalid details, and a popup message | Customer phone number input field accepts wrong inputs | Fail | To check whether input validations are properly working |
| OPOS_RD3 | Upload photos (for 30 times) | Not having a limit | Upload photo failed when reaching 23 rd upload (Payload too large error occurred) | Fail | To check if there's a limit or how many photo uploads can handle by the system |
| OPOS_RD4 | Edit and update details | Successfully edit data and a popup message | Successfully edit data and a popup message | Pass | To check edit function is working properly |
| OPOS_RD5 | Upload deferent format types of photos | Successfully uploading to the data base | Only PNG and JPEG formats can be uploaded to the system | Pass | To check what are the types of image formats accepted by the image uploading function |

Access Purchase History

| Test ID | Test Input | Expected Output | Actual Output | Result (Pass/Fail) | Description |
|------------|------------------------------------|-------------------------------------------|----------------------------------|--------------------|----------------------------------------------------------------------|
| 0POS GA_01 | Add item for favorite table | Item Added Successfully message | Item Added to the favorite table | Pass | Check that given field successfully Added to the favorite item table |
| 0POS GA_02 | Remove Transaction history | Remove successfully message | Remove successfully record | Pass | Check the delete given row of transaction history |
| 0POS GA_03 | Update customer favorite item name | Update favorite item name of the customer | Updated record | Pass | To Check the update function of the favorite item |
| 0POS GA_04 | Search Customer using wrong name | Display empty record | Display empty record | Pass | Check the output of data which are not in the database |

Item Delivering

| Test ID | Test Input | Expected Output | Actual Output | Result (Pass/Fail) | Description |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|------------------|--------------------|----------------------------------------------------------------|
| OPOS_MD1 | E-mail : thisitham123@gmail.com First Name : Thisitha Last Name : Manaram Tel No : 0711742203 Address : Makulla town,Dambagalla, Monaragala City : Monaragala | System should save the details,and display successfully message. Redirect to the display optional details page. | Expected output. | Pass | To check the create function working properly (client side) |
| OPOS_MD2 | E-mail : First Name : Thisitha Last Name : Manaram Tel No : Address : Makulla town,Dambagalla, Monaragala City : Monaragala | System should not save the details, and not redirect to the display optional details page. | Expected output. | Pass | To check some validations of create function (client side) |
| OPOS_MD3 | update some of the data above optional details | System should update the only updated details and redirect to the display details page. | Expected output. | Pass | To check the update function working properly (client side) |
| OPOS_MD4 | Search orders using customers address. | The searched address is filtered and displayed. | Expected output. | Pass | To check search orders Function working properly (Admin panel) |

| | | | | | |
|----------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|------|------------------------------------------------------------------------------|
| OPOS_MD5 | Enter the wrong type email address like this manaram.gmail.com | System should not save the details,and display Error message not redirect to any page. | System should save the details,and display successfully message. Redirect to the display optional details page. | Fail | To check the system should check correct type of Email address (Admin panel) |
| OPOS_MD6 | Delete a customer order in order table. | Delete the selected order and display Successfully message. | Expected output. | Pass | To check the delete function is working properly. (Admin panel) |

Manage Customer Inquiries & Feedback

| Test ID | Test Input | Expected Output | Actual Output | Result (Pass/Fail) | Description |
|----------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------|--------------------|-------------------------------------------------------------------------------------|
| OPOS_JI1 | Skip enter some data in customer inquiry and customer feedback function | Pop up warning message | Pop up warning message | Pass | To check if the system accepts null input values |
| OPOS_JI2 | Enter invalid details for customer Inquiry and Feedback input details | Not accepting invalid details, and a popup message | Customer input field accepts wrong inputs | Fail | To check whether input validations are properly working |
| OPOS_JI3 | In customer inquiry update page try to update details and redirect to inquiry home page | Update details and redirect to customer inquiry home page | Update details but didn't redirect to inquiry home page | Fail | To check whether redirect in to inquiry page is working after completing the update |
| OPOS_JI4 | Edit and update details | Successfully edit data and a popup message | Successfully edit data and a popup message | Pass | To check edit function is working properly |
| OPOS_JI5 | Delete inquiry and feedback in admin page | Successfully delete data from database | Successfully delete data from database | Pass | To check delete function is working properly |

3. Conclusion

Healthymart pharmacy is one of the famous pharmacies in Sri Lanka. “Remedi” Online Pharmaceutical Ordering web application is our recent implementation to connect with our valuable customers including brand new features. In the future we hope to improve the deliver side, add an online tracking system, add progress bar and further improve the security. One of the fewest mistakes of our system is lack of payment methods and we are planning to introduce more secure and faster payment methods. This project will highly be benefited to Healthymart Pharmacy because the system is very user friendly and highly optimized and many more things. Stay connected with our web application project to improve more and gain more benefits.

4. References

1. Stack Overflow - [Stack Overflow – Where Developers Learn, Share & Build Careers](#)
2. You Tube - [YouTube](#)
3. W3 School - [W3 School Online Web Tutorial](#)
4. Bootstrap - [Bootstrap 3](#)
5. GitHub - [GitHub](#)
6. React - [JavaScript library for building user interfaces](#)
7. Mongoose - [Mongoose ODM v6.0.10](#)

Appendix A: Design Diagrams

<Include the main UML diagrams in the main text and supplementary design diagrams can be included here>

Appendix B: Test Results

<Additional test result tables and figures can be included here>

Appendix C: Selected Code Listings

<Code of special algorithms implemented can be included here>

Test Case For Admin Access