

# **Find Your Meds**

**Organization:** Nexera

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## 1. Introduction

### 1.1 Purpose

The purpose of the *Find Your Meds* system is to provide an integrated platform for managing pharmacies, medicines, and customer interactions. The system caters to drugstore owners, customers, and administrators by streamlining operations like medicine management, order placement, and customer feedback.

### 1.2 Product Scope

*Find Your Meds* bridges the gap between pharmacies and customers by offering features like:

- Searchable inventory for medicines.
- Customer orders and their approval.
- Pharmacy feedback management.
- Secure administrative controls for pharmacy and owner approvals.

### 1.3 Title

#### **Find Your Meds**

### 1.4 Objectives

- Provide a user-friendly interface for pharmacy owners, customers, and administrators.
- Ensure real-time data management for medicine inventories and orders.
- Simplify approval workflows for pharmacy owners.
- Facilitate customer feedback collection.
- Provide a user-friendly platform for locating pharmacies with the required medicines based on real-time availability.
- Enable pharmacy owners to maintain and update their stock levels, ensuring accurate information for customers.

- Minimize the time spent by individuals searching for medications, especially during emergencies.
- Offer transparency in medicine pricing and availability across multiple stores.

### **1.5 Problem Statement**

The search for specific medications during emergencies or odd hours can be stressful, time-consuming, and sometimes futile. Many people face situations where they have to visit multiple pharmacies to find the required medicine, often in a critical state. The lack of centralized information on medicine availability, price, and location adds to the burden. "Find Your Meds" aims to address this issue by creating a platform that allows users to instantly find pharmacies with the desired medicines, based on real-time data provided by the registered drugstores. By facilitating this, the app enhances the efficiency of medical access and reduces the physical and emotional toll of searching for medicines at inconvenient times. It is feasible because of the widespread use of smartphones and location-based services, combined with pharmacies' willingness to manage and share inventory digitally. The app benefits both consumers and pharmacies, streamlining the supply of medicines and boosting business for the latter.

## 2. Overall Description

### 2.1 Product Perspective

*Find Your Meds* is a standalone system designed for seamless integration with pharmacies and their customers. The system includes:

- Admin controls for overseeing pharmacy registrations.
- A searchable interface for customers to locate medicines.
- Customers can give feedback for the pharmacies
- Automated workflows for managing orders and approvals.

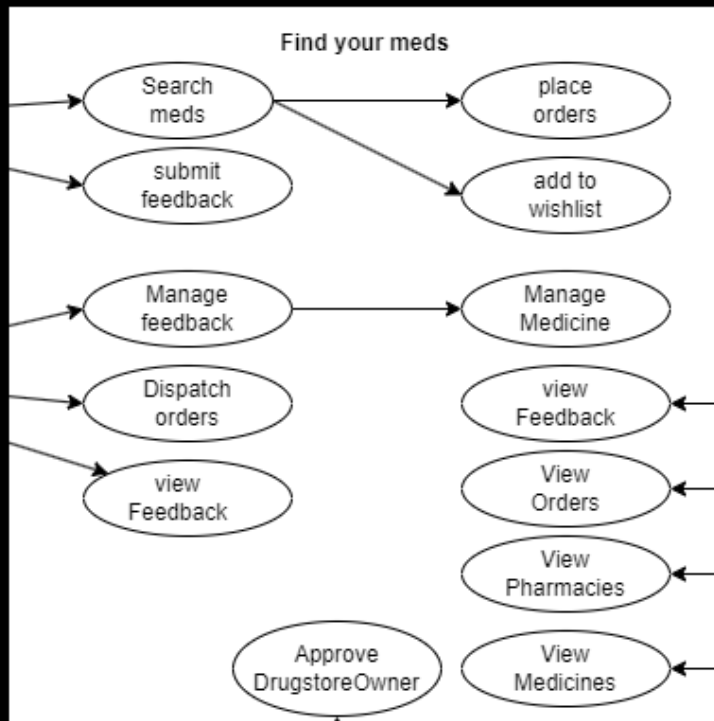
### 2.2 Product Functions

- Pharmacy Inventory Management
- Order Management and Tracking
- Feedback and Reviews Handling
- Owner Registration Approval

### 2.3 List of Use Cases

- Search for Medicines
- Place Orders
- Manage medicine
- Manage pharmacy
- Dispatch Order
- Manage Inventory
- Approve Drugstore Owner
- View Feedback

## 2.4 Use Case Diagram



### 3. Other Nonfunctional Requirements

#### 3.1 Performance Requirements

- The system must handle up to 10,000 active users concurrently.
- Inventory searches must return results within 3 seconds.

#### 3.2 Safety Requirements

- Prevent unauthorized pharmacy data edits.
- Implement backups to avoid data loss.

#### 3.3 Security Requirements

- Admin login must be authenticated.
- Customer orders must only be accessible to authorized pharmacy owners.

#### 3.4 Software Quality Attributes

- **Usability:** Simplified UI for users across varying technical expertise.
- **Reliability:** Ensure uptime of 99.9% through redundancy mechanisms.

#### 3.5 Business Rules

- Customers can only order medicines listed in the inventory.
- Admin must approve pharmacy registrations before operations commence.

#### 3.6 Operating Environment

- Built with JavaFX for front-end and MySQL for the database.

#### 3.7 User Interfaces

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: final\_database\_sda x

MANAGEMENT

- Server Status
- Client Connections
- Users and Privileges
- Status and System Variables
- Data Export
- Data Import/Restore

INSTANCE

- Startup / Shutdown
- Server Logs
- Options File

PERFORMANCE

- Dashboard
- Performance Reports
- Performance Schema Setup

Administration Schemas

SQL Editor: final\_database\_sda x

```
22 contactInfo VARCHAR(255),
23 address1 VARCHAR(255),
24 password1 VARCHAR(255)
25 };
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27 • INSERT INTO Customer (name, email, contactInfo, address1, password1) VALUES
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30 ('Najam', 'najam@example.com',
31
32
33 • CREATE TABLE DrugstoreOwner (
34 ownerID INT AUTO_INCREMENT
35 name1 VARCHAR(255),
```

Find Your Meds System

Find your Meds

Customer

Drugstore Owner

Admin

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Output

Action Output

#	Time	Action	Message	Duration / Fetch
29	17:08:42	TRUNCATE TABLE Customer	0 row(s) affected	0.110 sec
30	17:08:42	TRUNCATE TABLE FindYourMedsSystem	0 row(s) affected	0.078 sec
31	17:08:47	SET FOREIGN_KEY_CHECKS = 1	0 row(s) affected	0.000 sec
32	17:51:07	INSERT INTO FindYourMedsSystem (adminName, adminContact, adminEmail, pass...	1 row(s) affected	0.047 sec
33	17:51:13	INSERT INTO Customer (name, email, contactInfo, address1, password1) VALUES...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.047 sec
34	17:51:19	INSERT INTO DrugstoreOwner (name1, email, contactInfo, businessLicense, appro...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.031 sec

Object Info Session

Type here to search

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MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

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Find Your Meds System

Welcome to the Login Page

Login

Register

Go Back to Main Page

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Find Your Meds System

Back Customer Login

Username:

Password:

Login

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34 ownerID INT AUTO_INCREMENT
35 name1 VARCHAR(255),
```

Find Your Meds System

Full Name:

Email:

Contact Info:

Address:

Password:

Register

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Output

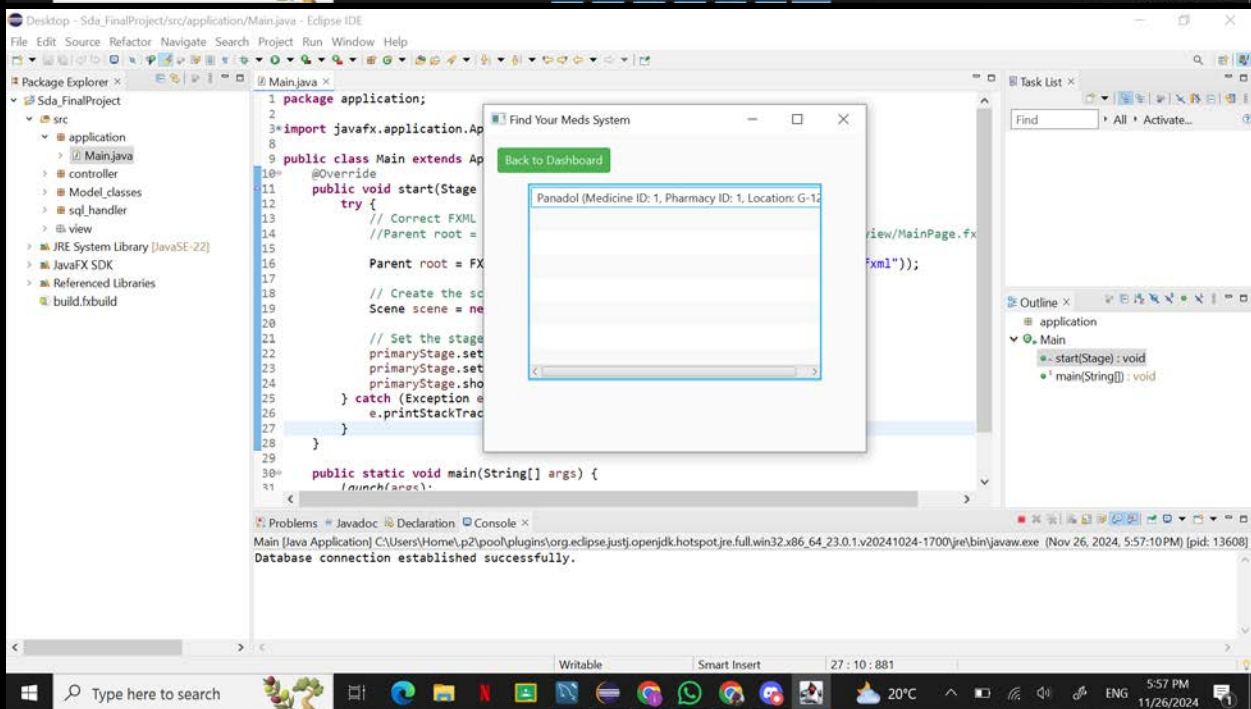
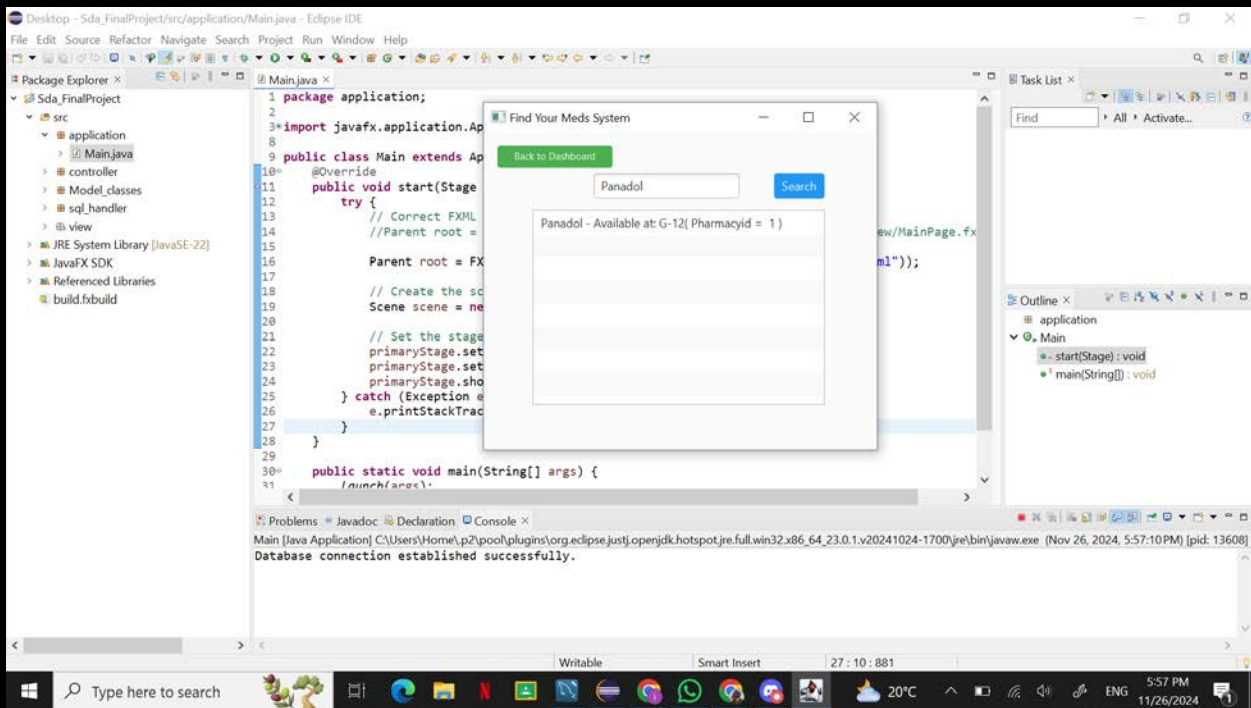
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Desktop - Sda\_FinalProject/src/application/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer

- Sda\_FinalProject
  - src
    - application
      - Main.java
    - controller
    - Model\_classes
    - sql\_handler
    - view
  - JRE System Library [JavaSE-22]
  - JavaFX SDK
  - Referenced Libraries
    - build.fxbuild

Main.java

```
1 package application;
2
3 import javafx.application.Application;
4
5 public class Main extends Application {
6     @Override
7     public void start(Stage primaryStage) {
8         try {
9             // Correct FXML
10            //Parent root = FXMLLoader.load(getClass().getResource("MainPage.fxml"));
11
12            Parent root = FXMLLoader.load(getClass().getResource("MainPage.fxml"));
13
14            // Create the scene
15            Scene scene = new Scene(root);
16
17            // Set the stage
18            primaryStage.setScene(scene);
19            primaryStage.show();
20        } catch (Exception e) {
21            e.printStackTrace();
22        }
23    }
24
25    public static void main(String[] args) {
26        launch(args);
27    }
28 }
```

Find Your Meds System

Back to Dashboard

Order ID	Medicine ID	Payment Status	Approval Status	Order Type
1	1	Pending	Approved	Delivery
2	1	Pending	Pending	Pickup

Problems Javadoc Declaration Custom

Main [Java Application] C:\Users\Home\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_23.0.1.v20241024-1700\jre\bin\javaw.exe (Nov 26, 2024, 5:57:10 PM) [pid: 13608]

Database connection established successfully.

Writable Smart Insert 27:10:881

Type here to search 20°C 5:57 PM 11/26/2024

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25    public static void main(String[] args) {
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27    }
28 }
```

Find Your Meds System

Customer Dashboard

Search Medicines

View Wishlist

Orders

Feedback

Logout

Outline

- application
  - Main
    - start(Stage) : void
    - main(String[]) : void

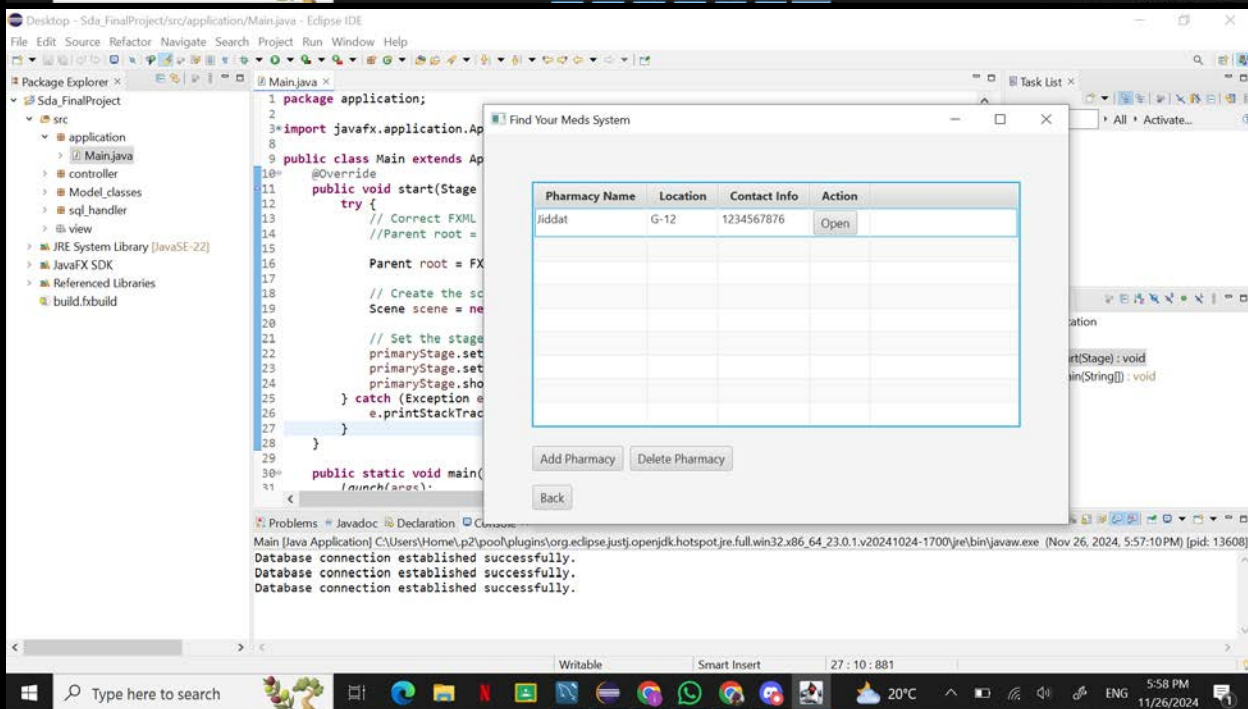
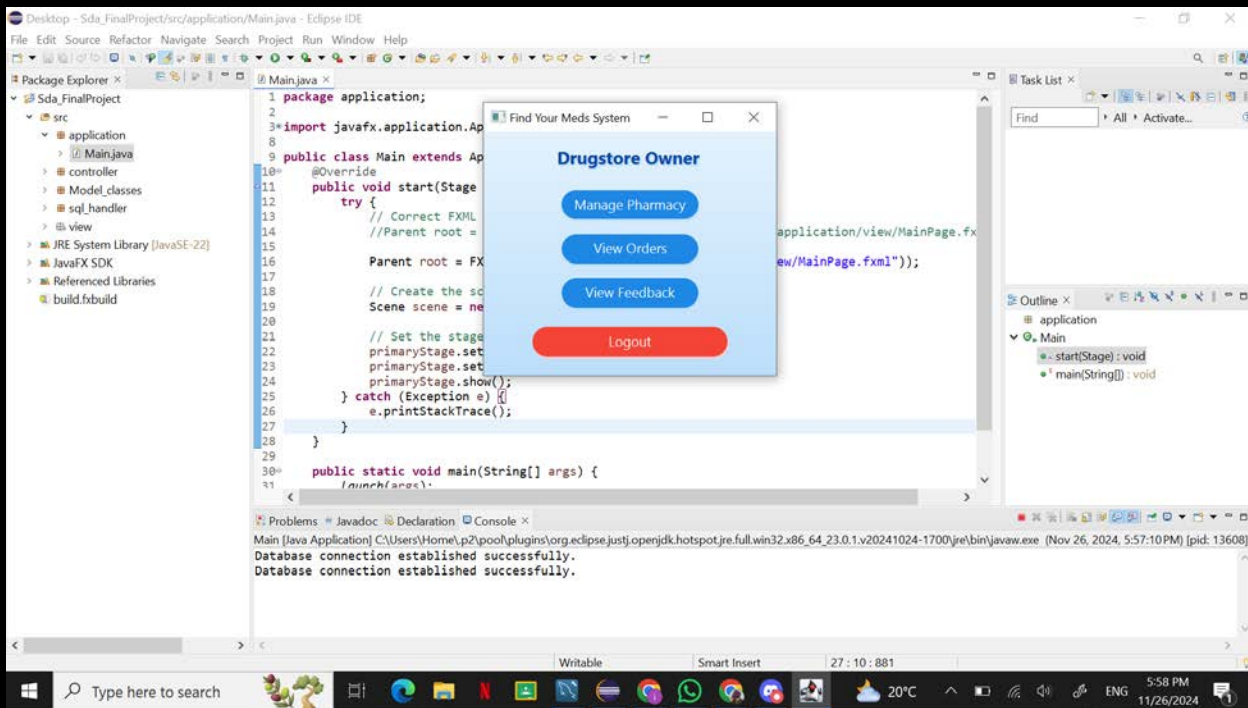
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21            e.printStackTrace();
22        }
23    }
24
25    public static void main(String[] args) {
26        launch(args);
27    }
28 }
```

Find Your Meds System

Medicine Name	Formula	Price	Quantity	Manufacturer
Panadol	dard	20.0	100	Pfizer

Add Medicine Delete Medicine Update Stock

Back

Problems Javadoc Declaration Console

Main [Java Application] C:\Users\Home\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_23.0.1.v20241024-1700\jre\bin\javaw.exe (Nov 26, 2024, 5:57:10 PM) [pid: 13608]

Database connection established successfully.

Database connection established successfully.

Selected Pharmacy: 1

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Writable Smart Insert 27 : 10 : 881

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Find Your Meds System

Medicine Name:

Formula:

Price:

Quantity:

Manufacturer:

Add Medicine Back

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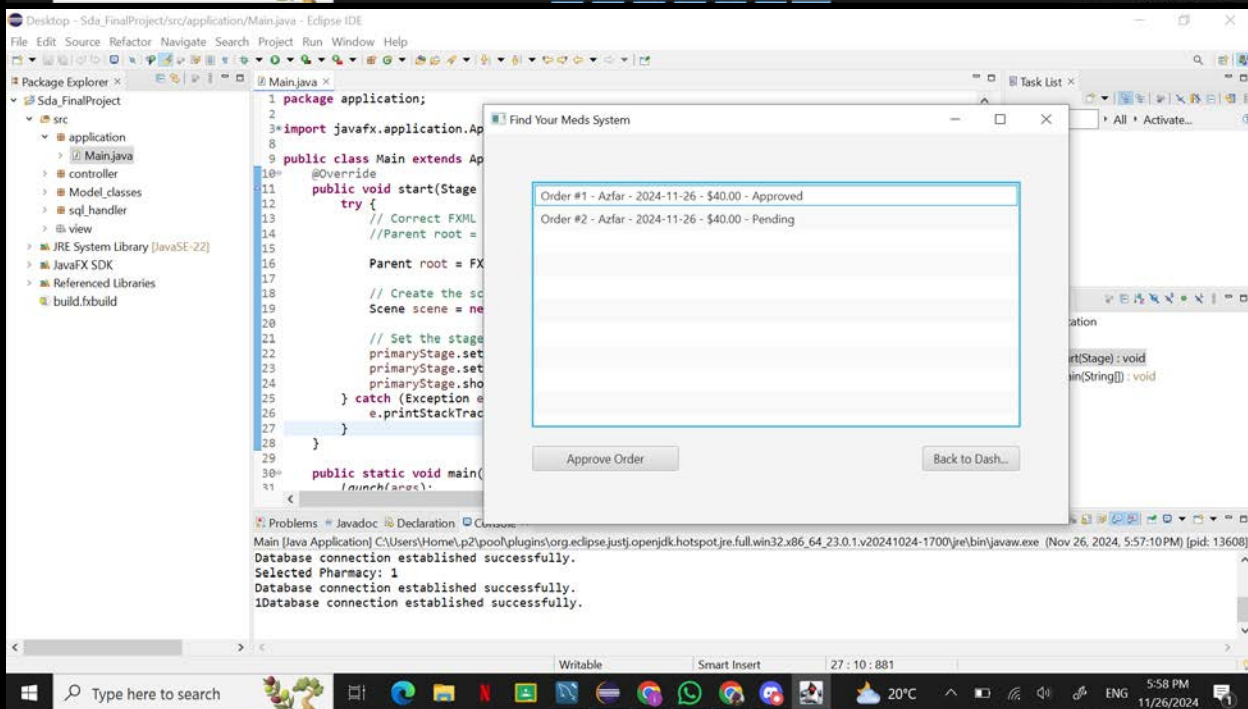
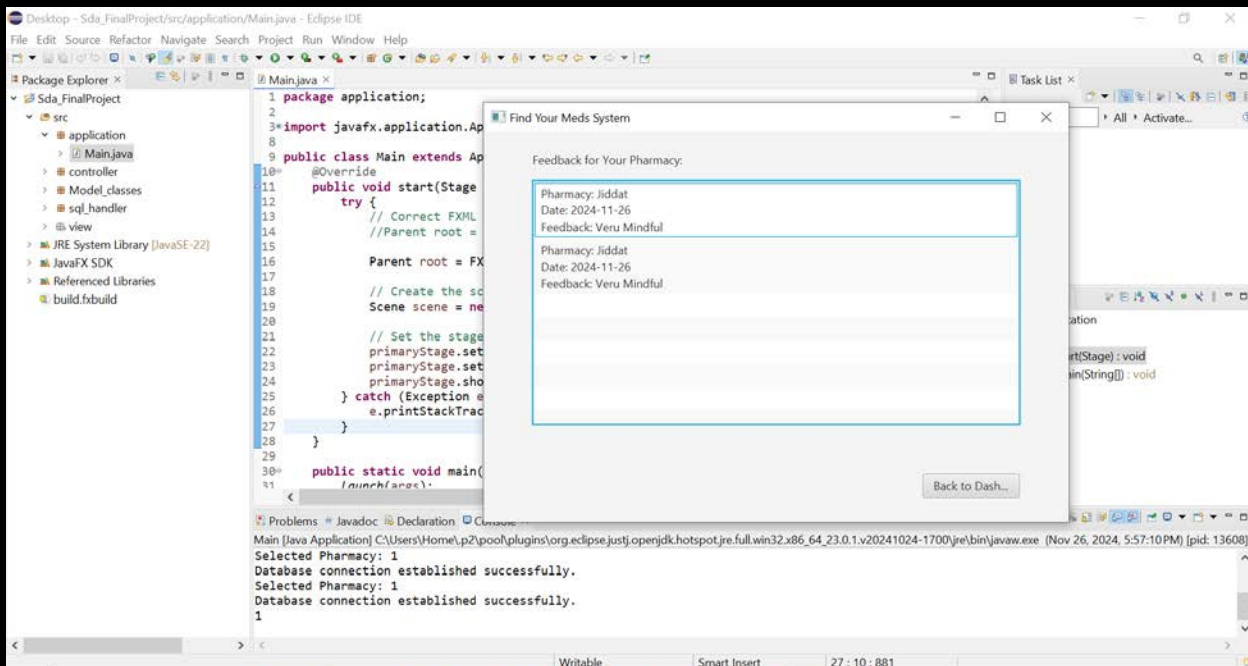
Database connection established successfully.

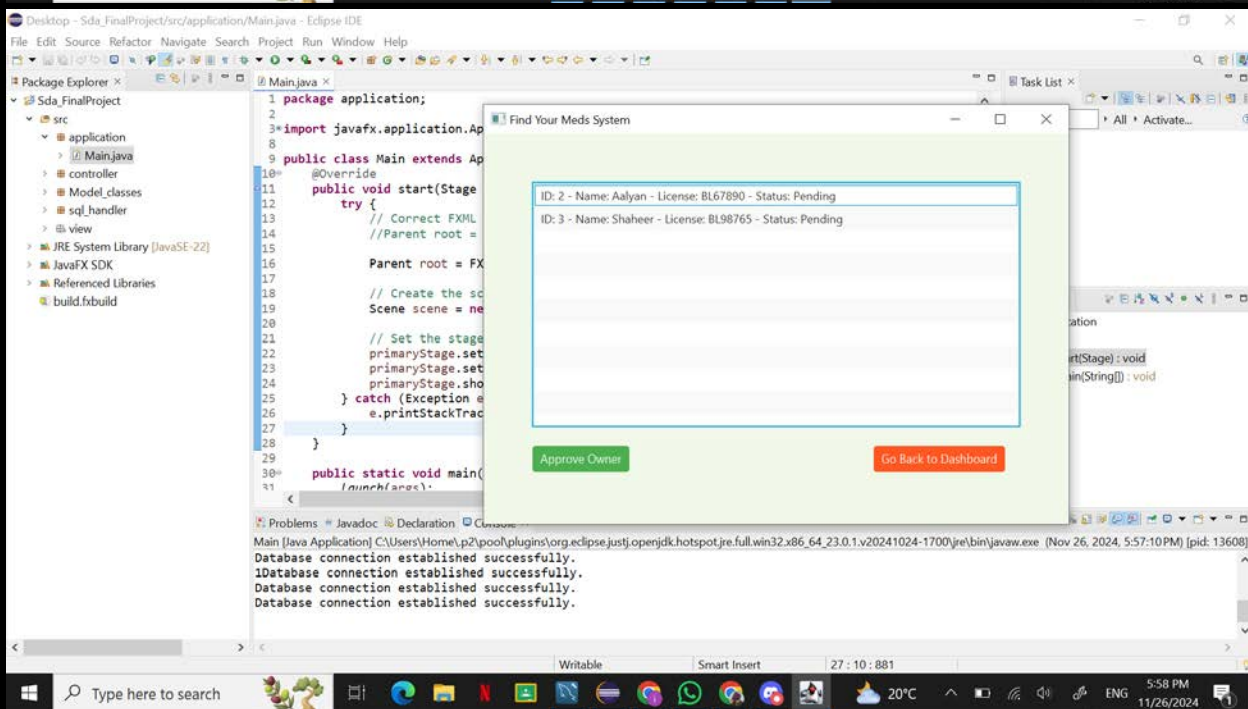
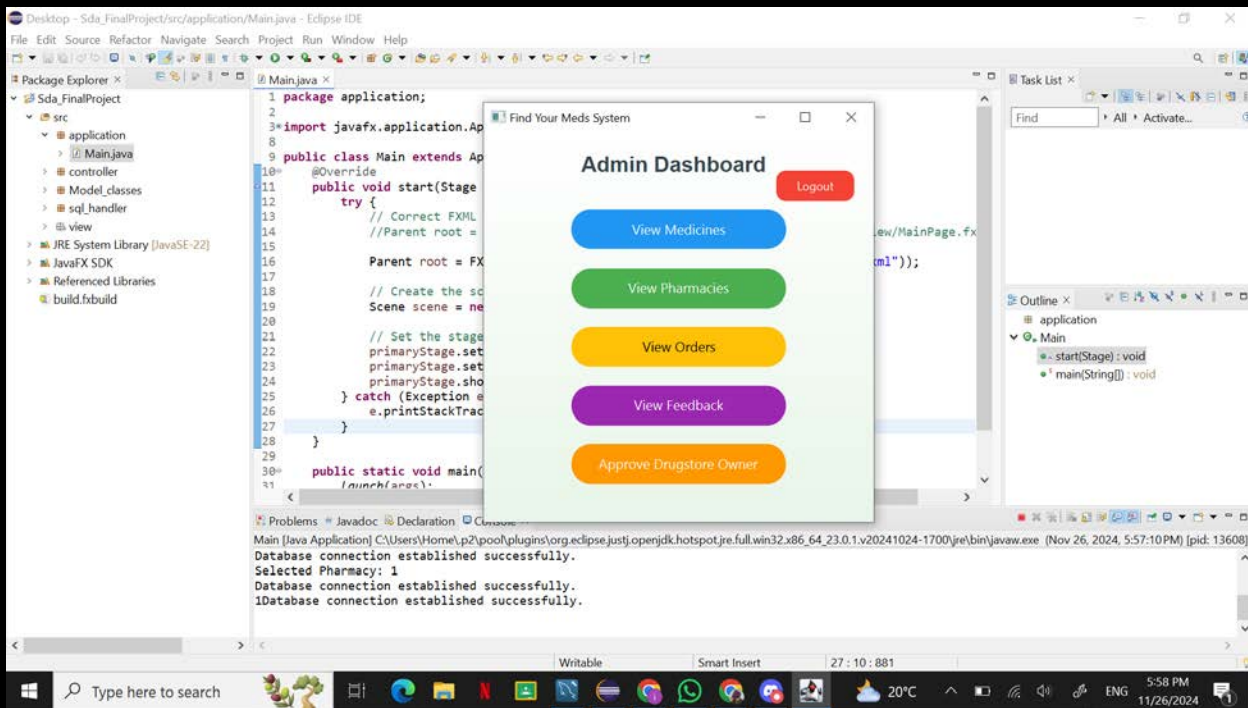
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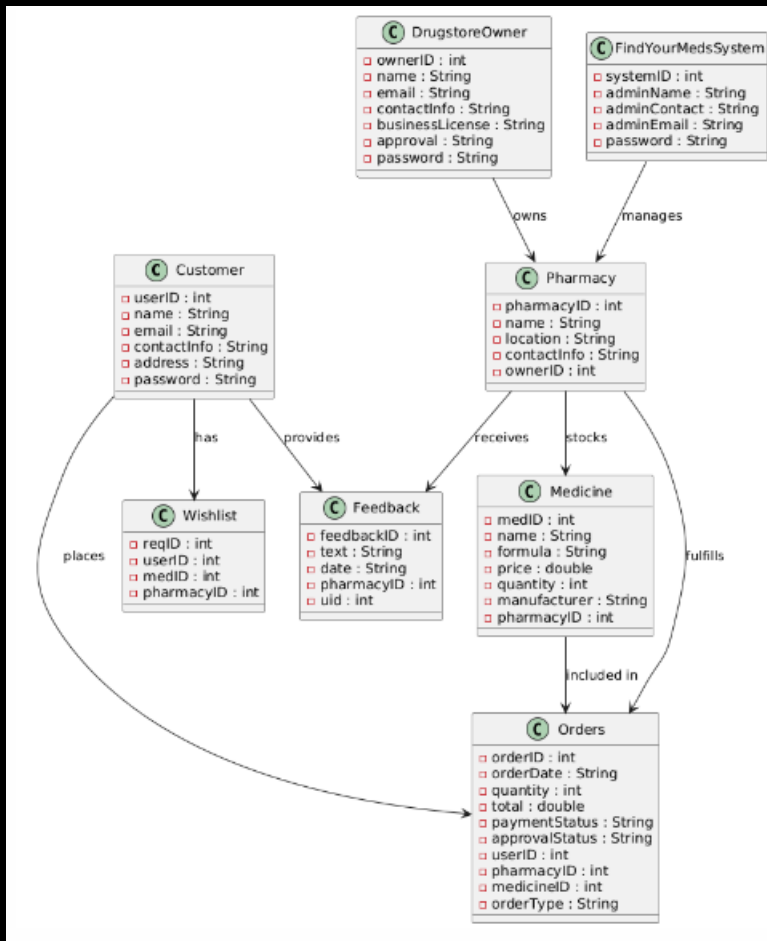
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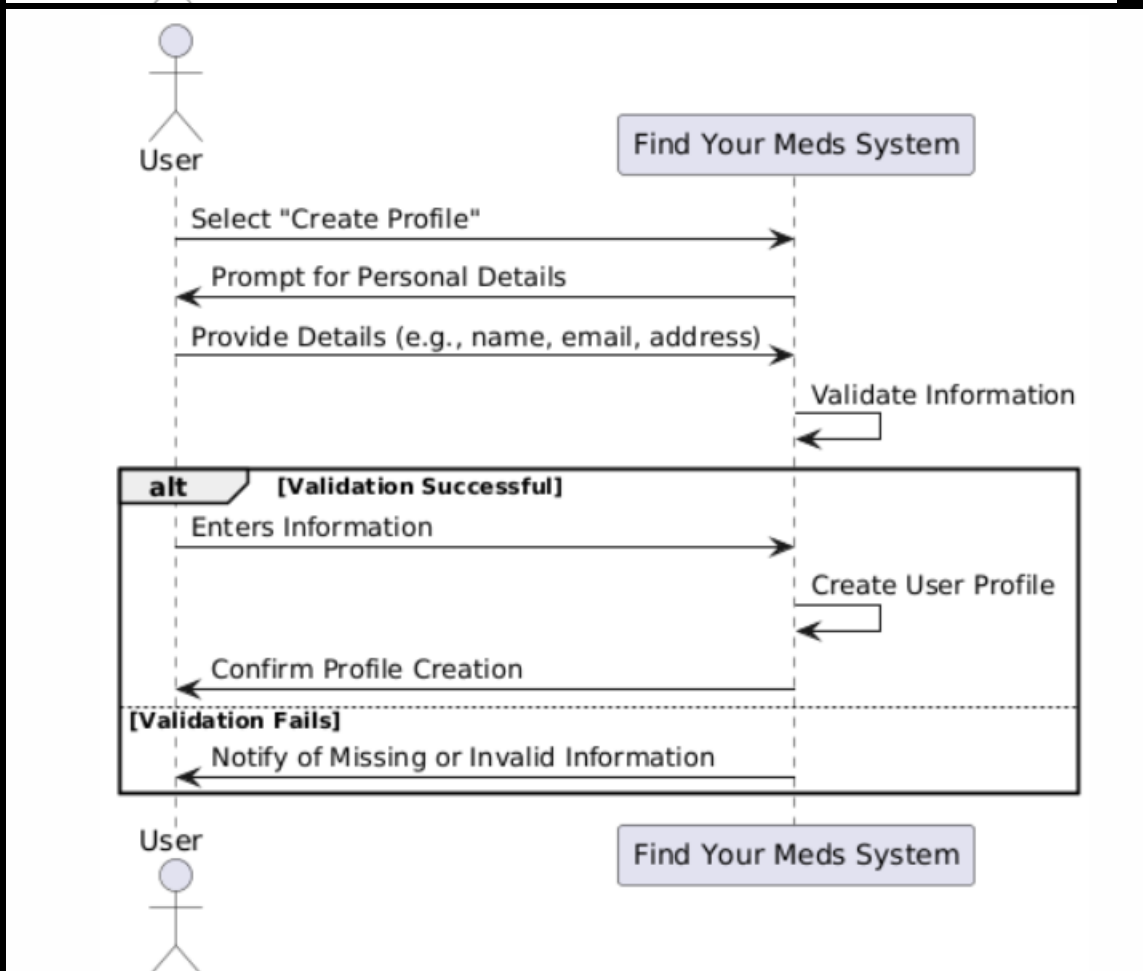
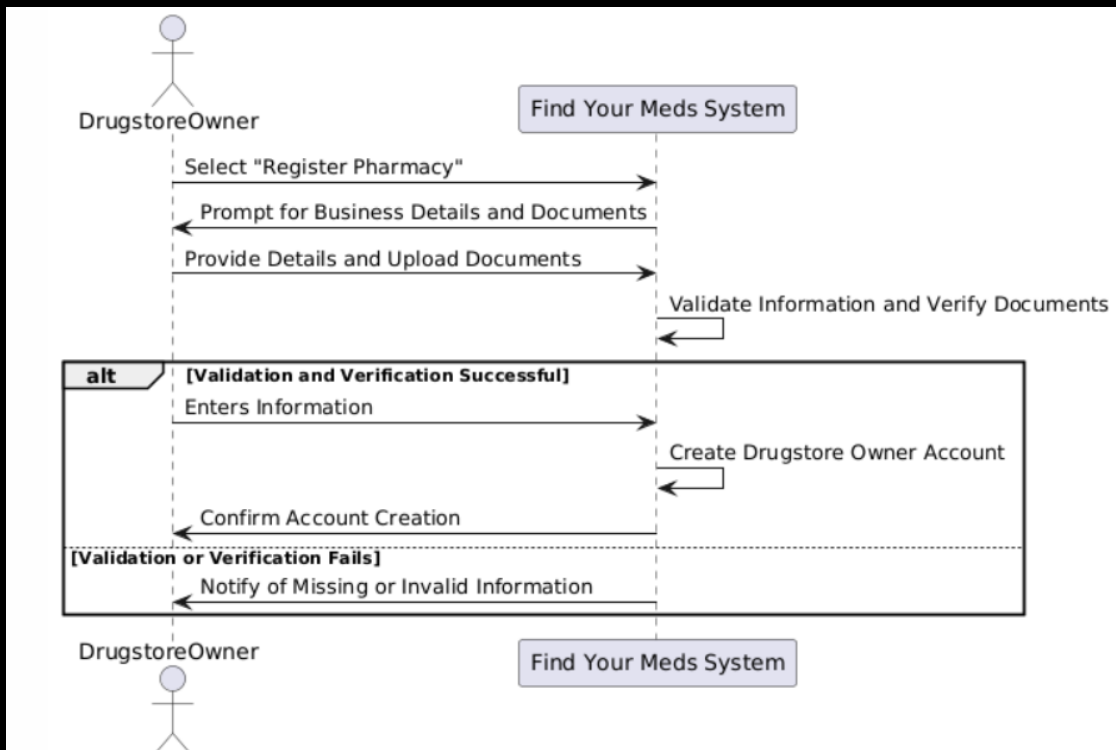


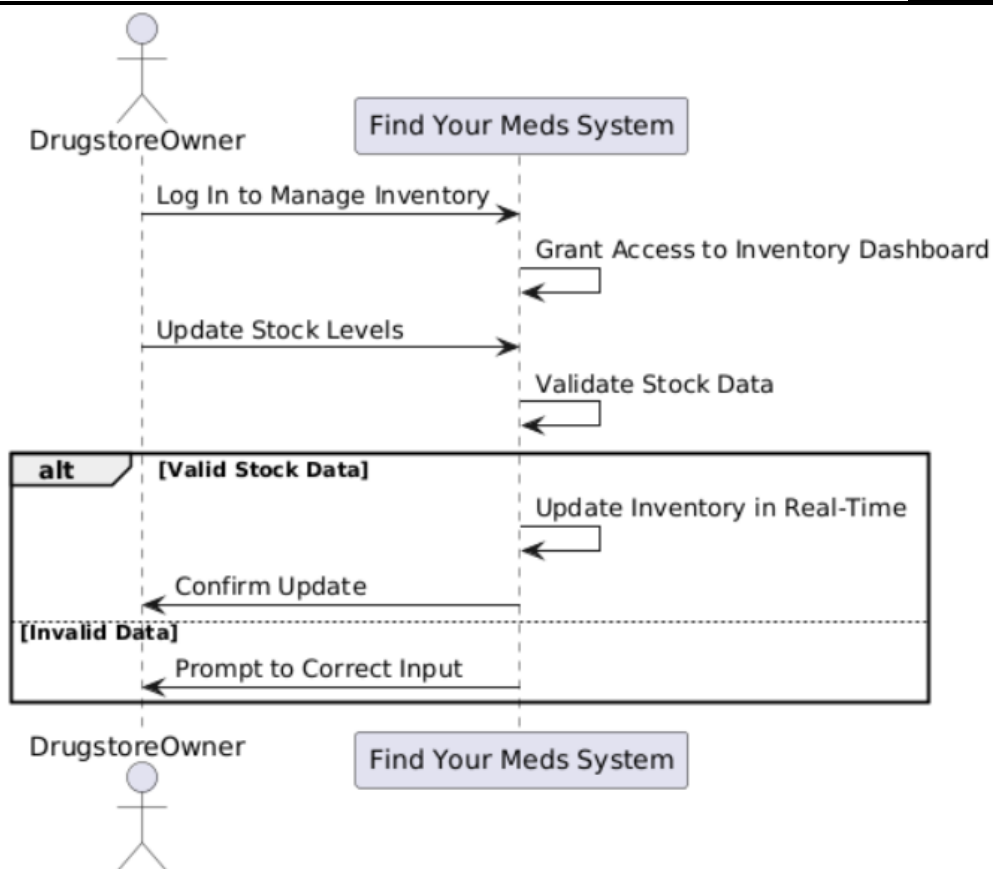
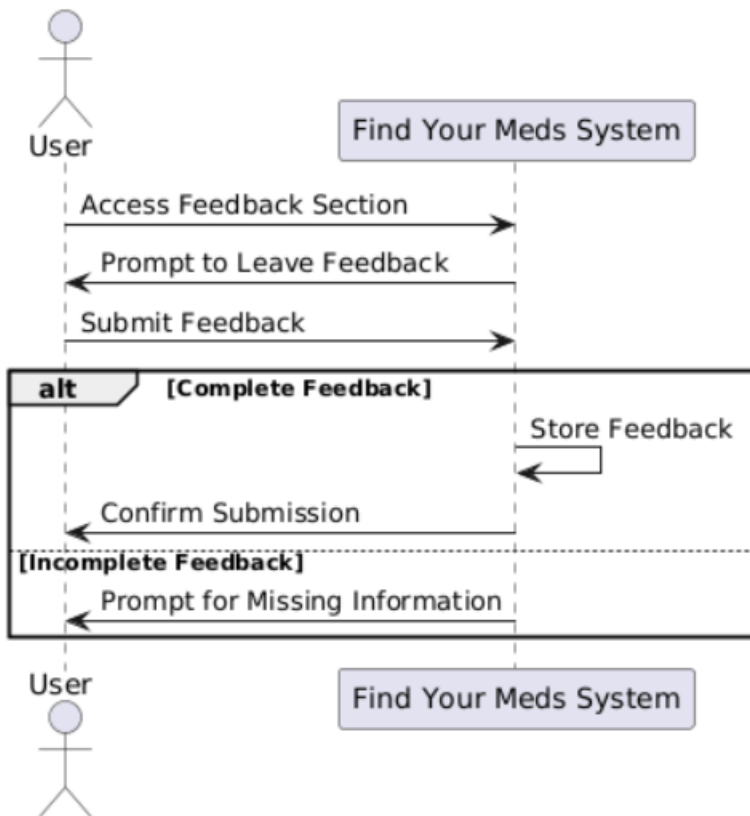
## 4. Domain Model

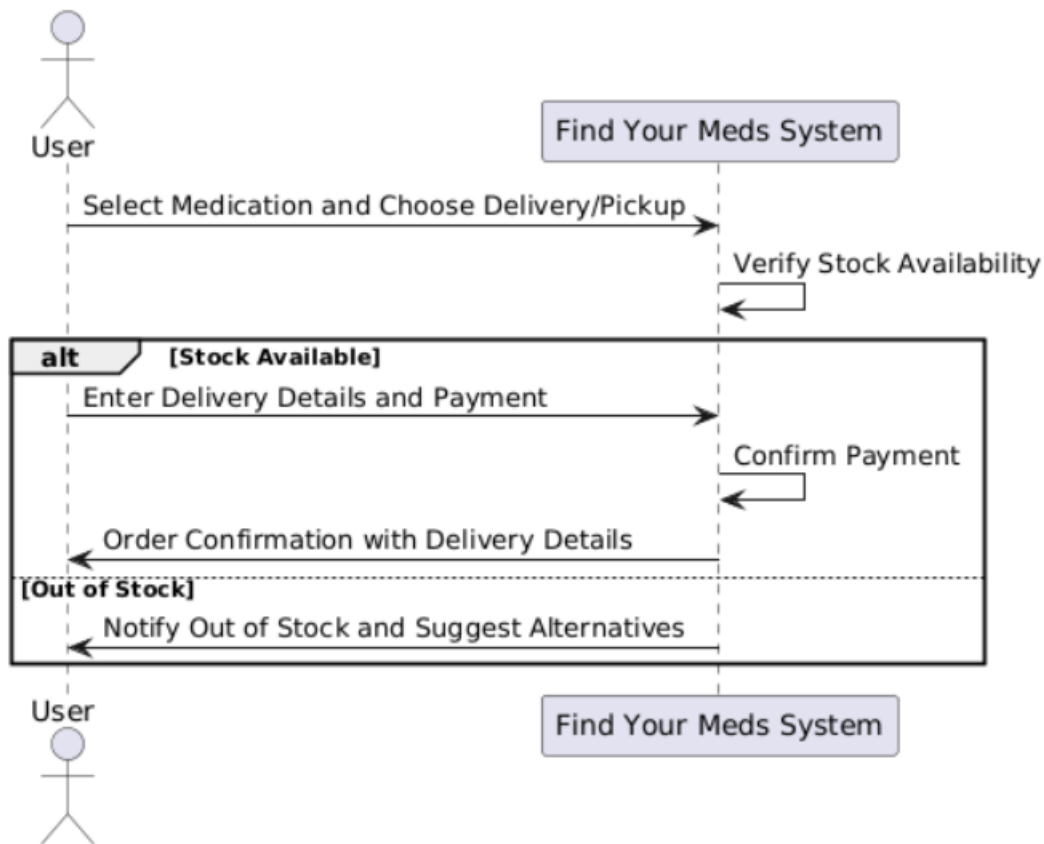
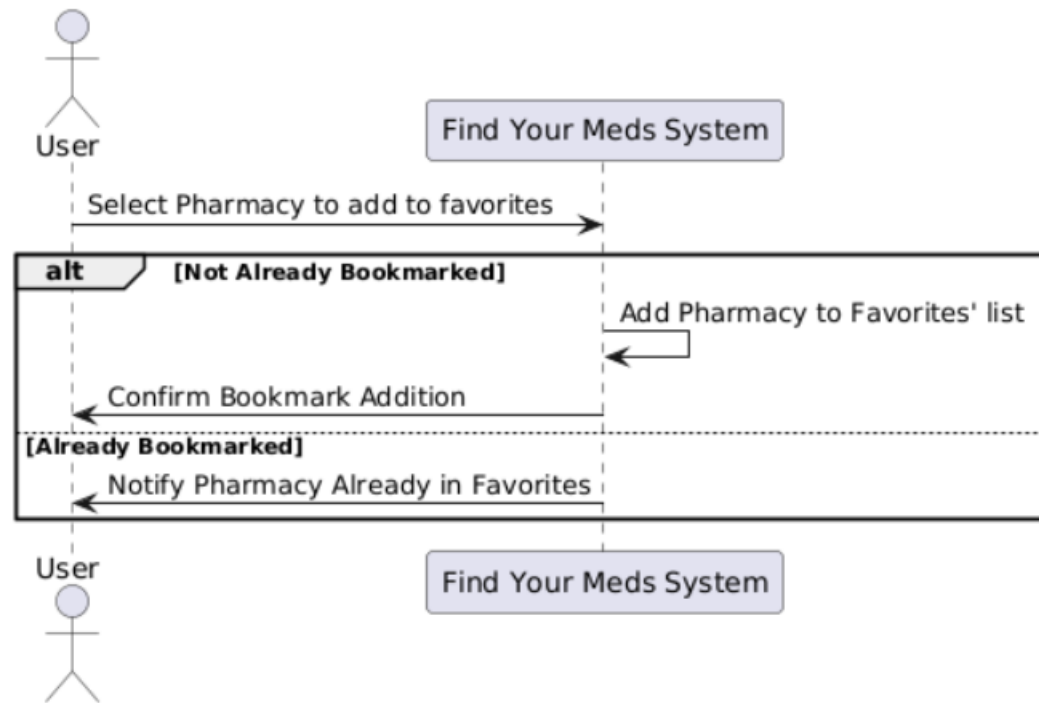


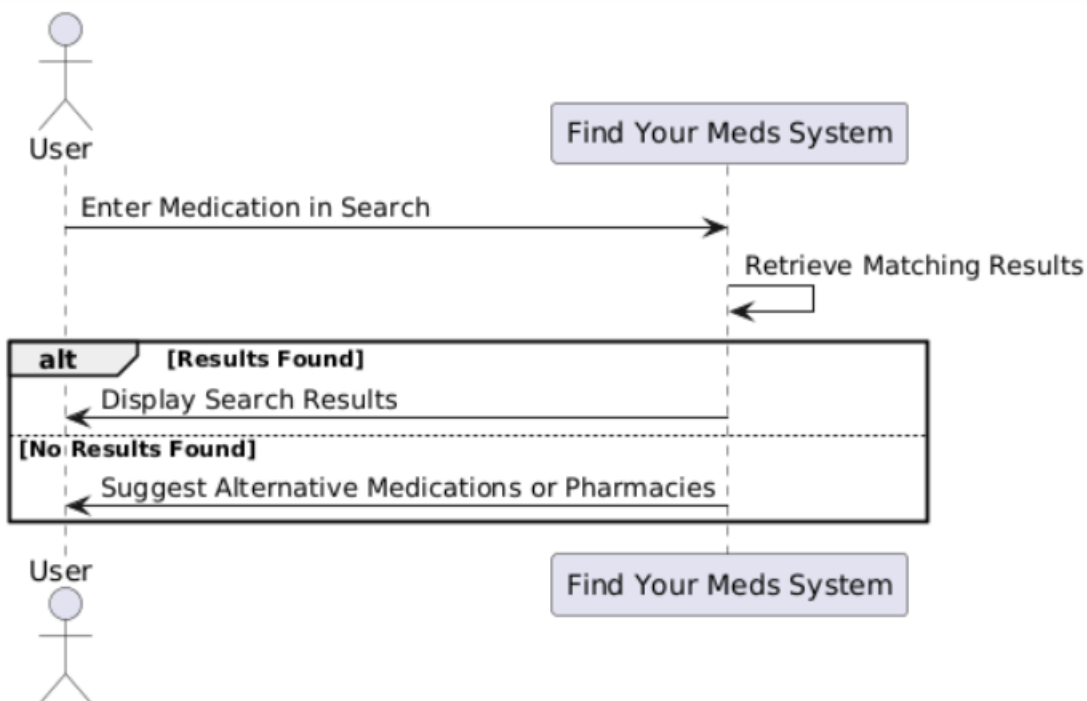
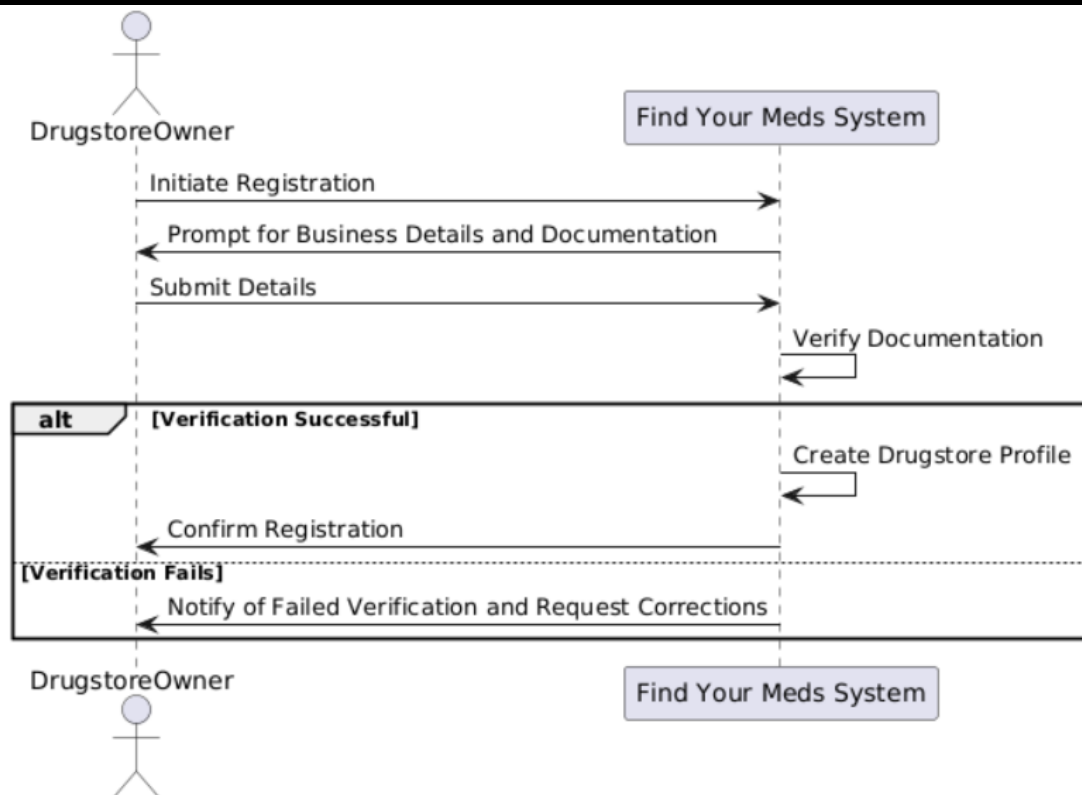


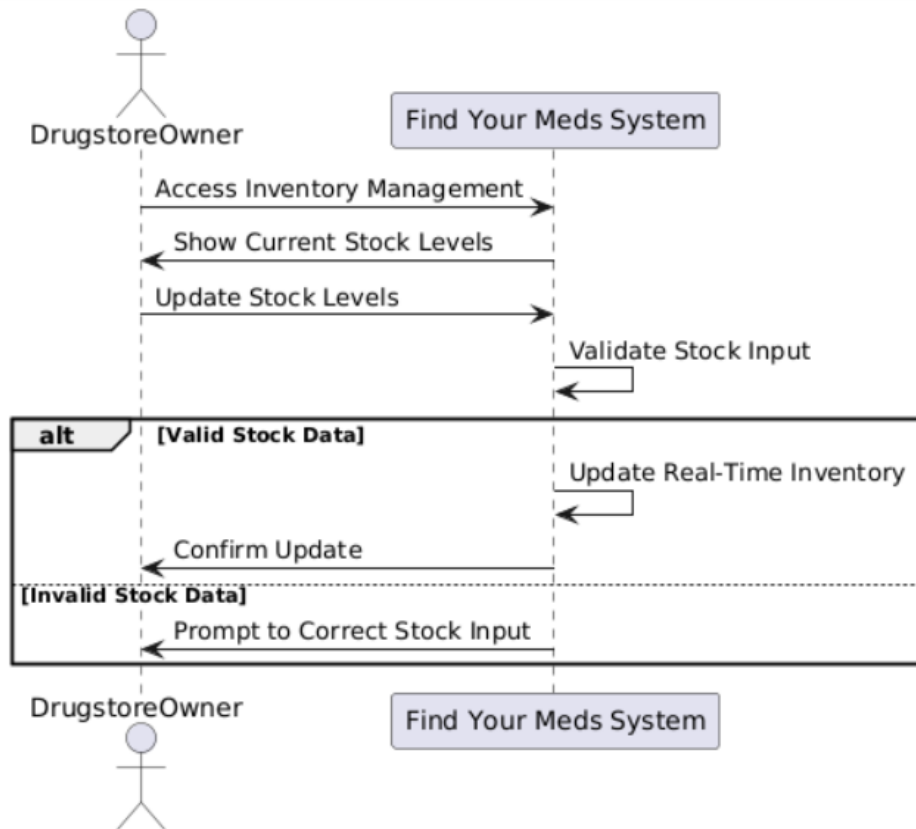
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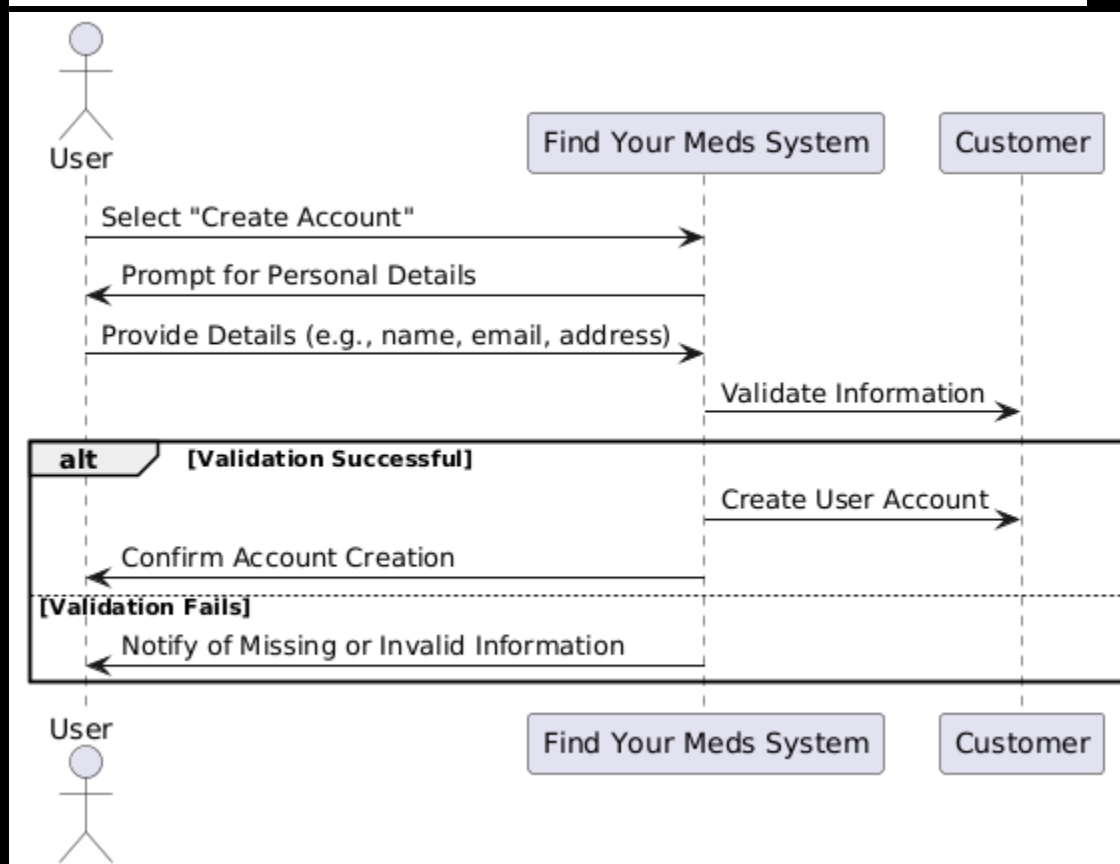
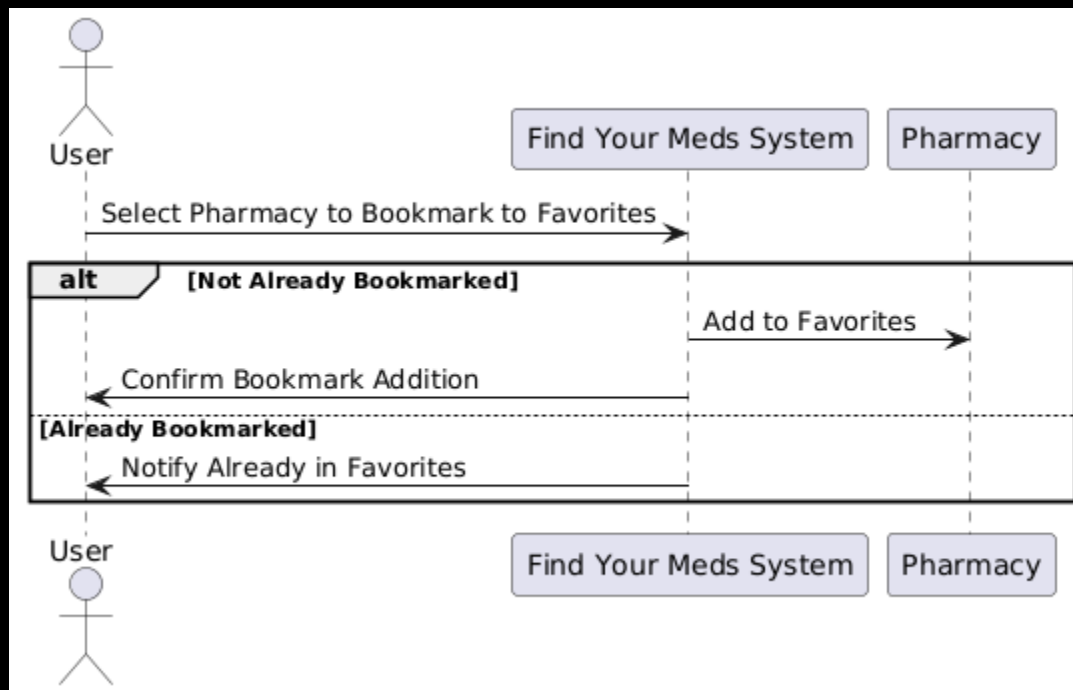


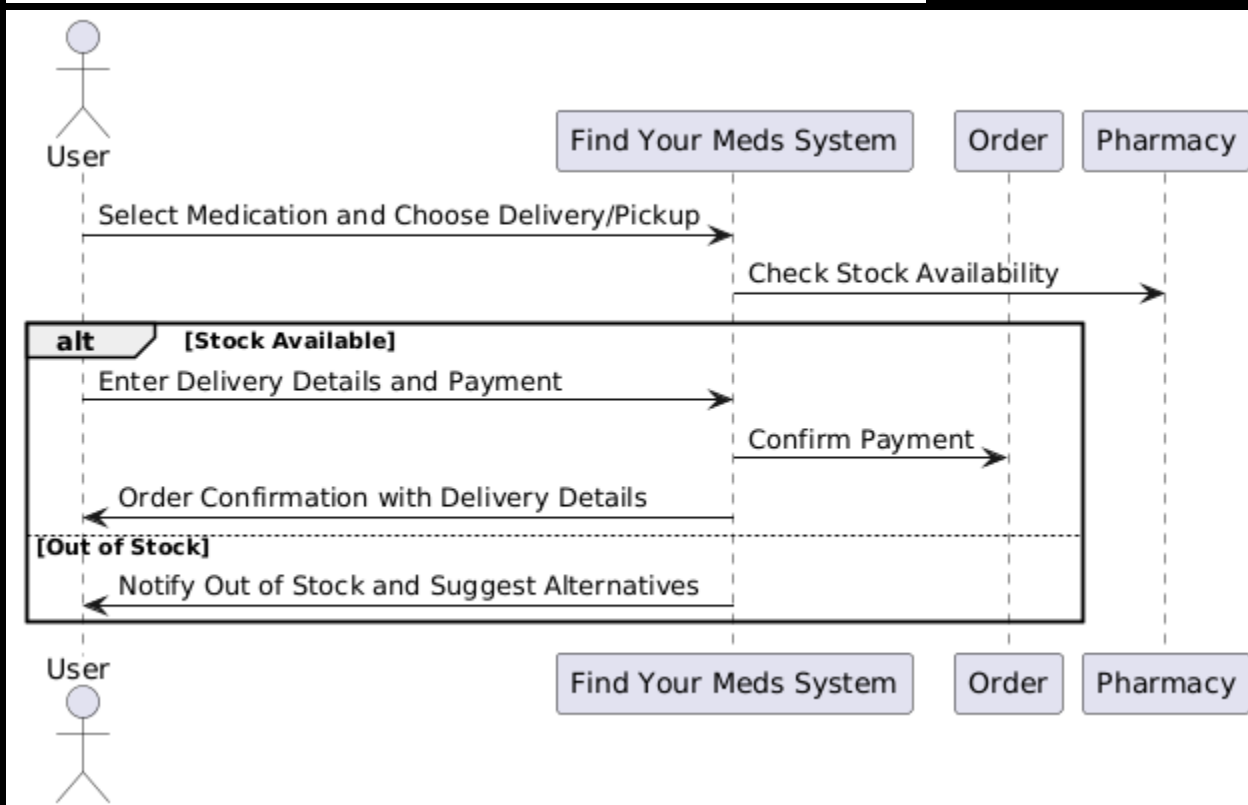
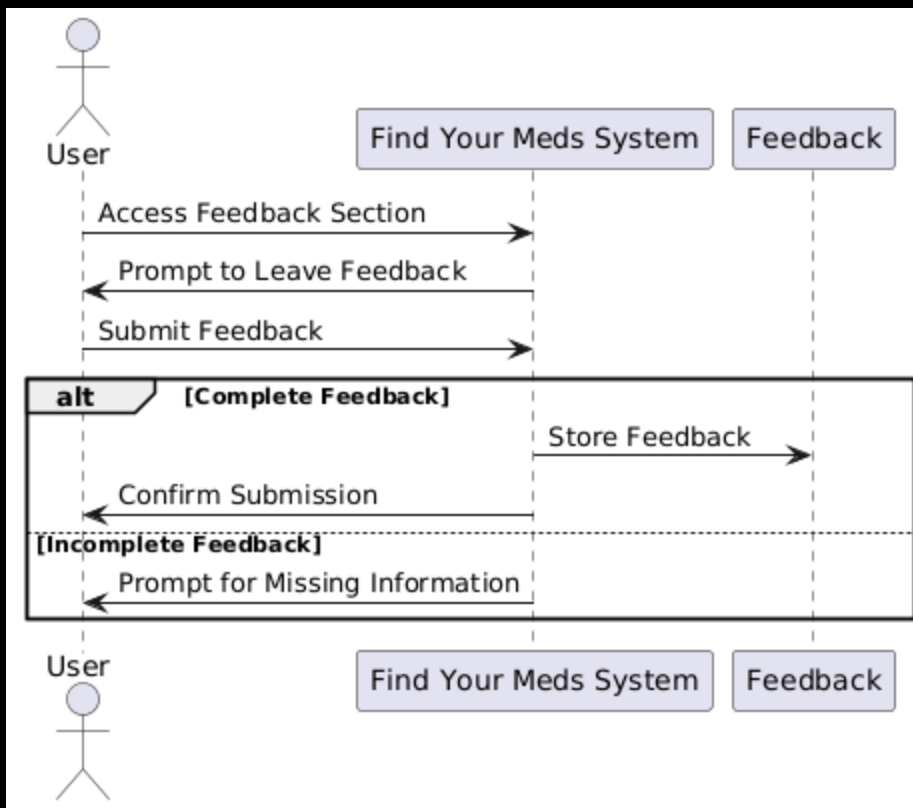


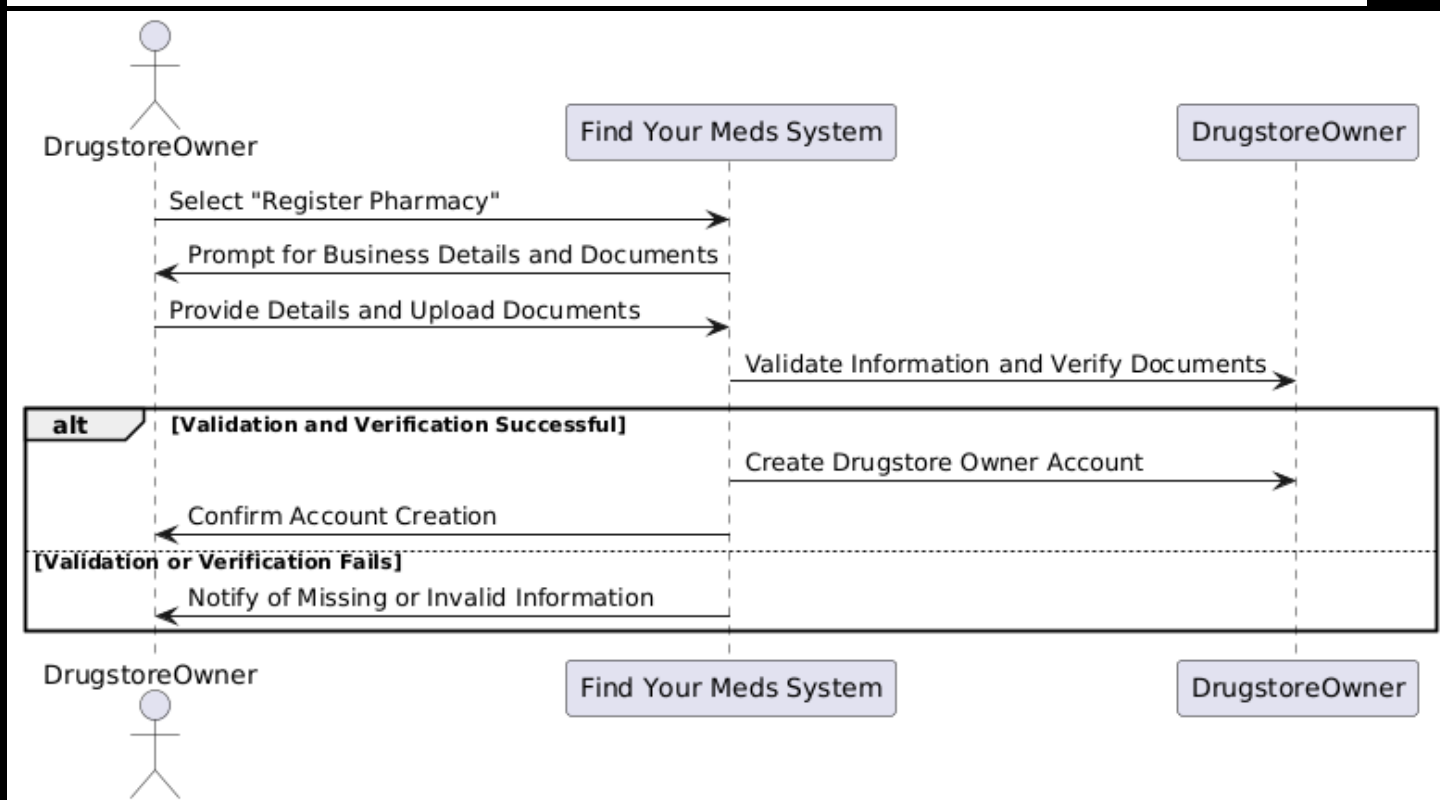
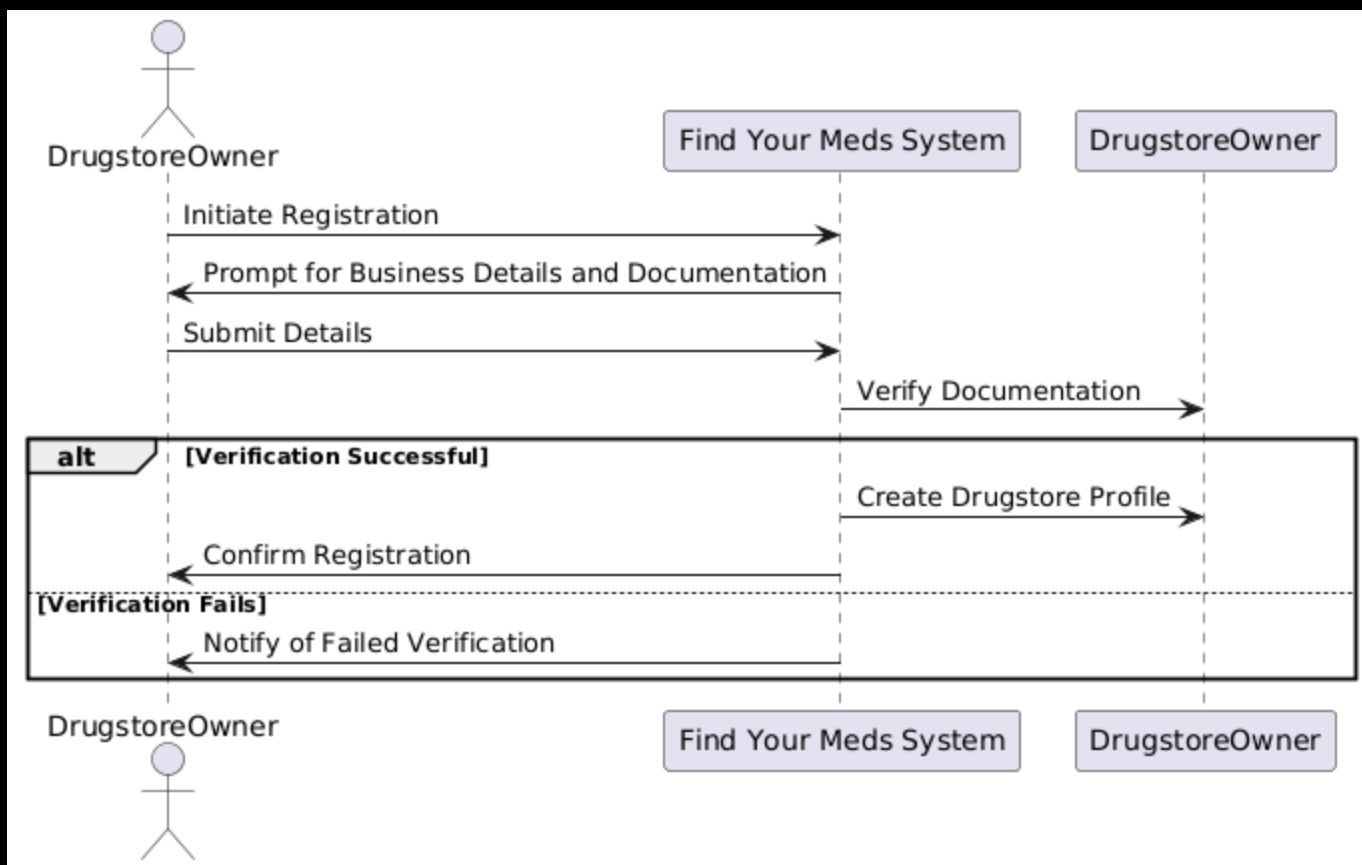




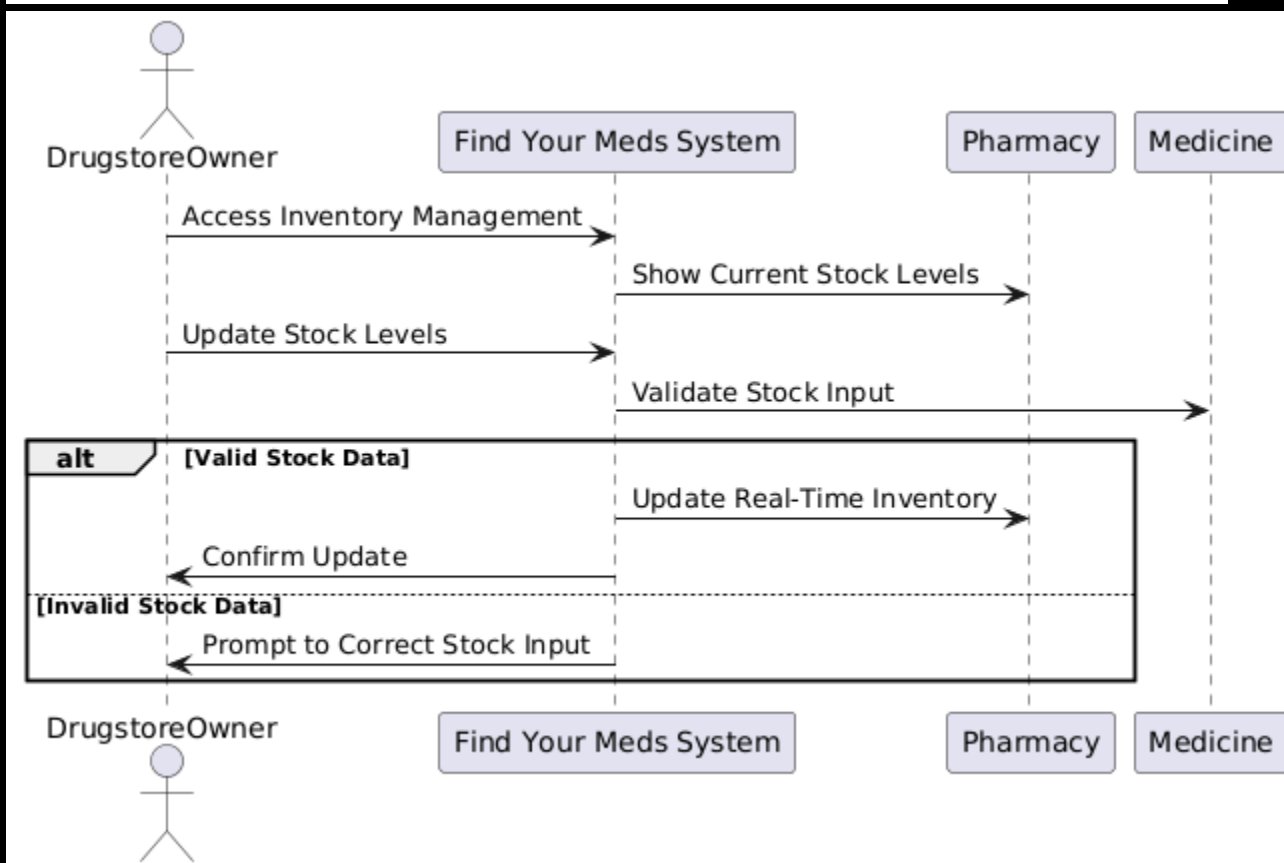
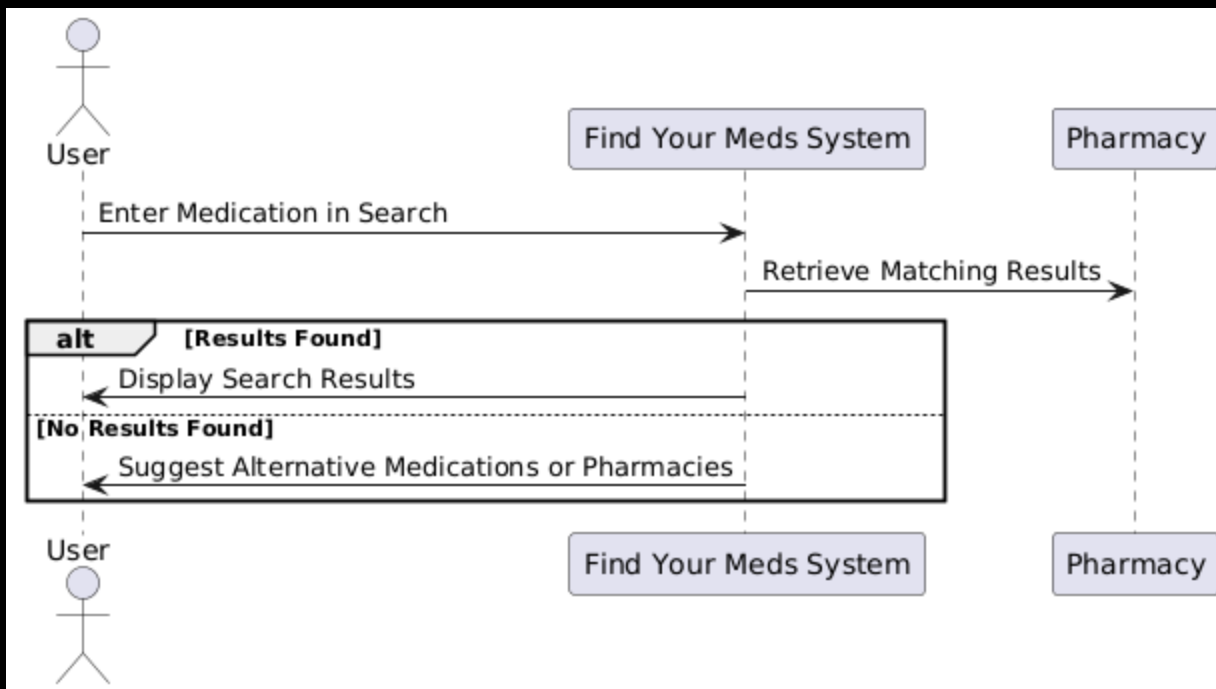
## 6. Sequence Diagram



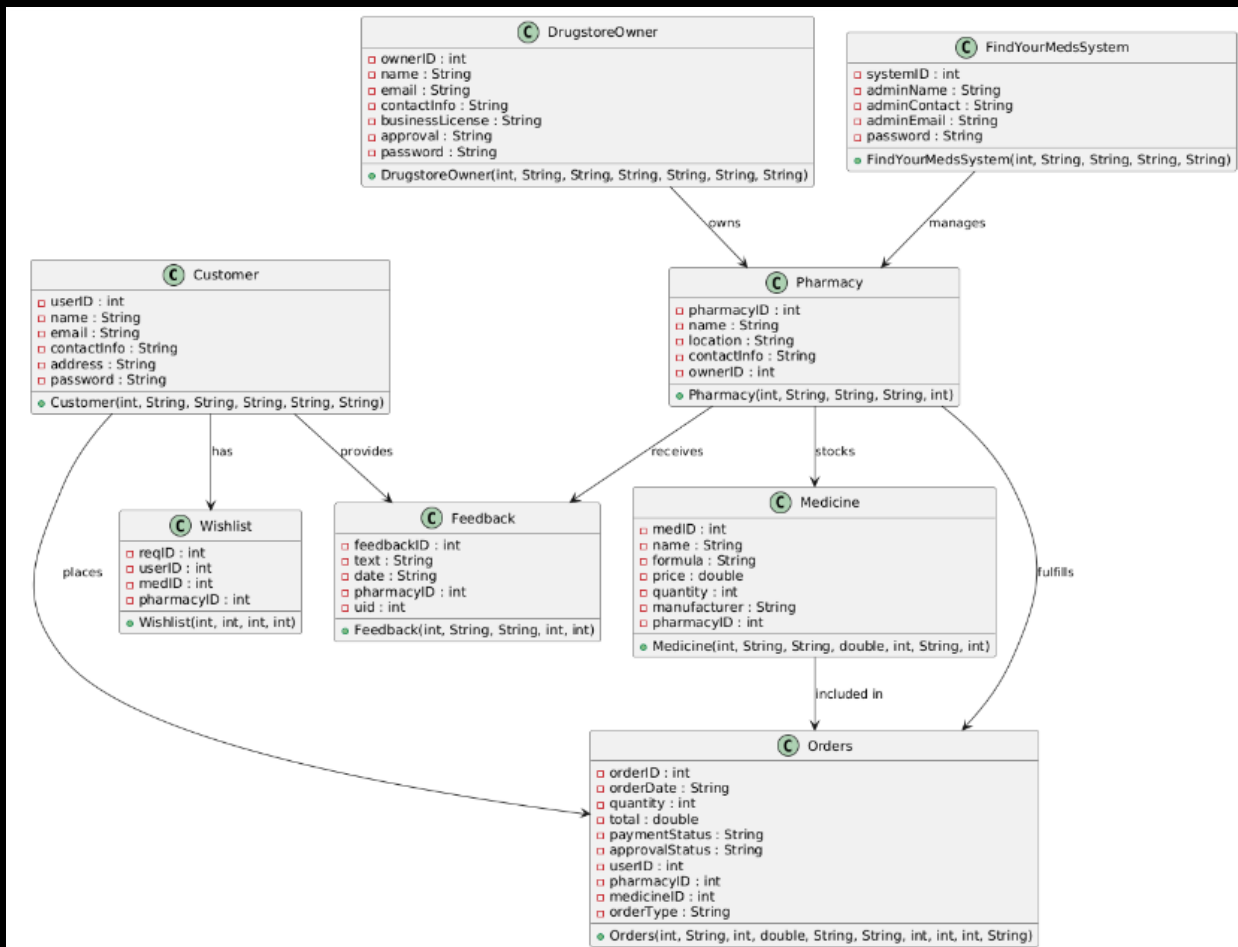




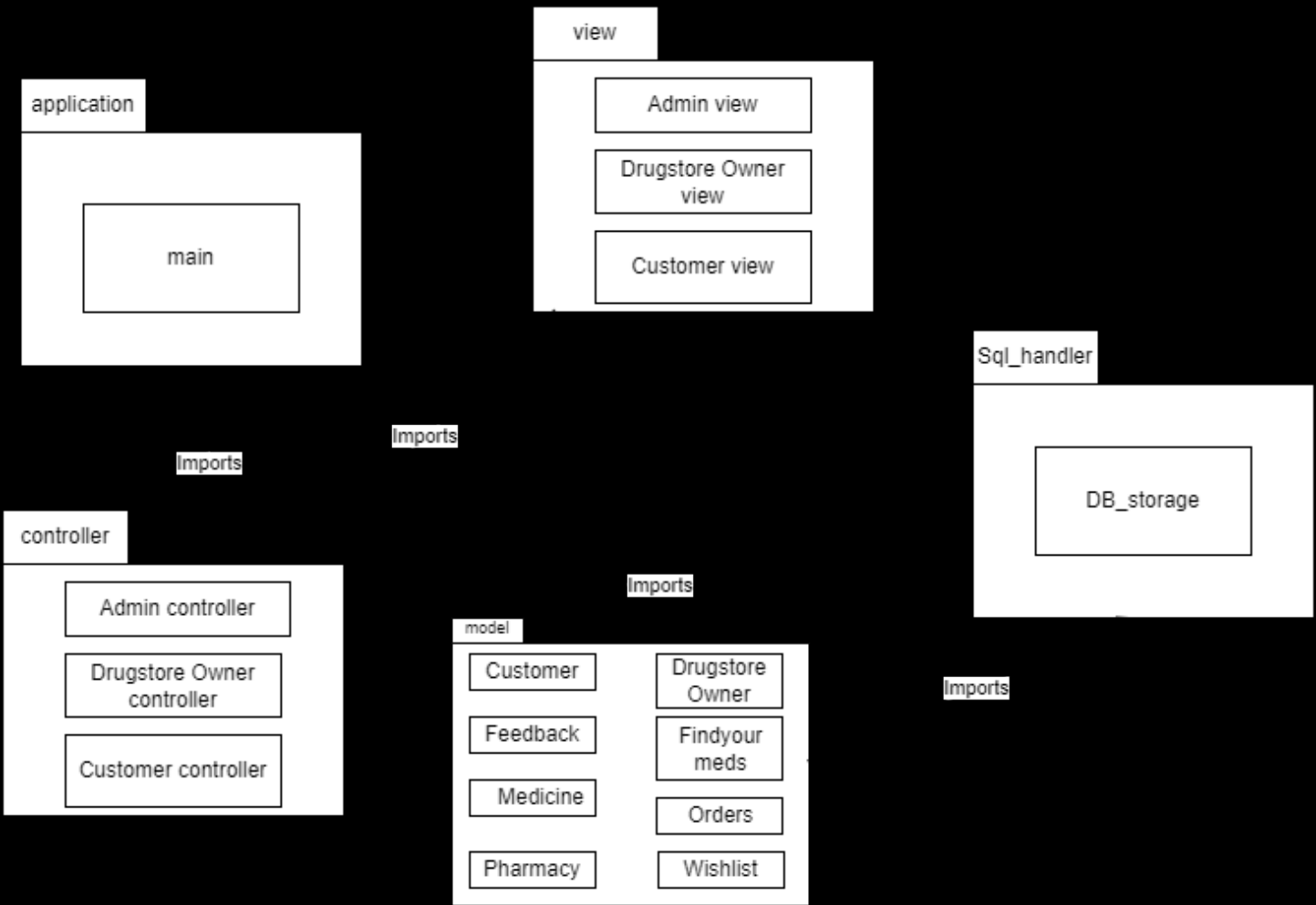




## 7. Class Diagram



8. Package Diagram



## 10. Deployment Diagram

