

Pharmacy Management System



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Abstract

PMS Projects are leading software development initiatives aimed at transforming drugstore management models. It is a strategy for the introduction of a holistic and comprehensive pharmacy management system (PMS Project) aimed at satisfying various pharmaceutical requirements and needs. The goal of the project is to offer better medical practices by integrating the processes of inventory management, prescription, patient data, invoicing, and reporting in such a way that it will also reduce drug errors, enhance operational efficiencies, and ensure confidentiality and compliance with relevant laws. To present the PMS project as an important step ahead of pharmacies that will contribute to providing qualified healthcare services and continuing success amid the changing healthcare industry. PMS Projects represent pioneering efforts in software development, strategically designed to revolutionize drugstore management paradigms. These initiatives aim to implement a comprehensive and holistic Pharmacy Management System (PMS Project) tailored to meet diverse pharmaceutical requirements and address various needs within the industry. The overarching objective of this project is to elevate medical practices by seamlessly integrating crucial processes such as inventory management, prescription handling, patient data management, invoicing, and reporting. The envisioned outcome is a substantial reduction in drug errors, improved operational efficiencies, and the assurance of confidentiality and compliance with relevant laws and regulations. This strategic approach positions the PMS project as a pivotal advancement for pharmacies, positioning them at the forefront of providing high-quality healthcare services. By navigating the complexities of the evolving healthcare industry, the project is poised to contribute significantly to sustained success. The transformative impact of the PMS project underscores its importance in fostering excellence, not only in day-to-day operations but also in contributing to the overarching goals of healthcare providers in adapting to and thriving amidst industry changes.

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Chapter 1

Introduction

1.1 Introduction

The healthcare sector involves frequent alterations in the legislature, patient needs, as well as technological advancements. Therefore, one can say that pharmacies represent not just drug distributors but important components of the health care system, responsible for accurate and rapid treatment processes. Henceforth, it is important to indicate that we are pleased to avail the Pharmacy Management System (PMS) project which is a comprehensive software solution aimed at rejuvenating and modernizing pharmacy operations as a result of these complications.

The pharmacies also act as intermediaries for this most vital role of the pharmaceuticals within the health care system which links together people and health professionals. However, a highly intelligent and broad-based approach involving the latest methodology must be adopted since there are numerous differences in the way that the drugs can work. The Pharmacy Management System Project intends to provide a basis on which pharmacies can develop, transform, and remain thriving amid the evolving healthcare setting.

The plan of this project gives detailed information about the objectives, limits, and likely benefits. Additionally, it offers a detailed description of the project management. Important objectives for the Pharmacy Management System Project are the ability to integrate and manage patient records, ensure a sound security strategy, bill services, process prescriptions, maintain an inventory, and report status. This integration would help the pharmacy to run at its best in ensuring that it upholds the needs of patients as they remain committed to them. In this chapter, the details mentioned will include the project's details, anticipated results, and strategic implementation strategy. These serve as our guideposts, guiding us toward innovation while producing a modernized pharmacy administration system. The main objective is ensuring that pharmacies remain on the front line of healthcare delivery without losing focus on the objective of improving patient health and well-being in a dynamically shifting environment.

1.2 Problem Statement

Modern-day pharmacies need to strike a balance between high precision, optimal throughput, and patient-oriented care while dealing with complex obligations. These demands cannot be adequately handled by the current manual and paper-based pharmacy management systems that result in mistakes while prescribing, ineffective inventory control, and cumbersome administrative processes. These are critical issues that would require an up-to-date PMS to harmonize pharmacies to reform health care.

1.3 Objectives

The PMS project is aimed at transforming and updating the practices related to pharmacy management. This project is designed to solve weaknesses in the existing manual and paper-based systems by implementing a modern software package to automate different functions involved in a pharmacy. The key objectives include:

- **Increasing Efficiency:** The objective of the PMS Project will be to replace labor-intensive manual processes with linked end-to-end software to effect massive cost and productivity improvements in pharmacy service operations. These will improve inventory control, reduce prescription handling errors, and minimize the administrative burden.
- **Enhancing Data Management:** The project will provide a robust mechanism for managing prescription, drug stocking, and patient information. This will enhance pharmacists' ability to provide intelligent and informed patient care because they can easily access essential data.
- **User-Friendly Interface:** The system's user-friendly design will enable pharmacists and staff members with differing degrees of technological proficiency to utilize it. Its ease of use will guarantee effective use and promote acceptance.
- **Adapting to Future Requirements:** The PMS Project is future-focused and made to change to meet the ever-changing demands of the pharmaceutical and healthcare sectors. It will be adaptable and scalable, allowing it to take on new problems and advances in the future.

1.4 Scope

The development, deployment, and ongoing support of a complete software solution designed to modernize and enhance pharmacy operations are all included in the scope of the Pharmacy Management System (PMS) Project. The project's goal is to handle all aspects of pharmacy administration, including inventory control and prescription processing, with an emphasis on patient safety, efficiency, and compliance.

The Pharmacy Management System (PMS) Project encompasses the entire lifecycle of a comprehensive software solution, covering development, deployment, and continuous support. Its overarching objective is to revolutionize and elevate pharmacy operations by modernizing existing systems. The project is designed to address every facet of pharmacy administration, placing particular emphasis on critical areas such as inventory control and prescription processing. The guiding principles of the PMS Project revolve around enhancing patient safety, operational efficiency, and ensuring compliance with regulatory standards.

Through meticulous development, seamless deployment, and sustained support, the PMS Project strives to create a transformative impact on the pharmacy landscape. It goes beyond a mere technological upgrade; it represents a strategic initiative to redefine and optimize pharmacy operations. By centralizing and streamlining administration processes, the project aims to enhance patient safety measures, improve operational efficiency, and ensure strict adherence to regulatory compliance.

In essence, the PMS Project is not just a software solution; it's a holistic approach to modernizing pharmacy practices. Its comprehensive scope underscores the commitment to delivering a system that addresses the dynamic needs of pharmacy administration, setting the stage for a more efficient, secure, and compliant future in pharmaceutical management.

Chapter 2

Requirement Analysis

2.1 Literature Review

This is a CQI application that enables pharmacists to manage pharmacies. Some other software like this do exist in the market as of now. The major difference between them and this project is that this project is much more goal-oriented and focuses on one major goal i.e., providing customer support compared to that software. Those software despite being very interactive are still not very easy to use.

2.1.1 Go Frugal

GOFRUGAL Technologies has offered pharmacy software for 15 years, integrating invoice input, inventory management, expiration management, sales billing, reordering, and drug index.[\[1\]](#) It offers 24/7 support, customized onboarding, and business apps. Bad after-sales customer support. The complicated way to generate a coupon and connect on call.[\[2\]](#)

2.1.2 Win pharms

Win pharm, a pioneer in pharmacy software since 1981, streamlines workflow, boosts profits, and improves efficiency, offering a boutique-style service with many features available for free.[\[3\]](#) There seem to be more pop-up screens with warnings than there used to be which takes focus off the script and slows the whole process down.[\[4\]](#)

2.1.3 Pioneer RX

Pioneer Rx Pharmacy Software is a crucial tool for independent pharmacies, providing weekly updates and enhancing patient outcomes through its robust functionality across all workflow areas.[\[5\]](#) The alert for non-matched/incorrect items in the check screen is inadequate. The reports can be difficult to manage, there are lots of reports to choose from, but not always the exact one you want.[\[6\]](#)

2.1.4 Liberty

Liberty Software is a pharmacy software platform designed and supported by pharmacists, used by thousands of successful pharmacies to manage their pharmacy, improve patient outcomes, and grow their business.[7] Lack of a "home screen". It has been discovered that the previous patient's name was automatically entered while filling an RX if the user had forgotten to enter it.[8]

2.2 Functional Requirement

- Login

Index	Priority	Requirements
FR-01-01	1	The system shall provide a secure login interface for the admin and patient to access their account.
FR-01-02	1	Admin and patient shall be required to enter a valid username and password to log in.

- Admin shall add medicine

FR-02-01	1	Admin shall be able to add new medicines to the system.
FR-02-02	1	Required information for adding a medicine shall include name, description, price, quantity, and any other relevant details.
FR-02-03	1	The system shall generate a unique identifier for each new medicine.

- Admin shall delete medicine

FR-03-01	1	Admin shall have the capability to delete medicines from the system.
FR-03-02	1	The system shall prompt for confirmation before permanently removing a medicine.

- Admin shall edit medicine

FR-04-01	2	Admin shall be able to modify the details of existing medicines.
FR-04-02	2	The system shall allow changes to medicine name, description, price, quantity, and other relevant information.

- Admin shall search for medicine

FR-05-01	2	Admin shall be able to search for medicines based on criteria like name, category, or other attributes.
FR-05-02	2	The system shall display a list of matching medicines.

- Admin shall check the stock of medicine

FR-06-01	2	Admin shall be able to view the current stock levels of all medicines.
FR-06-02	2	The system shall provide real-time information on the quantity of each medicine available.

- Admin shall view monthly report

FR-07-01	2	Admin shall have access to a monthly report that includes data on medicine sales, revenue, and other relevant statistics.
FR-07-02	2	The report shall be available for each month and allow the admin to select the desired month for viewing.

- Admin shall add patient

FR-08-01	2	The admin shall be able to add a new patient to the system.
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- Admin shall delete patient

FR-09-01	2	The admin shall be able to delete a patient from the system.
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- The patient shall order medicine

FR-10-01	2	Patients shall be able to select medicines they want to order.
FR-10-02	2	Patients shall need to provide their personal information and specify the quantity of each medicine they wish to purchase.

- The patient shall view message

FR-11-01	3	Patients shall view message about the order approve or cancel
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2.3 Non-Functional Requirement

a. Security

The system must implement robust security measures to protect user data, especially in the case of admin login and patient payment information.

b. Performance

The system must be responsive and capable of handling concurrent user requests efficiently, ensuring minimal downtime.

c. Scalability

The system must be designed to accommodate an increasing number of medicines, patients, and transactions without a significant drop in performance.

d. Usability

The user interfaces for both admin and patients must be intuitive and user-friendly to enhance ease of use.

e. Reliability

The system must be highly reliable, ensuring minimal disruption in pharmacy operations and preventing data loss.

f. Data Backup and Recovery

Regular automated data backups must be in place, and there must be an efficient data recovery mechanism in case of system failures or data loss.

g. Data Integrity

The system must maintain the integrity of data, preventing unauthorized access, modification, or corruption of records.

h. Response Time

The system must provide quick response times for admin and patient actions, ensuring a smooth user experience.

i. Error Handling

Effective error handling and user-friendly error messages must be in place to guide users in case of mistakes or system issues.

j. Backup Power and Redundancy

The system must have provisions for backup power sources and redundancy to ensure continuous operation in case of power outages or hardware failures.

2.4 Use Case Description

○ Login

Name	Login
Primary Actor	Admin, Patient
Goal	As a user, I want to login to the system to access the pharmacy functionalities.
Trigger	<ul style="list-style-type: none">● When the admin wants to edit, delete, add a medicine or patient etc.● When the patient wants to access pharmacy medicines or place orders.
Pre-condition	<ul style="list-style-type: none">● Users must have internet connection.● User must remember his/her login credentials.● Patients must be added by the admin.
Post condition	<ul style="list-style-type: none">● Admin shall be able to add, delete or edit medicines or patients etc.● Patients shall be able to search or order available medicines of the pharmacy.
Basic Flow	<ul style="list-style-type: none">● Patient will click on the patient link and a patient login form will open.● Patient will enter his/her username and password.● Admin will enter his/her password.● User will click on the sign in button.
Alternative Flow	Not available
Exceptions	<p>Patient have not been added by the admin.</p> <ul style="list-style-type: none">○ Admin must add patient on time or inform patient if there is any issue.
Qualities	<ul style="list-style-type: none">● User's personal information must not be shared with any unauthorized person.

	<ul style="list-style-type: none"> ● User must sign in to the system within 3 to 5 seconds.
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○ Add Medicine

Name	Add medicine
Primary Actor	Admin
Goal	Admin wants to add medicine to the pharmacy.
Trigger	When the admin enters the medicine details and click on the add button.
Pre-condition	<ul style="list-style-type: none"> ● Admin must have internet access. ● Admin must be login to the system. ● Admin must know about the medicine details which he wants to add.
Post condition	Medicine will be added to the pharmacy.
Basic Flow	<ul style="list-style-type: none"> ● Admin will click on the medicine from the menu. ● Admin will enter the medicine details. ● Admin will click on the add button.
Alternative Flow	Not available
Exceptions	<p>Medicine already exists</p> <ul style="list-style-type: none"> ○ Admin can be able to edit already existed medicine details.
Qualities	<ul style="list-style-type: none"> ● Medicine must be added to the system within 3 to 5 seconds. ● Medicine must not be harmful to the patients.

○ **Delete Medicine**

Name	Delete Medicine
Primary Actor	Admin
Goal	Admin wants to delete medicine from the system
Trigger	When the admin clicks on the delete button in the medicine panel.
Pre-condition	<ul style="list-style-type: none"> • Admin must have internet access. • Admin must be login to the system. • Medicine must exist in the pharmacy.
Post condition	Medicine will be deleted from the system
Basic Flow	<ul style="list-style-type: none"> • Admin will click on the medicine from the menu. • Admin will enter the medicine details. • Admin will click on the delete button.
Alternative Flow	<ul style="list-style-type: none"> • Admin will click on the medicine from the menu. • Admin will click on any row on the table • Admin will click on the delete button.
Exceptions	<p>Medicine does not exist.</p> <ul style="list-style-type: none"> ○ Admin must enter the details of that medicine which have already been added to the pharmacy or he/she can click on the row of the table to delete a specific medicine.
Qualities	Medicine will be deleted from the system within 3 to 5 seconds.

○ Edit Medicine

Name	Edit Medicine
Primary Actor	Admin
Goal	Admin wants to edit the medicine of the system.
Trigger	When the admin clicks on the edit button in the medicine panel.
Pre-condition	<ul style="list-style-type: none"> ● Admin must have internet access. ● Admin must be logged into the system. ● Medicine have already been added before.
Post condition	Medicine will be edited
Basic Flow	<ul style="list-style-type: none"> ● Admin will click on the medicine from the menu. ● Admin will enter the medicine details. ● Admin will click on the edit button.
Alternative Flow	<ul style="list-style-type: none"> ● Admin will click on the medicine from the menu. ● Admin will click on any row of the table. ● Admin will change medicine details without changing its name. ● Admin will click on the edit button.
Exceptions	<p>Medicine does not exist.</p> <ul style="list-style-type: none"> ○ Admin must enter the details of that medicine which have already been added to the pharmacy or he/she can click on the row of the table to edit a specific medicine.
Qualities	Medicine will be edited within 3 to 5 seconds.

○ **Add Patient**

Name	Add patient
Primary Actor	Admin
Goal	Admin wants to add patient to the pharmacy.
Trigger	When the admin enters the patient details and click on the add button in the patient menu.
Pre-condition	<ul style="list-style-type: none">● Admin must have internet access.● Admin must be login to the system.● Admin must know about the patient details which he wants to add.
Post condition	Patient will be added to the pharmacy.
Basic Flow	<ul style="list-style-type: none">● Admin will click on the patient from the menu.● Admin will enter the patient details.● Admin will click on the add button.
Alternative Flow	Not available
Exceptions	<p>Patient already exists</p> <ul style="list-style-type: none">○ Admin can edit already existing patient details.
Qualities	<ul style="list-style-type: none">● Patients must be added to the system within 3 to 5 seconds.

○ Delete Patient

Name	Delete Patient
Primary Actor	Admin
Goal	Admin wants to delete patient from the system.
Trigger	When the admin clicks on the delete button in the patient panel.
Pre-condition	<ul style="list-style-type: none">● Admin must have internet access.● Admin must be login to the system.● Patient must exist in the pharmacy.
Post condition	Patient will be deleted from the system.
Basic Flow	<ul style="list-style-type: none">● Admin will click on the patient from the menu.● Admin will enter the patient details.● Admin will click on the delete button.
Alternative Flow	<ul style="list-style-type: none">● Admin will click on the patient from the menu.● Admin will click on any row on the table● Admin will click on the delete button.
Exceptions	<p>Patient does not exist.</p> <ul style="list-style-type: none">○ Admin must enter the details of that patient which have already been added to the pharmacy or he/she can click on the row of the table to delete a specific patient.
Qualities	Patient will be deleted from the system within 3 to 5 seconds.

○ Approve Order

Name	Approve Order
Primary Actor	Admin
Goal	Admin wants to approve the order of medicine placed by some patient.
Trigger	When the admin clicks on the approve button in the order request menu.
Pre-condition	<ul style="list-style-type: none">• Admin must have internet access.• Admin must be logged onto the system.• There must be some unapproved order remaining.
Post condition	Patient's order will be approved and a message will be sent to the patient.
Basic Flow	<ul style="list-style-type: none">• Admin clicks on the order request from the menu.• Admin clicks on the approve button.
Alternative Flow	Not available
Exceptions	No exceptions
Qualities	Order must be approved within 5 to 10 seconds.

○ Order Medicine

Name	Order Medicine
Primary Actor	Patient
Goal	Patient wants to order medicine from the pharmacy.
Trigger	When the patient clicks on the order button after searching for a medicine.
Pre-condition	<ul style="list-style-type: none"> ● Patient must have internet access ● Patients must be logged onto the system. ● Medicine must exist which the patient wants to order. ● Medicine quantity must be sufficient for the patient.
Post condition	Medicine will be ordered.
Basic Flow	<ul style="list-style-type: none"> ● Patient clicks on the order medicine from the menu. ● Patient enters the medicine details. ● Patient searches for the medicine. ● Patient clicks on the order button if medicine is found and a message box will appear to enter the quantity of medicine.
Alternative Flow	<ul style="list-style-type: none"> ● Patient clicks on the order medicine from the menu. ● Patient clicks on the row of the table. ● Patient clicks on the order button and a message box will appear to enter the quantity of medicine.
Exceptions	<ul style="list-style-type: none"> ● Medicine quantity is insufficient. ● Medicine does not exist. <ul style="list-style-type: none"> ○ Patients must enter the quantity less than or equal to the available quantity. ○ Patients can wait for that medicine to be found from the pharmacy.
Qualities	Order will be placed within 3 to 5 seconds.

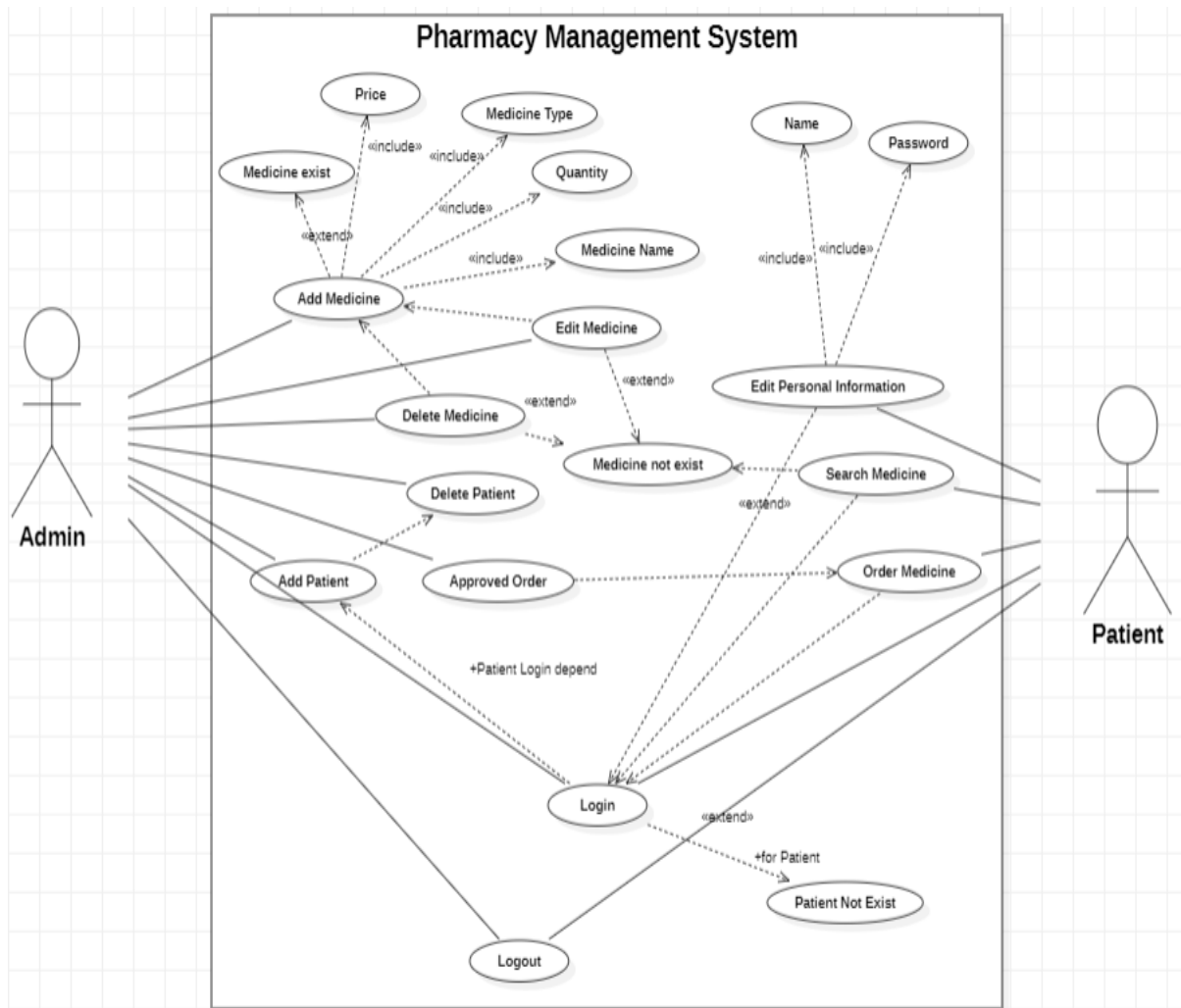
○ **Edit Personal Information**

Name	Edit personal info
Primary Actor	Patient
Goal	Patient wants to edit his personal info.
Trigger	Patient enters his new details and click on the edit button in the account panel.
Pre-condition	<ul style="list-style-type: none">● Patient must have internet access● Patients must be logged onto the system.
Post condition	Patient personal info will be edited.
Basic Flow	<ul style="list-style-type: none">● Patient click on the account from the menu.● Patient enters the new details.● Patient clicks on the edit button.
Alternative Flow	Not available
Exceptions	No exception
Qualities	Patient personal info must not be leaked Patient personal info must be edited within 3 to 5 seconds.

○ **Patient Message**

Name	Patient Message
Primary Actor	Patient
Goal	Patient wants to view received messages.
Trigger	When the patient wants to view messages, he/she clicks on the messages in the menu.
Pre-condition	<ul style="list-style-type: none">• Patient must have internet access• Patients must be logged onto the system.
Post condition	Patient can be able to read his/her messages.
Basic Flow	<ul style="list-style-type: none">• Patient click on the messages from the menu.• Patient select the category read or unread messages.• Patient can view the selected category messages.
Alternative Flow	Not available
Exceptions	No exception
Qualities	<ul style="list-style-type: none">• Patient personal messages cannot be seen to other patients.• Patient messages must be updated as soon as they will be received.

2.5 Use Case Diagram

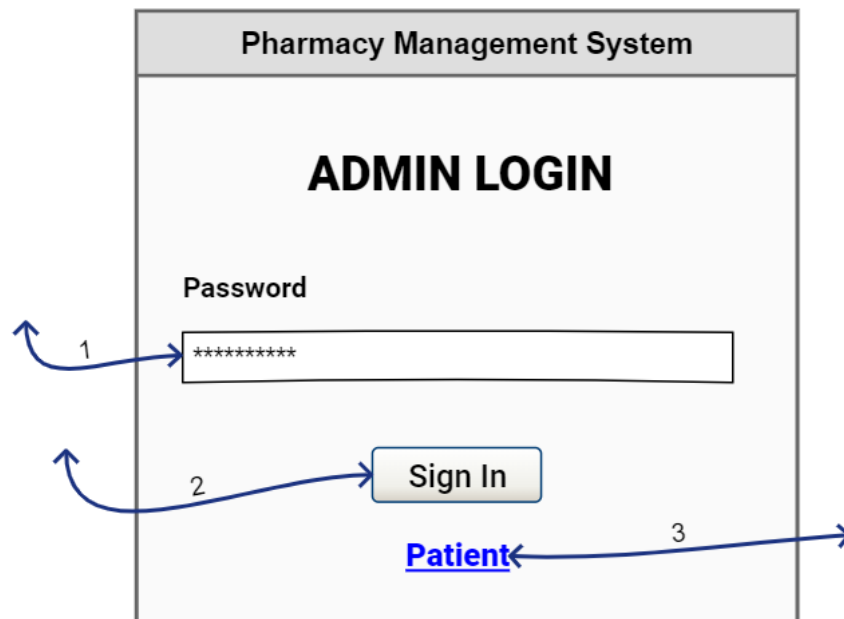


Chapter 3

System Design Analysis

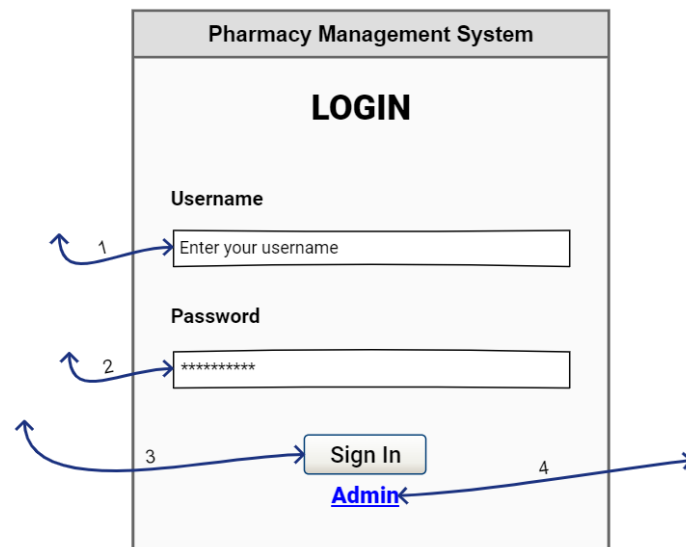
3.1 Wireframes

a. Admin Login



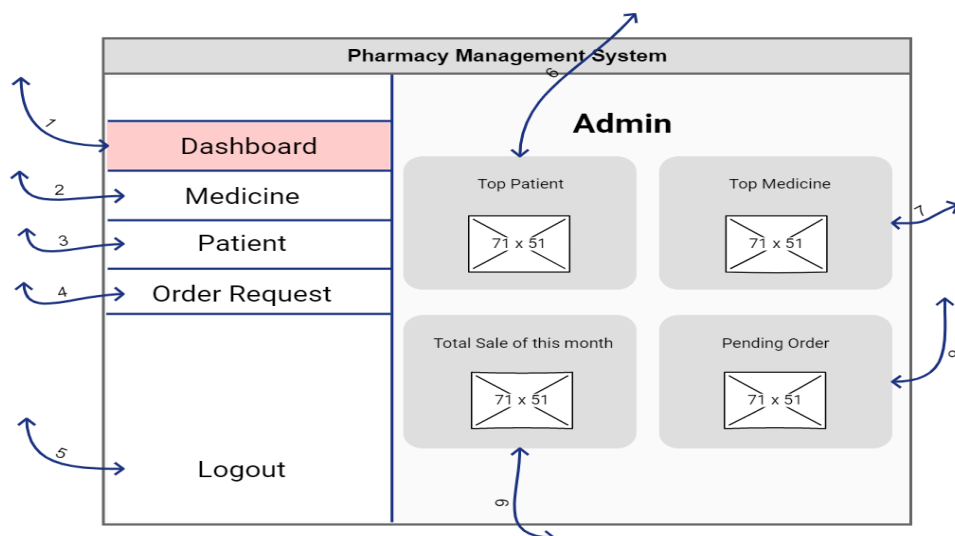
<i>ID</i>	<i>User/Patient</i>	<i>Admin</i>
1	No Role	As an admin, I shall enter my specific password to login to the system.
2	No Role	As an admin, I shall click on the sign-in button after entering the password to login into the system.
3	As a user, I shall click on the link which allows me to go to the login page of the user.	No Role

b. Patient Login



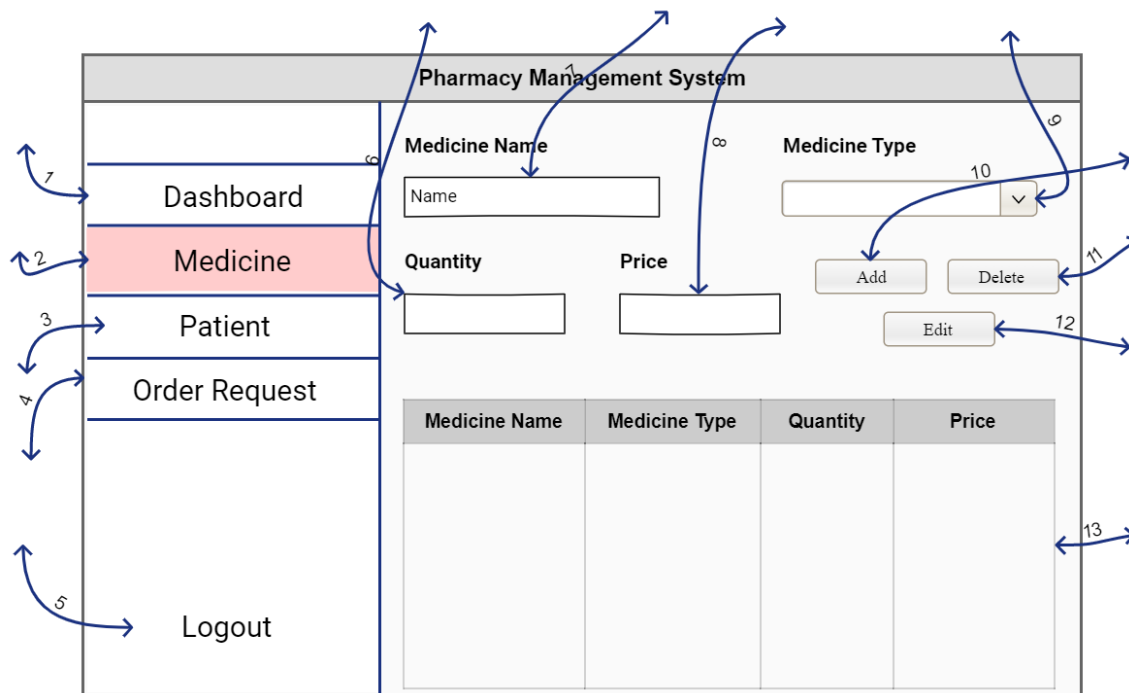
<i>ID</i>	<i>User/Patient</i>	<i>Admin</i>
1	As a User, I shall enter my specific username to login to the system.	No Role
2	As a User, I shall enter my specific password to login to the system.	No Role
3	As a User, I shall click on the sign-in button after entering the username and password to login into the system.	No Role
		As a Admin, I shall click on the link which allows me to go to the login page of the admin.

c. Admin Dashboard



<i>ID</i>	<i>User/Patient</i>	<i>Admin</i>
1	No Role / Page not available for the user	As an admin, I shall not be able to perform any action because I will be already on the dashboard page.
2	No Role / Page not available for the user	As an admin, I shall click on the medicine button to go to the medicine page of the admin.
3	No Role / Page not available for the user	As an admin, I shall click on the patient button to go to the patient page of admin.
4	No Role / Page not available for the user	As an admin, I shall click on the order request button to go to the orders page of the admin.
5	No Role / Page not available for the user	As an admin, I shall click on the logout button to logout from the system
6	No Role / Page not available for the user	As an admin, I shall be able to view the top patient of the month who have placed maximum orders.
7	No Role / Page not available for the user	As an admin, I shall be able to view the top medicine of the month that have been sold the most.
8	No Role / Page not available for the user	As an admin, I shall be able to view the pending orders of all the customers
9	No Role / Page not available for the user	As an admin, I shall be able to view the total sales of medicine in the latest month

d. Admin Medicine



<i>ID</i>	<i>User/Patient</i>	<i>Admin</i>
<i>1</i>	No Role / Page not available for the user	As an admin, I shall click on the dashboard button to go to the dashboard page of admin.
<i>2</i>	No Role / Page not available for the user	As an admin, I shall not be able to perform any action because I will be already on the medicine page
<i>3</i>	No Role / Page not available for the user	As an admin, I shall click on the patient button to go to the patient page of admin.
<i>4</i>	No Role / Page not available for the user	As an admin, I shall click on the order request button to go to the orders page of the admin.
<i>5</i>	No Role / Page not available for the user	As an admin, I shall click on the logout button to logout from the system
<i>6</i>	No Role / Page not available for the user	As an admin, I shall enter the quantity of the medicine to add in the pharmacy, or also when I click on the row of medicine its quantity will appear here.
<i>7</i>	No Role / Page not available for the user	As an admin, I shall enter the name of the medicine to add in the pharmacy, or also when I click on the row of medicine its name will appear here.
<i>8</i>	No Role / Page not available for the user	As an admin, I shall enter the price of the medicine to add in the pharmacy, or also when I click on the row of medicine its price will appear here.
<i>9</i>	No Role / Page not available for the user	As an admin, I shall select the type of medicine to add to the pharmacy, or also when I click on the row of medicine its type will be selected in the combo box.
<i>10</i>	No Role / Page not available for the user	As an admin, I shall click on the add button to add the medicine to the pharmacy after entering its details.
<i>11</i>	No Role / Page not available for the user	As an admin, I shall click on the delete button to delete the medicine after entering details of the medicine to be deleted.

12	No Role / Page not available for the user	As an admin, I shall click on the edit button after entering new details of a specific medicine which have been selected from the table.
13	No Role / Page not available for the user	As an admin, I shall click on any row of the medicine to display its details in the text fields and combo box.

e. Admin Patient

Pharmacy Management System

1 Dashboard

2 Medicine

3 Patient

4 Order Request

5 Logout

Username

Name

Password

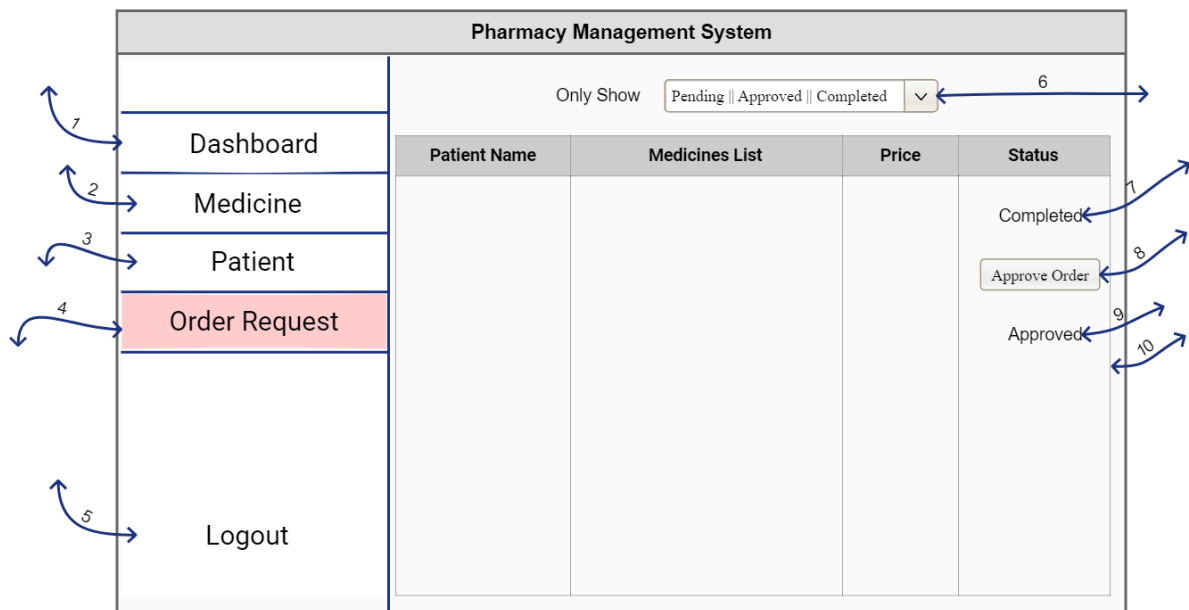
Add Delete

Patient Name	Username	Password

<i>ID</i>	<i>User/Patient</i>	<i>Admin</i>
1	No Role / Page not available for the user	As an admin, I shall click on the dashboard button to go to the dashboard page of admin.
2	No Role / Page not available for the user	As an admin, I shall click on the medicine button to go to the medicine page of the admin.

3	No Role / Page not available for the user	As an admin, I shall not be able to perform any action because I will be already on the patient page.
4	No Role / Page not available for the user	As an admin, I shall click on the order request button to go to the orders page of the admin.
5	No Role / Page not available for the user	As an admin, I shall click on the logout button to logout from the system
6	No Role / Page not available for the user	As an admin, I shall enter the username of the user/patient to add in the pharmacy, or also when I click on the row of patients table, its username will appear here.
7	No Role / Page not available for the user	As an admin, I shall enter the name of the user/patient to add in the pharmacy, or also when I click on the row of patients table, its name will appear here.
8	No Role / Page not available for the user	As an admin, I shall enter the password of the user/patient to add in the pharmacy, or also when I click on the row of patients table, its name will appear here.
9	No Role / Page not available for the user	As an admin, I shall click on the add button to add the patient to the system after entering the details of the user/patient.
10	No Role / Page not available for the user	As an admin, I shall click on the delete button to delete the patient from the system after entering the details of the user/patient to be deleted.
11	No Role / Page not available for the user	As an admin, I shall be able to click on any row of the table so that all the details will appear in the text fields.

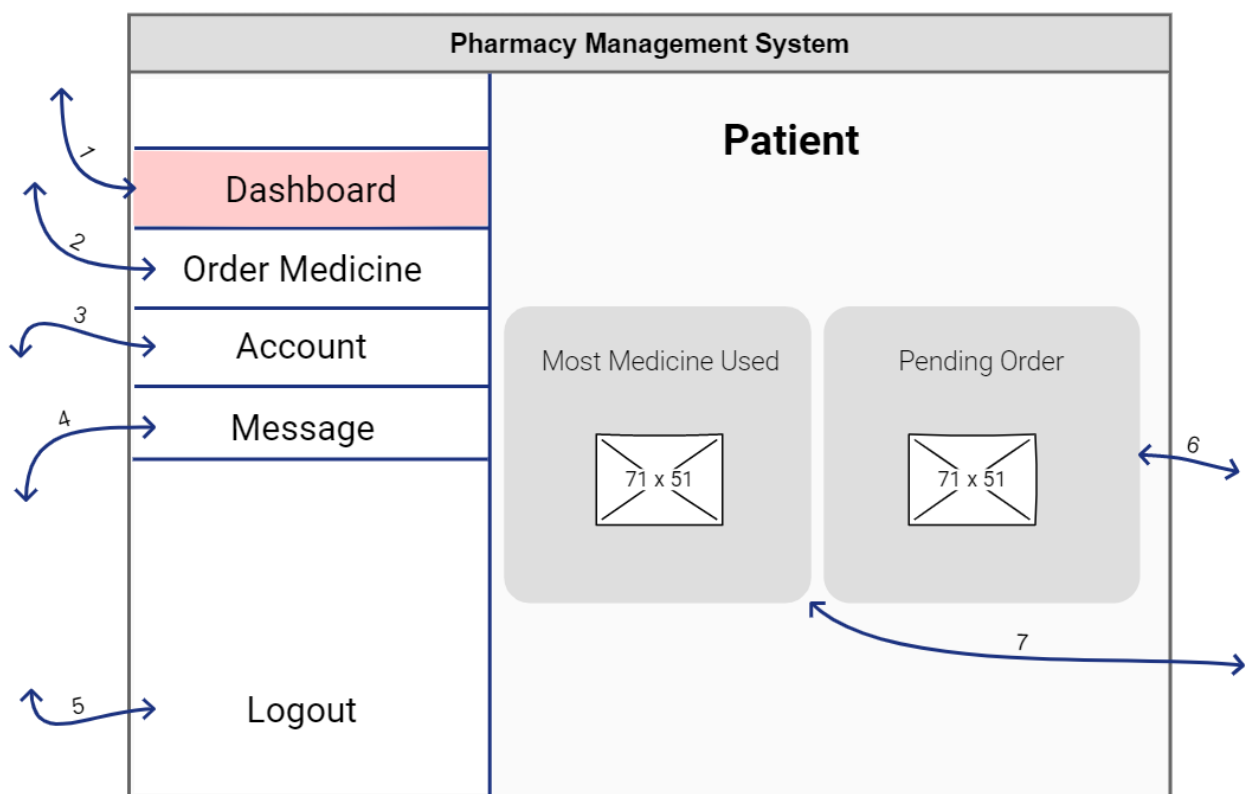
f. Admin Order Request



<i>ID</i>	<i>User/Patient</i>	<i>Admin</i>
1	No Role / Page not available for the user	As an admin, I shall click on the dashboard button to go to the dashboard page of admin.
2	No Role / Page not available for the user	As an admin, I shall click on the medicine button to go to the medicine page of the admin.
3	No Role / Page not available for the user	As an admin, I shall click on the order request button to go to the order request page of the admin.
4	No Role / Page not available for the user	As an admin, I shall not be able to perform any action because I will be already on the order request page.
5	No Role / Page not available for the user	As an admin, I shall click on the logout button to logout from the system
6	No Role / Page not available for the user	As an admin, I shall be able to select any option (pending, approved, completed) from the combo box so, that type of message will appear in the table

7	No Role / Page not available for the user	As an admin, I shall be able to view the completed orders from their status.
8	No Role / Page not available for the user	As an admin, I shall click on the approve order button to approve the order of the customer.
9	No Role / Page not available for the user	As an admin, I shall be able to view the approved orders from their status.
10	No Role / Page not available for the user	As an admin, I shall be able to view the orders of the customers.

g. Patient Dashboard



<i>ID</i>	<i>User/Patient</i>	<i>Admin</i>
1	As a user, I shall not be able to perform any action because I will be already on the dashboard page.	No Role / Page not available for the admin
2	As a user, I shall click on the order medicine button to go to the order medicine page of the user.	No Role / Page not available for the admin
3	As a user, I shall click on the account button to go to the account page of the user to view or edit personal details.	No Role / Page not available for the admin
4	As a user, I shall click on the message button to go to the message page of the user to view personal messages.	No Role / Page not available for the admin
5	As a user, I shall click on the logout button to logout from the system	No Role / Page not available for the admin
6	As a user, I shall be able to view my pending orders.	No Role / Page not available for the admin
7	As a user, I shall be able to view the most used medicine of the month or year.	No Role / Page not available for the admin

h. Order Patient

Pharmacy Management System

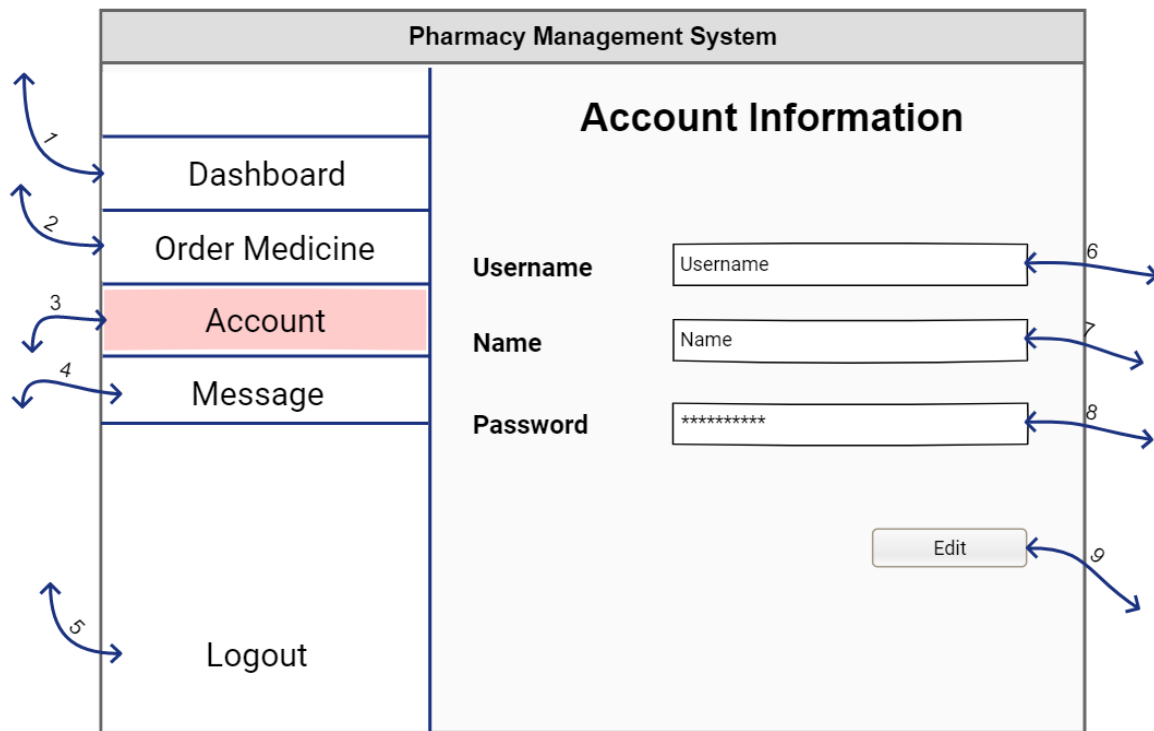
Medicine Name: Name

Medicine Type: ▼

Medicine Name	Medicine Type	Quantity	Price

<i>ID</i>	<i>User/Patient</i>	<i>Admin</i>
1	As a user, I shall click on the dashboard button to go to the dashboard page.	No Role / Page not available for the admin
2	As a user, I shall not be able to perform any action because I will be already on the order medicine page.	No Role / Page not available for the admin
3	As a user, I shall click on the account button to go to the account page of the user to view or edit personal details.	No Role / Page not available for the admin
4	As a user, I shall click on the message button to go to the message page of the user to view personal messages.	No Role / Page not available for the admin
5	As a user, I shall click on the logout button to logout from the system	No Role / Page not available for the admin
6	As a user, I shall enter the name of the medicine which I want to order or search.	No Role / Page not available for the admin
7	As a user, I shall select the type of the medicine which I want to order or search.	No Role / Page not available for the admin
8	As a user, I shall click on the search button to search the medicine after entering its name and selecting its type	No Role / Page not available for the admin
9	As a user, I shall be able to view the medicines and their details in the table and when I click on the row of the table its name will be shown in the text field and type in the combo box	No Role / Page not available for the admin
10	As a user, I shall click on the order button to order the medicine after entering its quantity in the message box which will be shown after clicking on the button.	No Role / Page not available for the admin

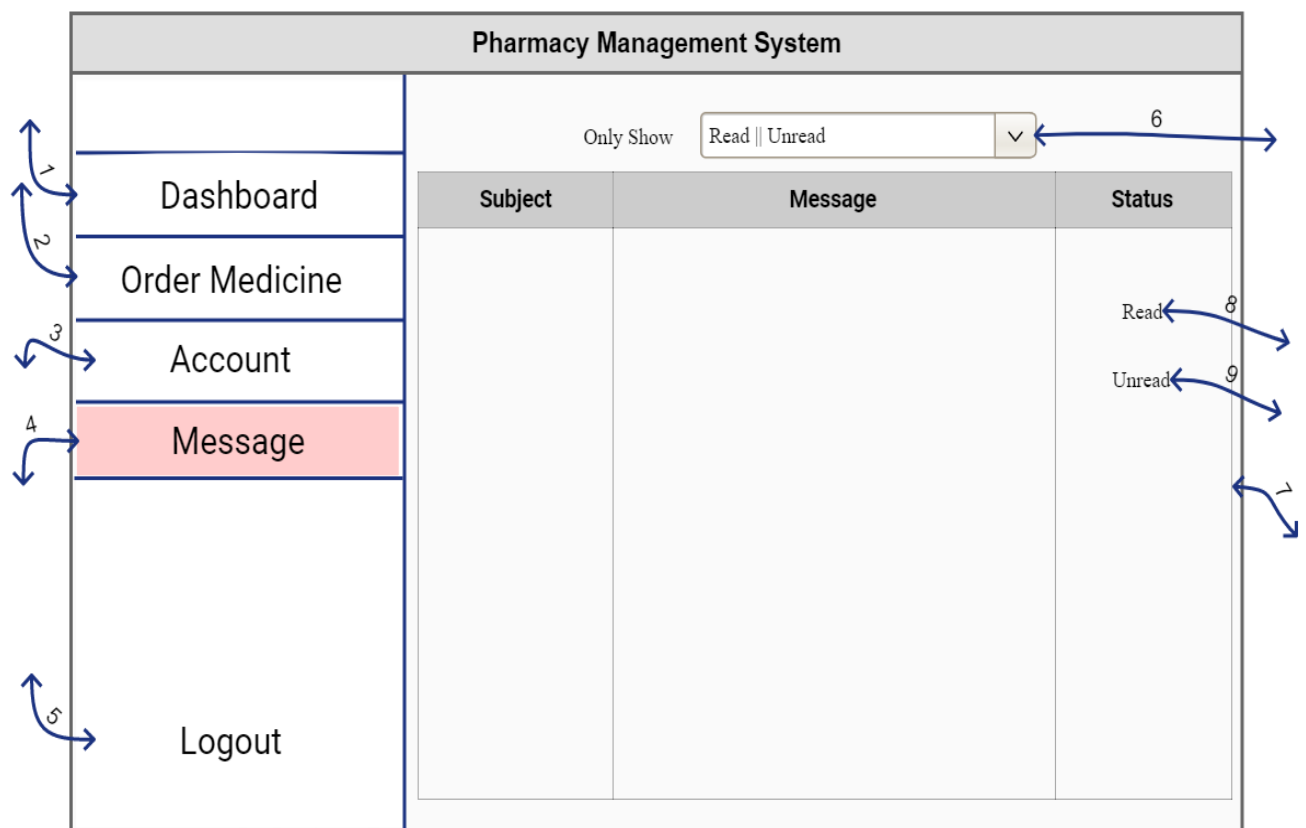
i. Patient Information



<i>ID</i>	<i>User/Patient</i>	<i>Admin</i>
1	As a user, I shall click on the dashboard button to go to the dashboard page.	No Role / Page not available for the admin
2	As a user, I shall click on the order medicine button to go to the order medicine page.	No Role / Page not available for the admin
3	As a user, I shall not be able to perform any action because I will be already on the account page.	No Role / Page not available for the admin
4	As a user, I shall click on the message button to go to the message page of the user to view personal messages.	No Role / Page not available for the admin
5	As a user, I shall click on the logout button to logout from the system	No Role / Page not available for the admin

6	As a user, I shall view my username or enter the new username to edit my personal info.	No Role / Page not available for the admin
7	As a user, I shall view my name or enter a new name to edit my personal info.	No Role / Page not available for the admin
8	As a user, I shall view my password or enter a new password to edit my personal info.	No Role / Page not available for the admin
9	As a user, I shall click on the edit button to edit my personal info after entering new details.	No Role / Page not available for the admin

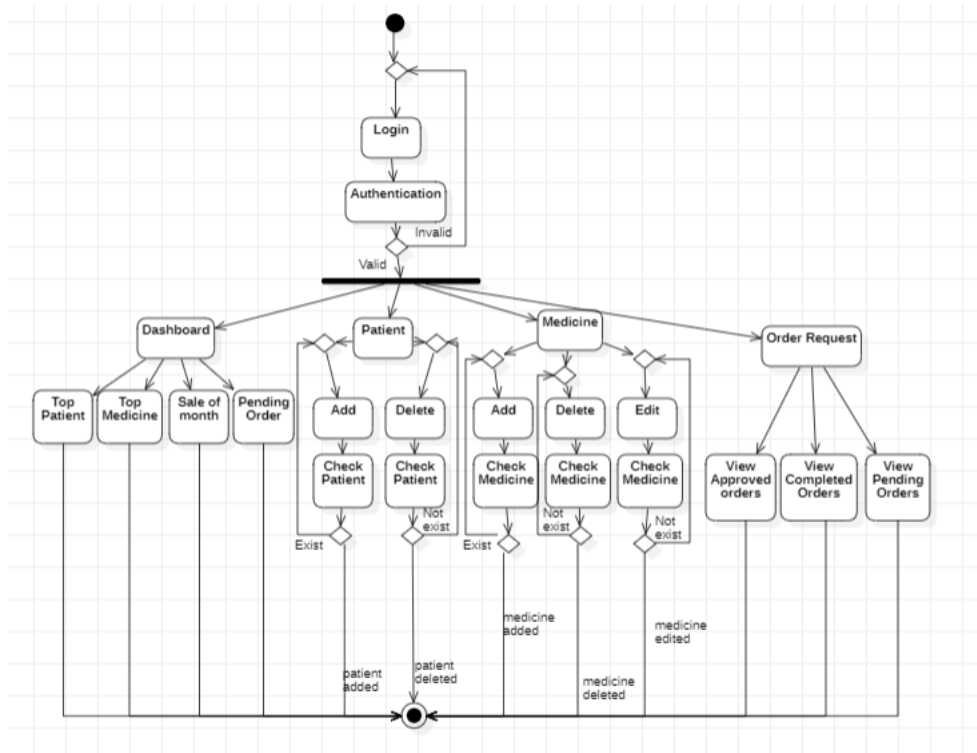
j. Patient Message



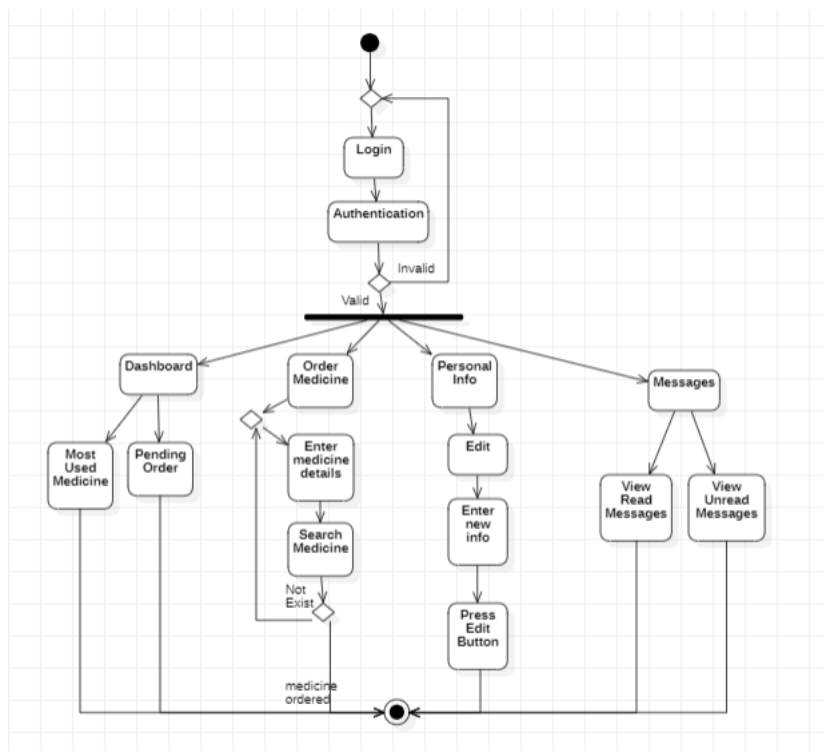
<i>ID</i>	<i>User/Patient</i>	<i>Admin</i>
1	As a user, I shall click on the dashboard button to go to the dashboard page.	No Role / Page not available for the admin
2	As a user, I shall click on the order medicine button to go to the order medicine page.	No Role / Page not available for the admin
3	As a user, I shall click on the account button to go to the account page to view my personal details.	No Role / Page not available for the admin
4	As a user, I shall not be able to perform any action because I will be already on the messages page.	No Role / Page not available for the admin
5	As a user, I shall click on the logout button to logout from the system	No Role / Page not available for the admin
6	As an admin, I shall be able to select any option (read, unread) from the combo box so, that type of message will appear in the table	No Role / Page not available for the admin
7	As a user, I shall be able to view my read and unread messages.	No Role / Page not available for the admin
8	As a user, I shall be able to view the read messages using their status.	No Role / Page not available for the admin
9	As a user, I shall be able to view the unread messages using their status.	No Role / Page not available for the admin

3.2 Activity Diagram

a. Admin

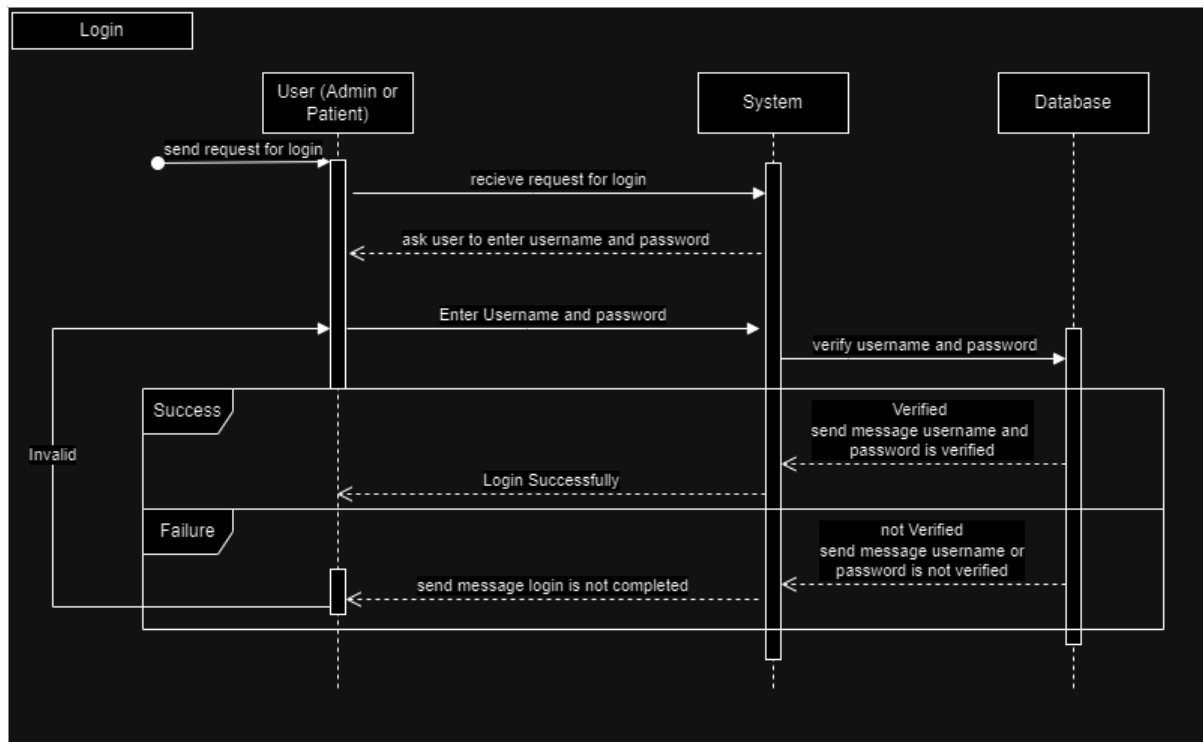


b. Patient

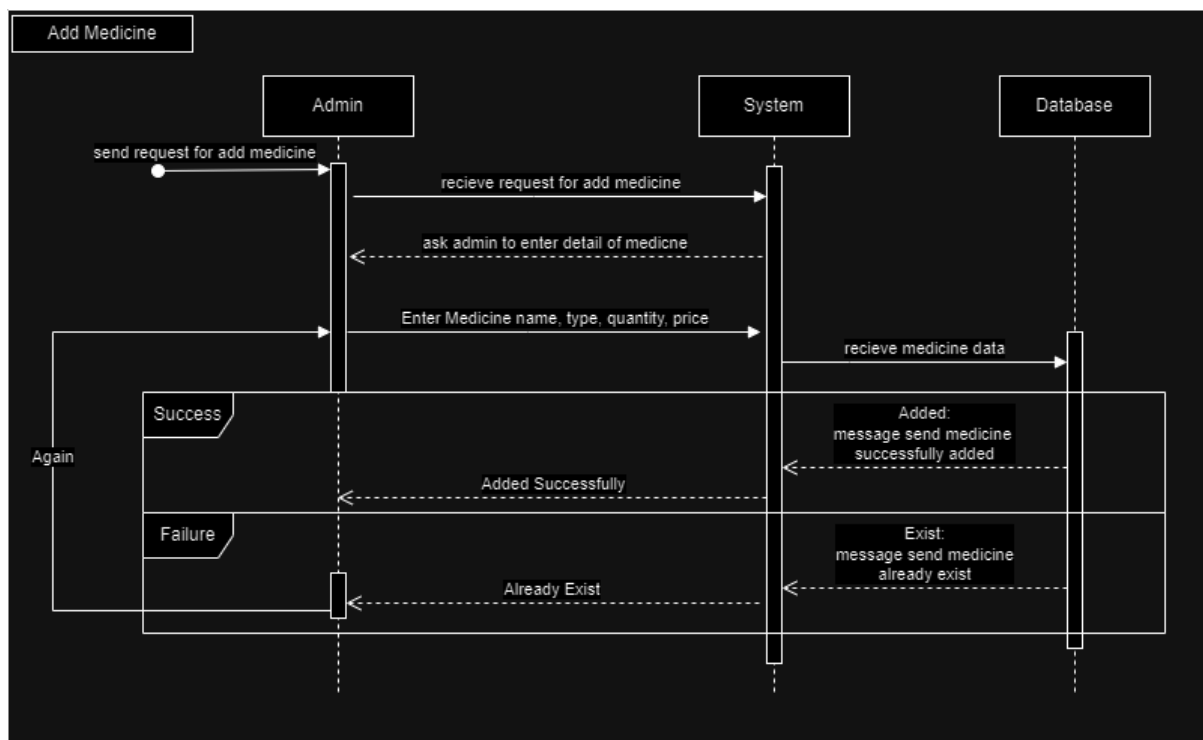


3.3 Sequence Diagram

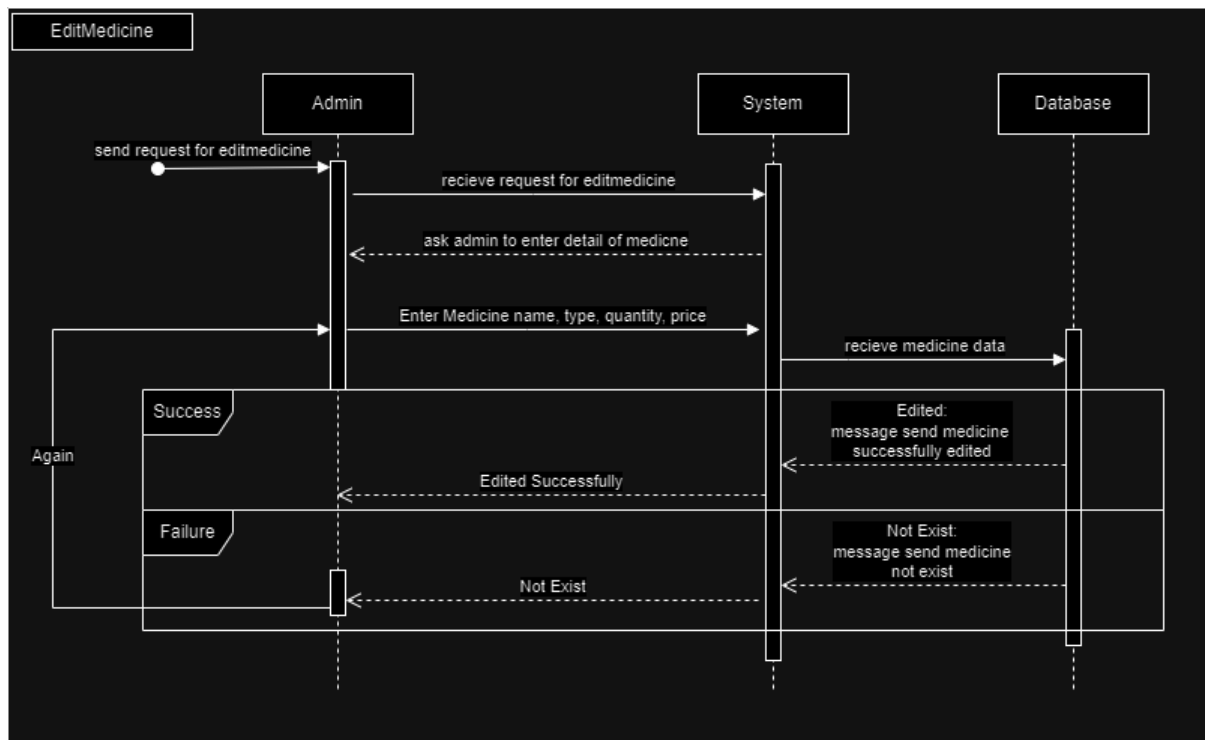
a. Login



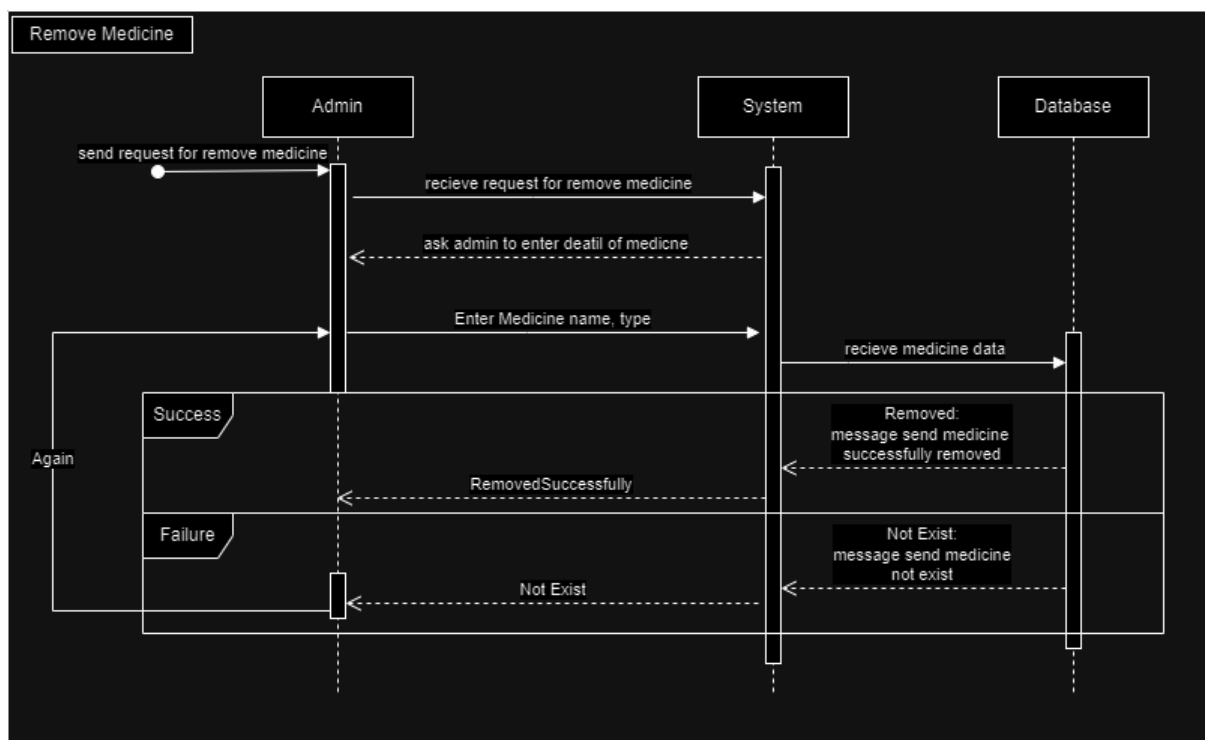
b. Add Medicine



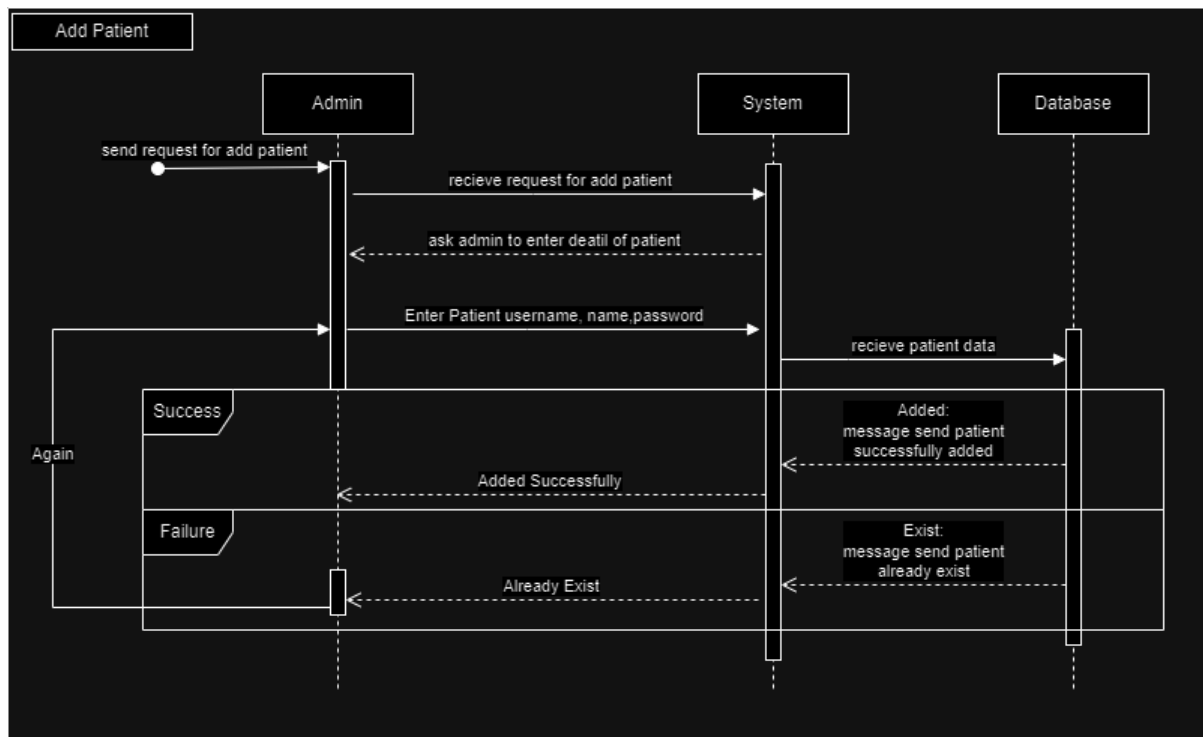
c. Edit Medicine



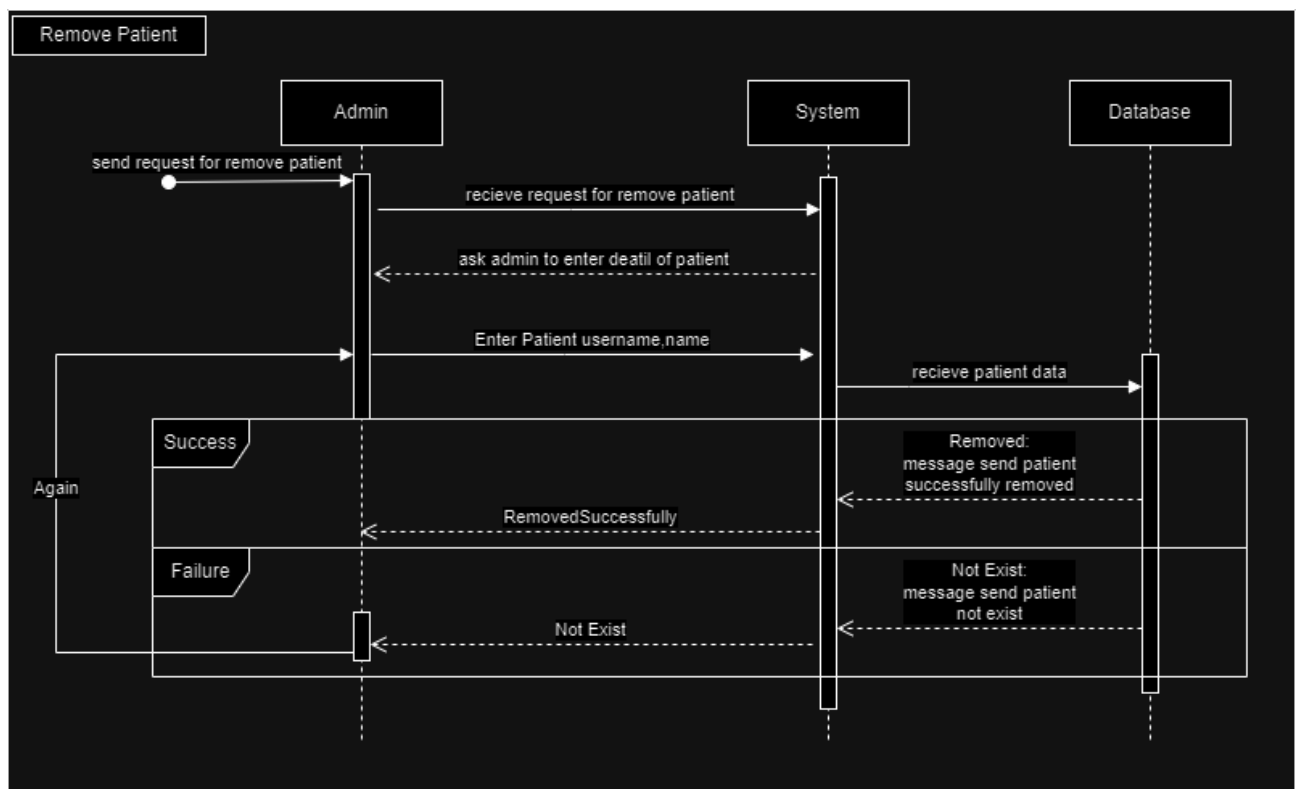
d. Remove Medicine



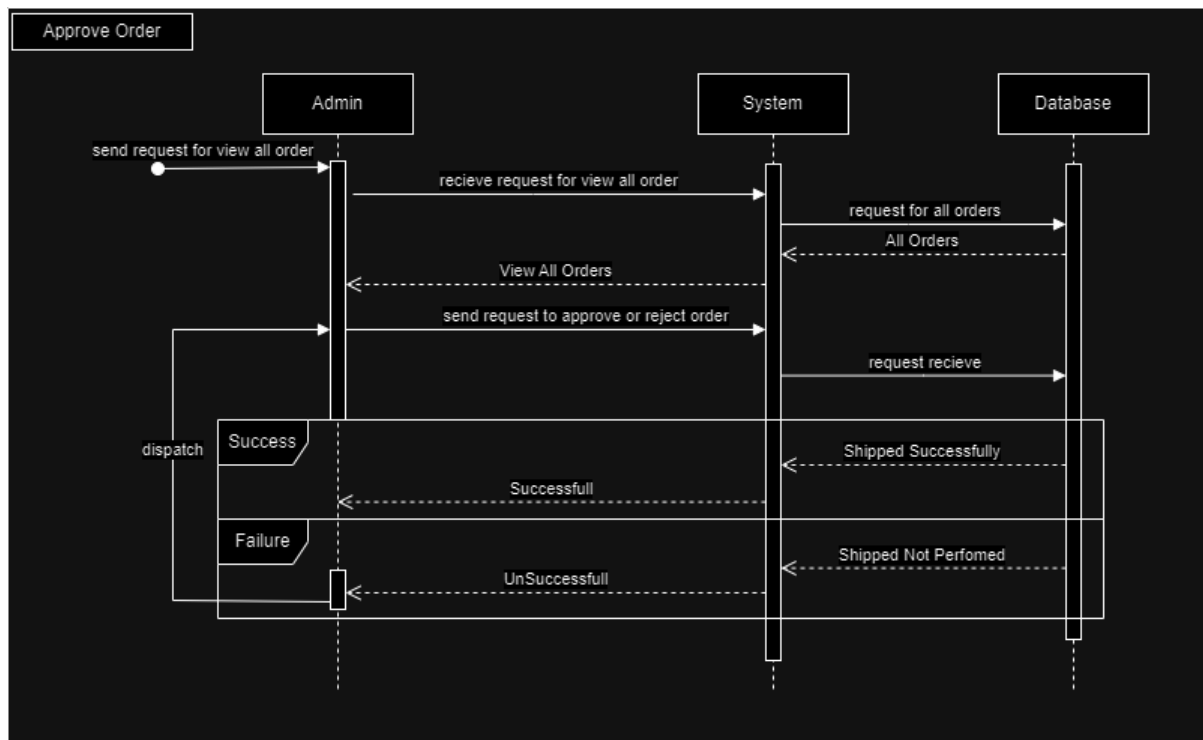
e. Add Patient



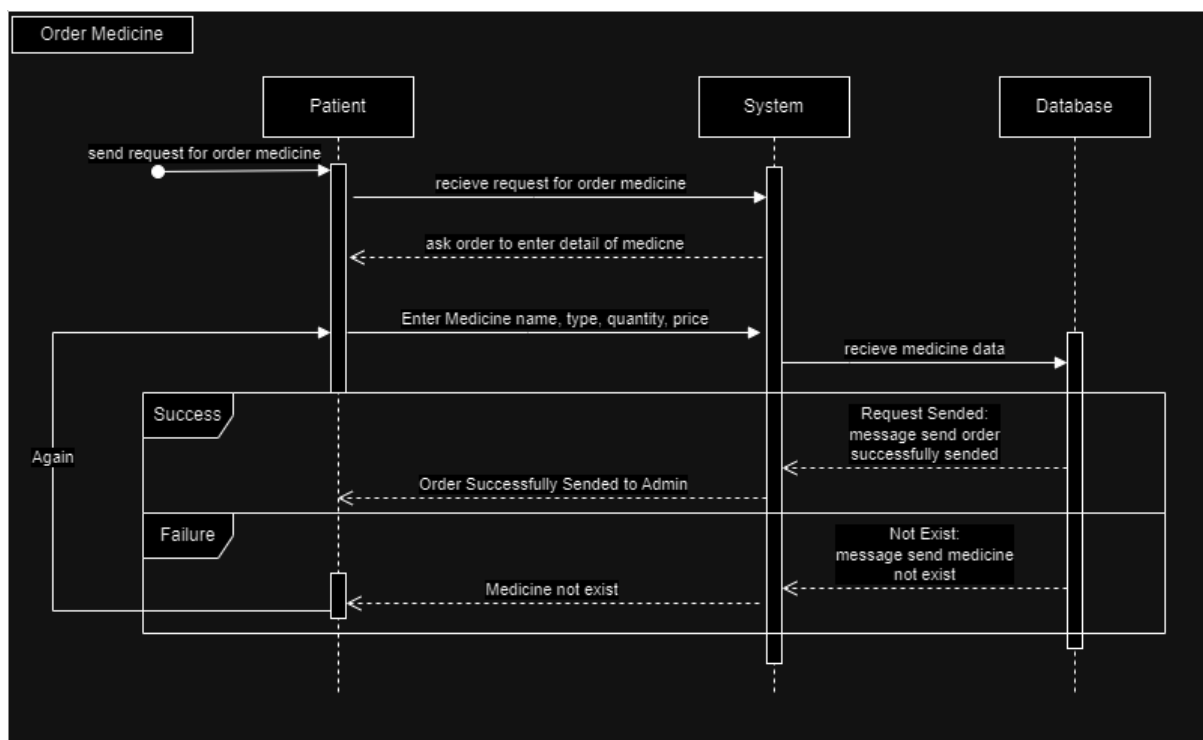
f. Remove Patient



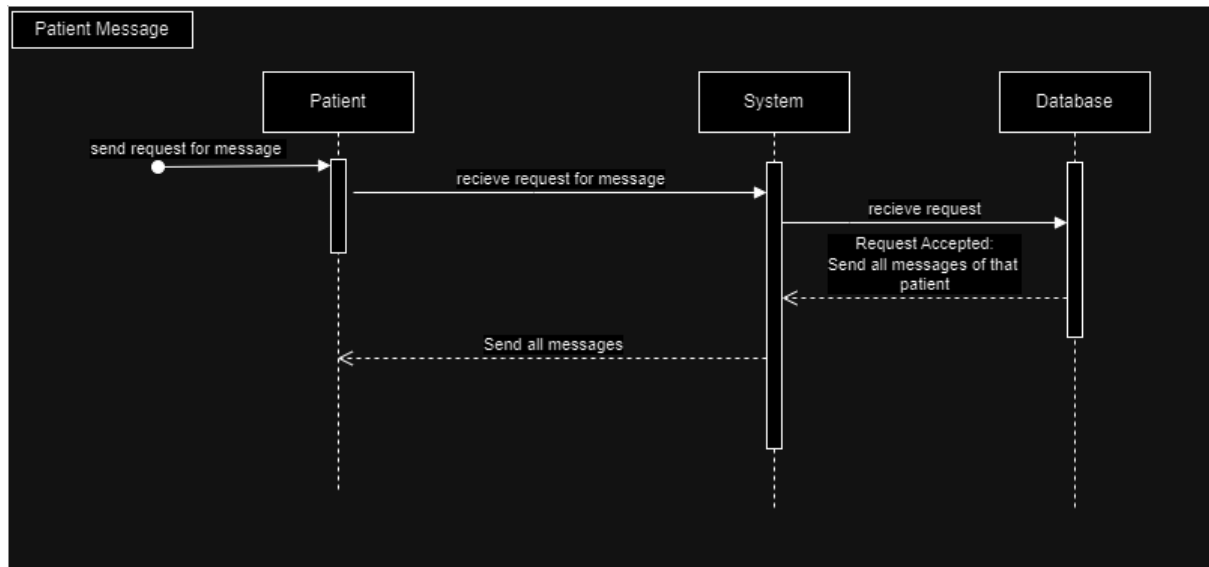
g. Approve Order



h. Order Medicine

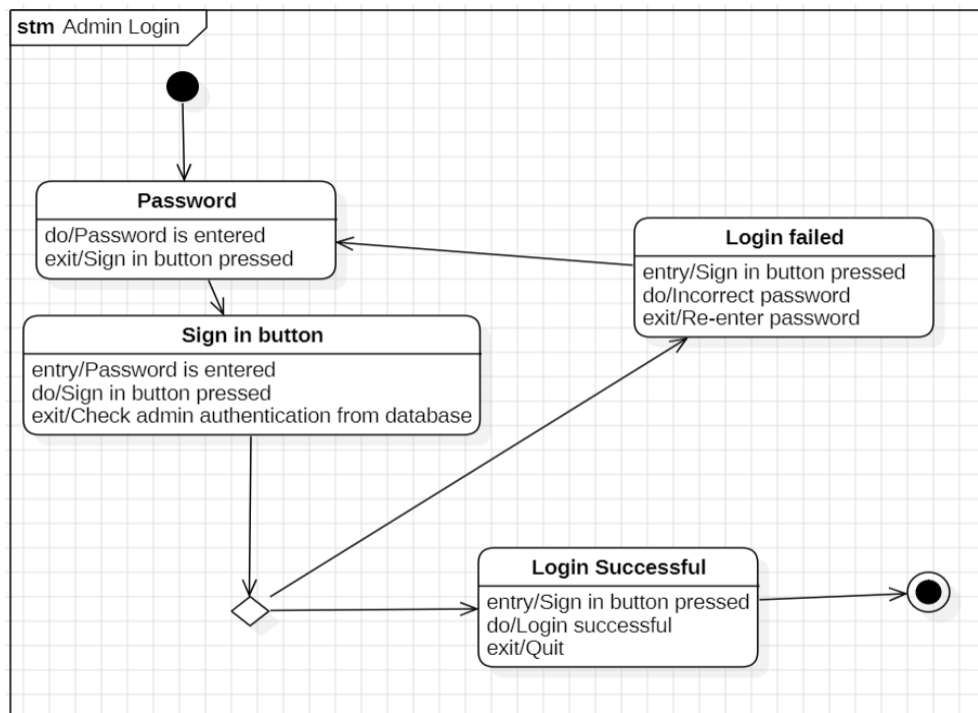


i. Patient Message

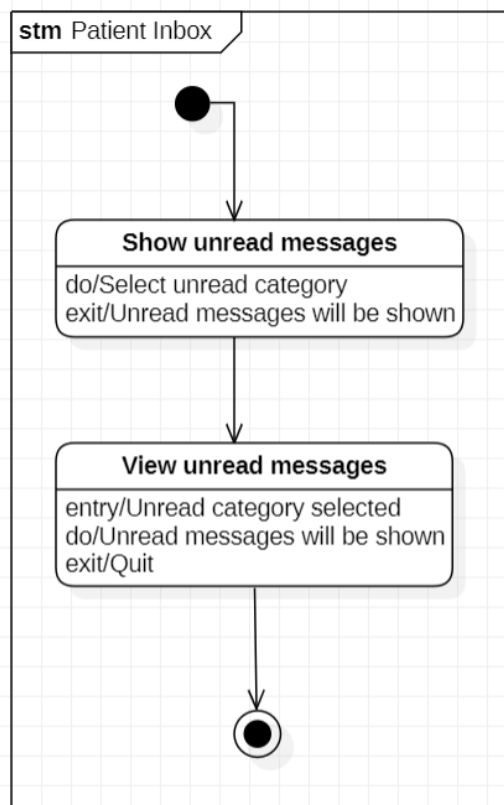


3.4 State Diagram

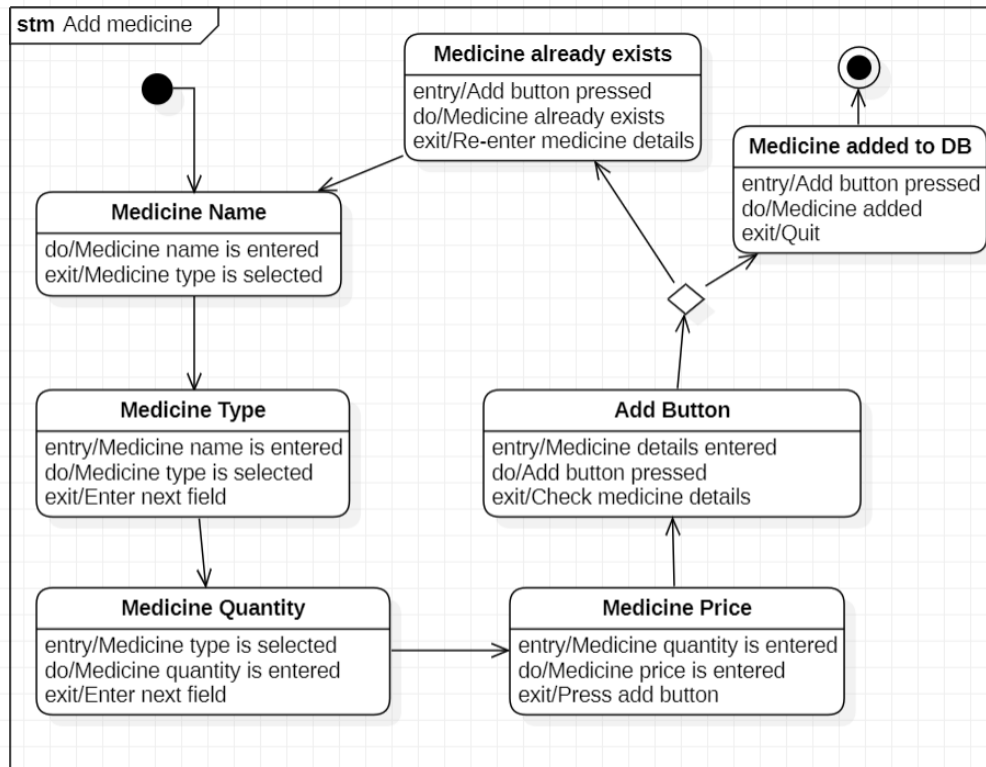
a. Admin Login



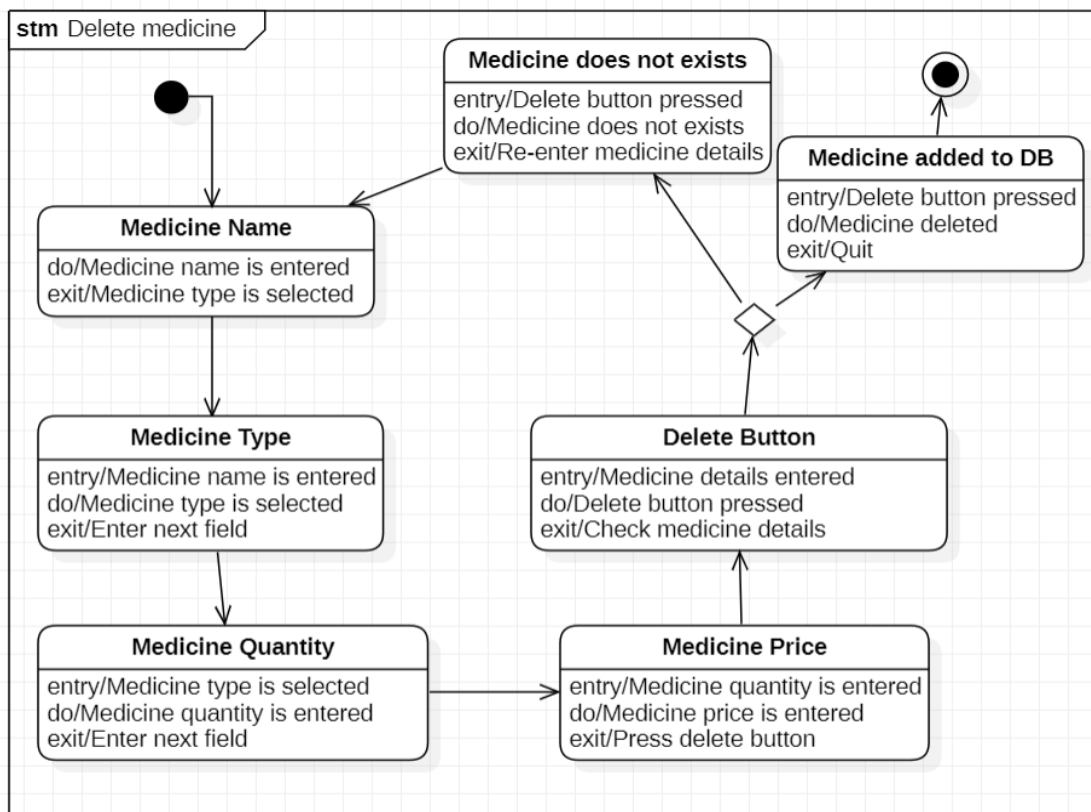
b. Patient Login



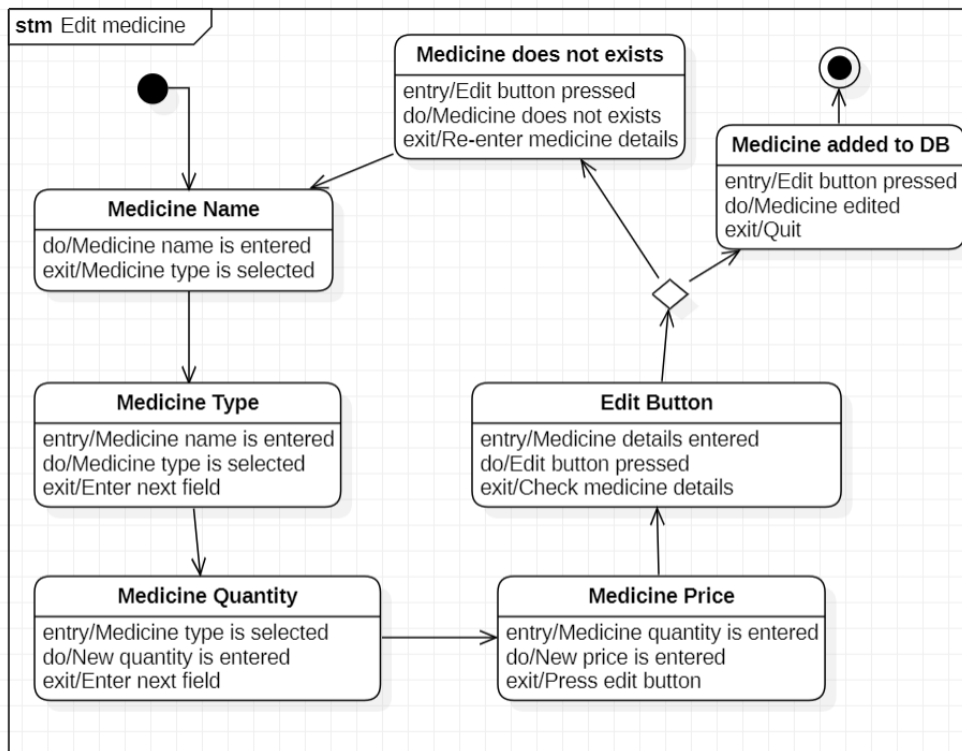
c. Add Medicine



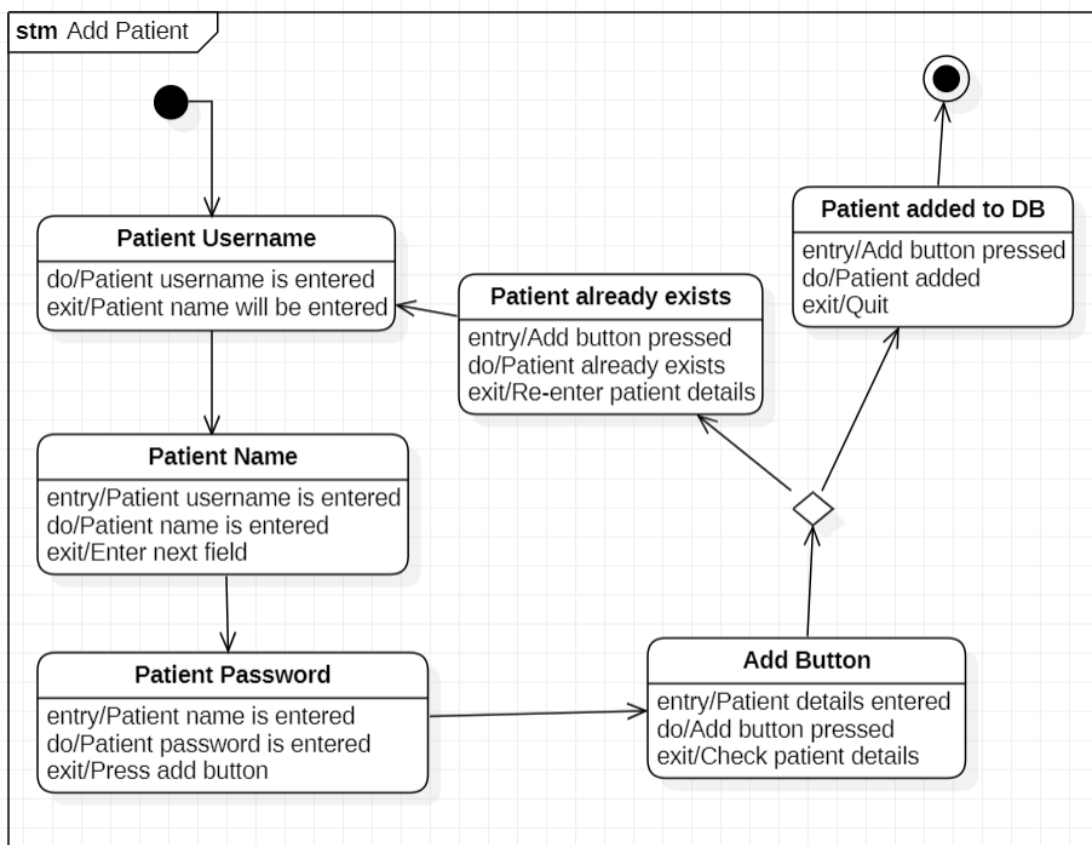
d. Delete Medicine



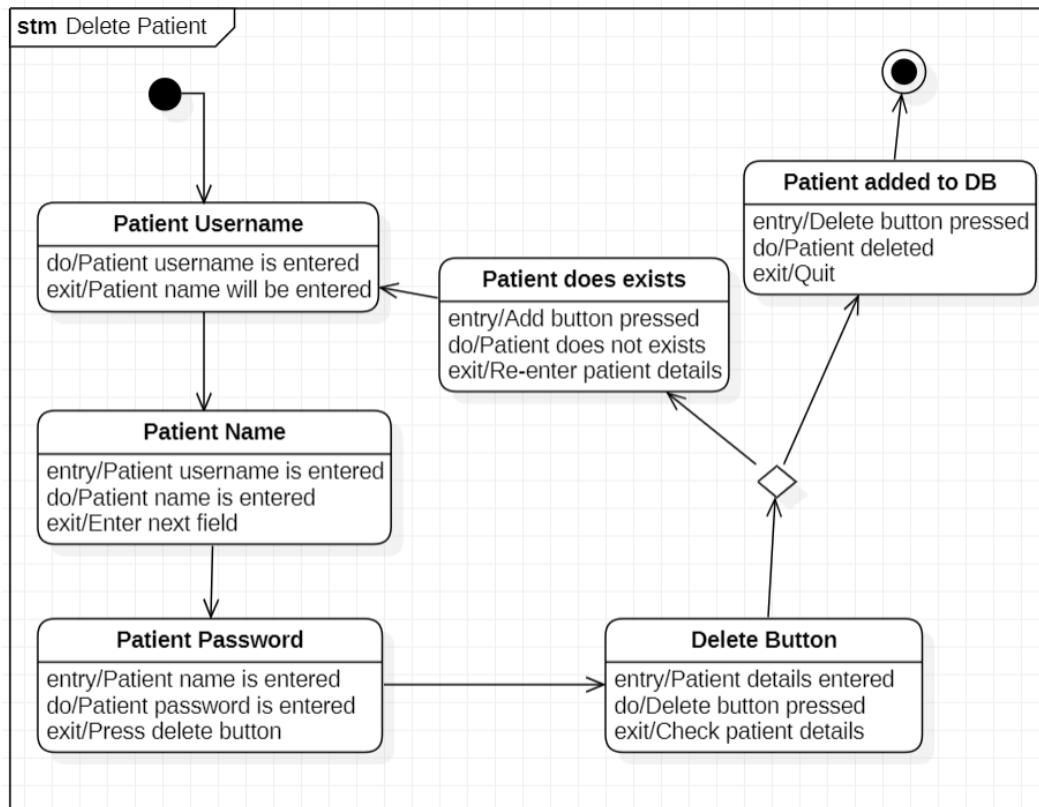
e. Edit Medicine



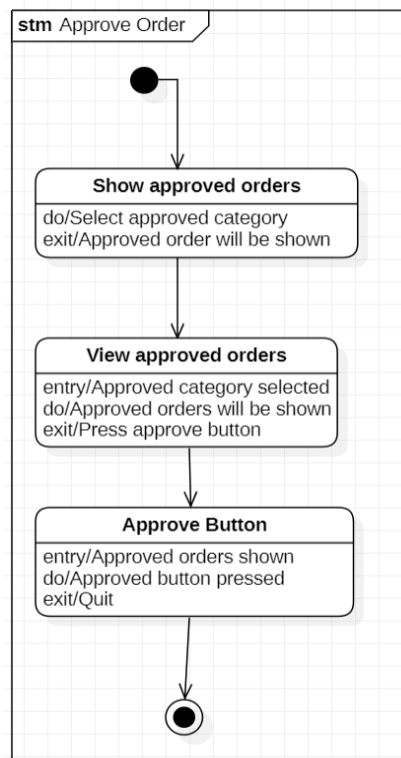
f. Add Patient



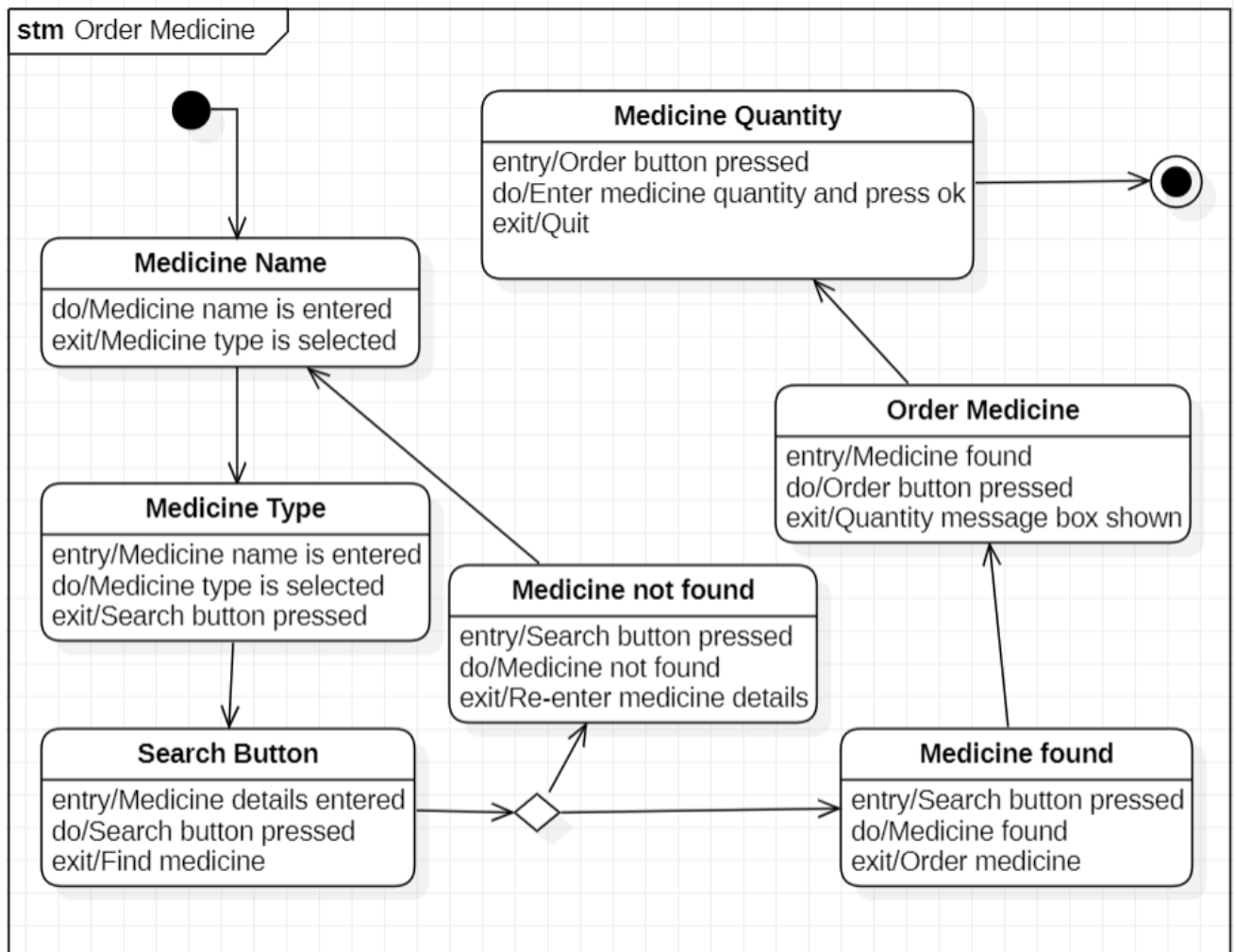
g. Delete Patient



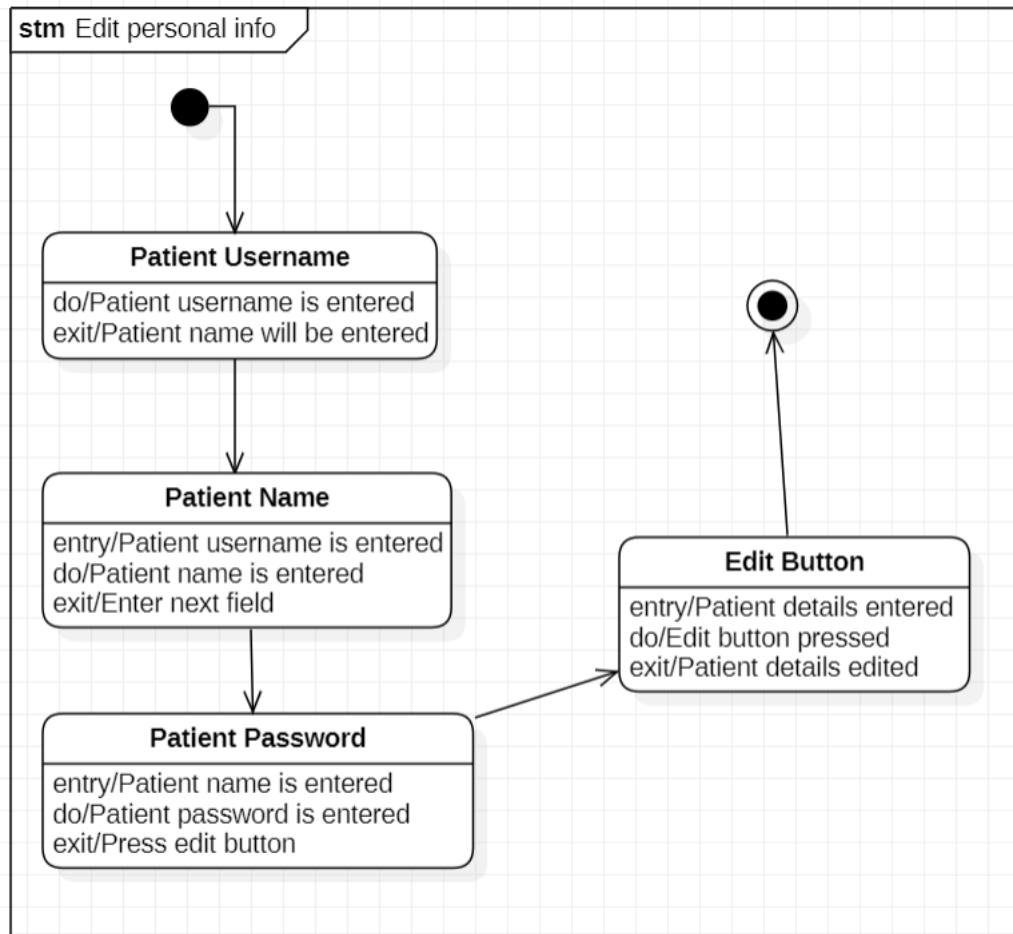
h. Approve Order



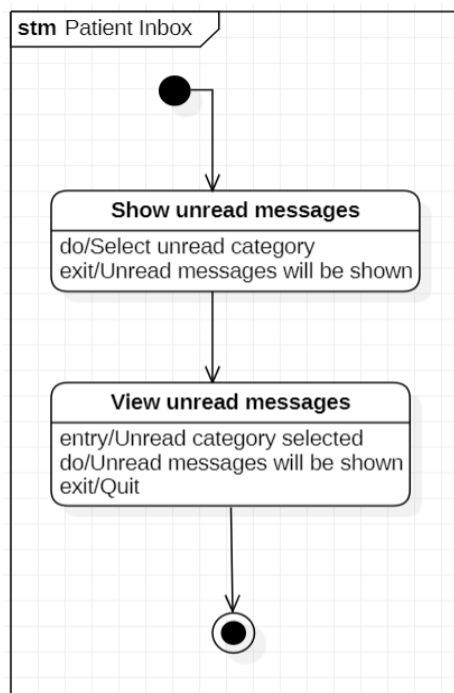
i. Order Medicine



j. Edit Personal Information

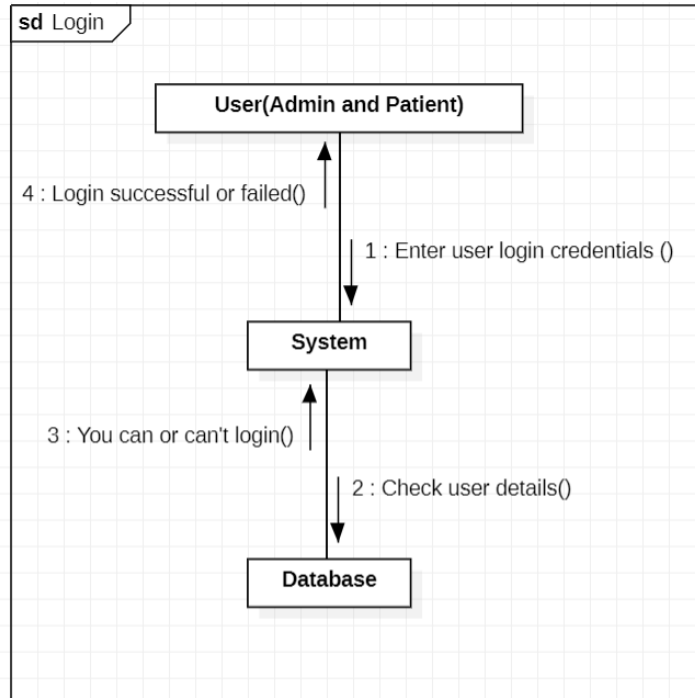


k. Patient Message

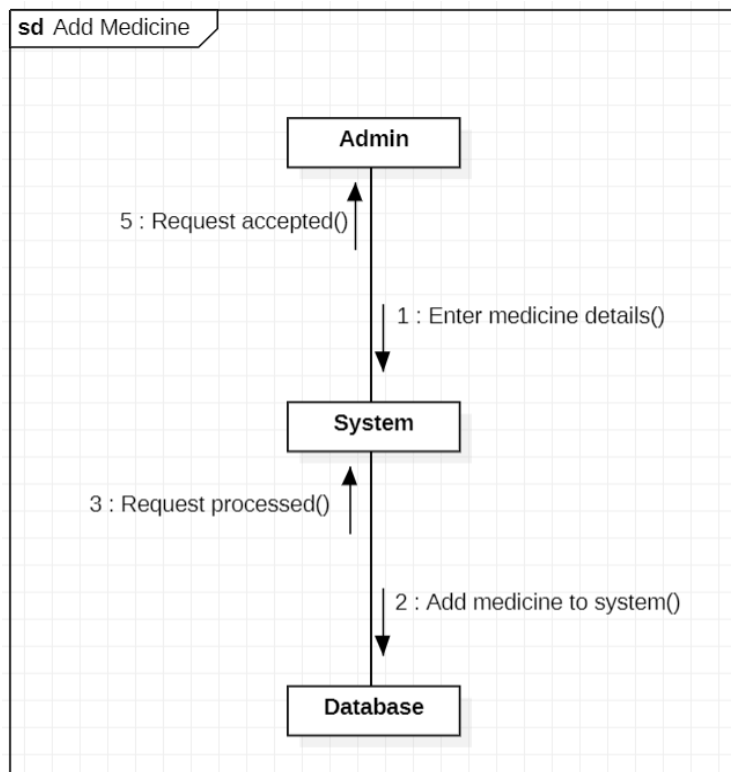


3.5 Collaboration Diagram

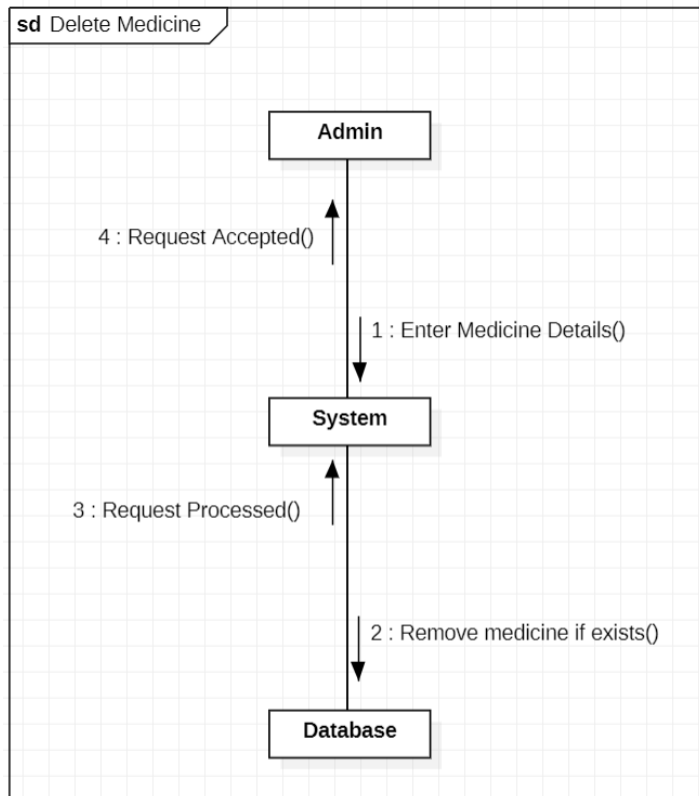
a. Login



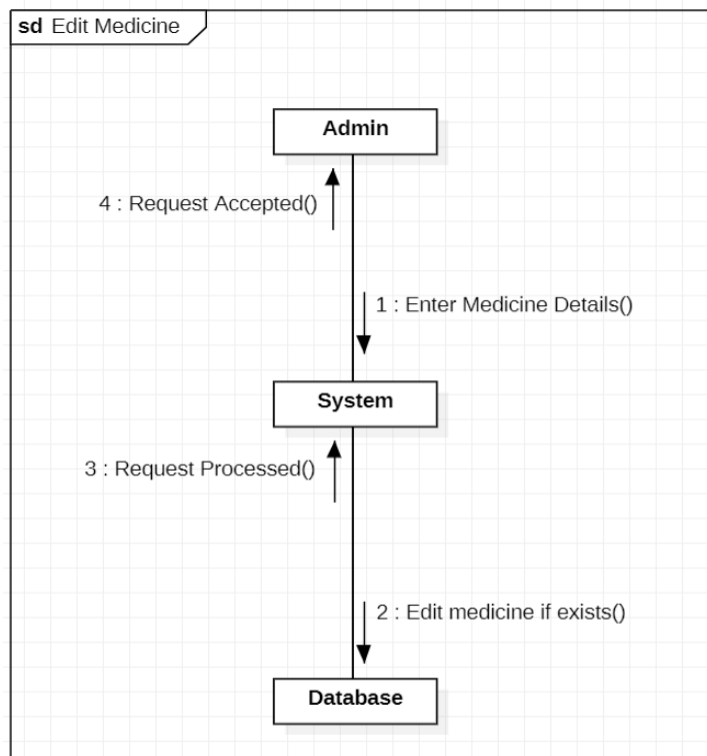
b. Add Medicine



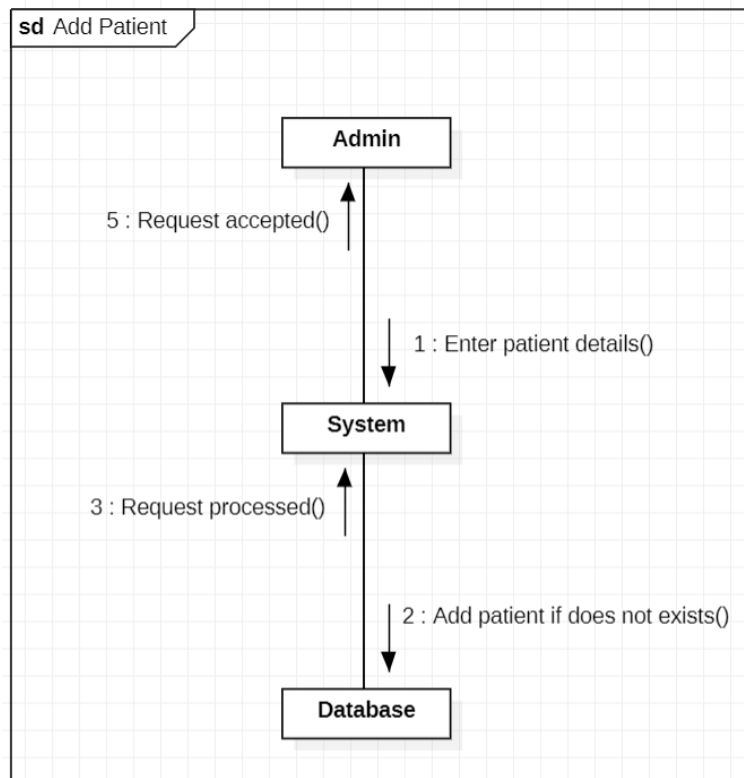
c. Delete Medicine



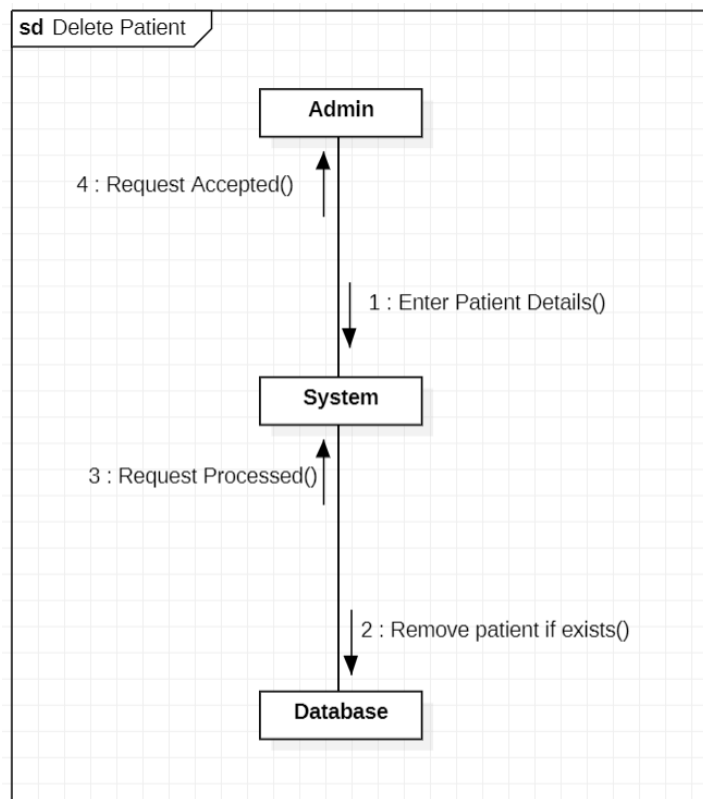
d. Edit Medicine



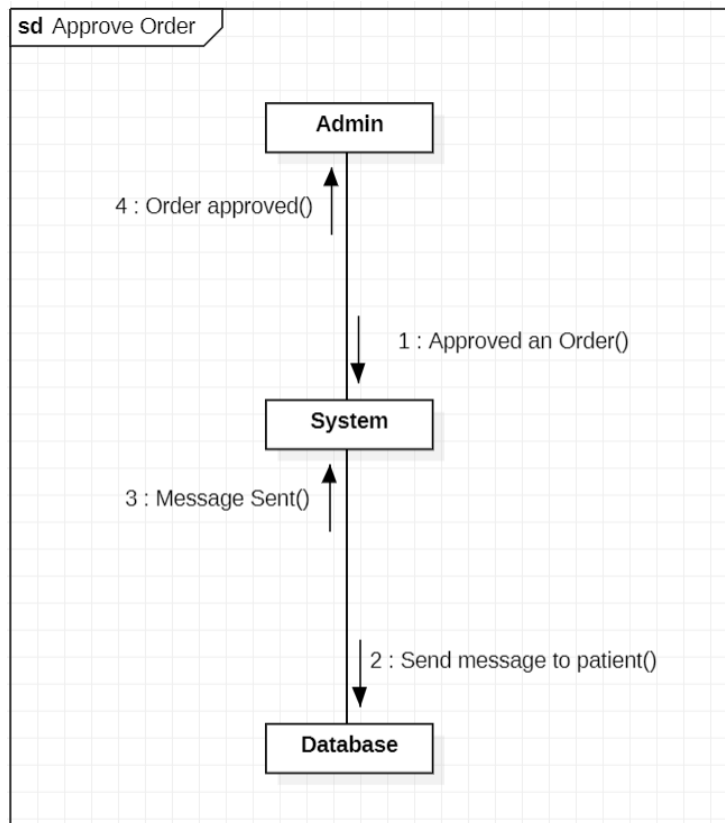
e. Add Patient



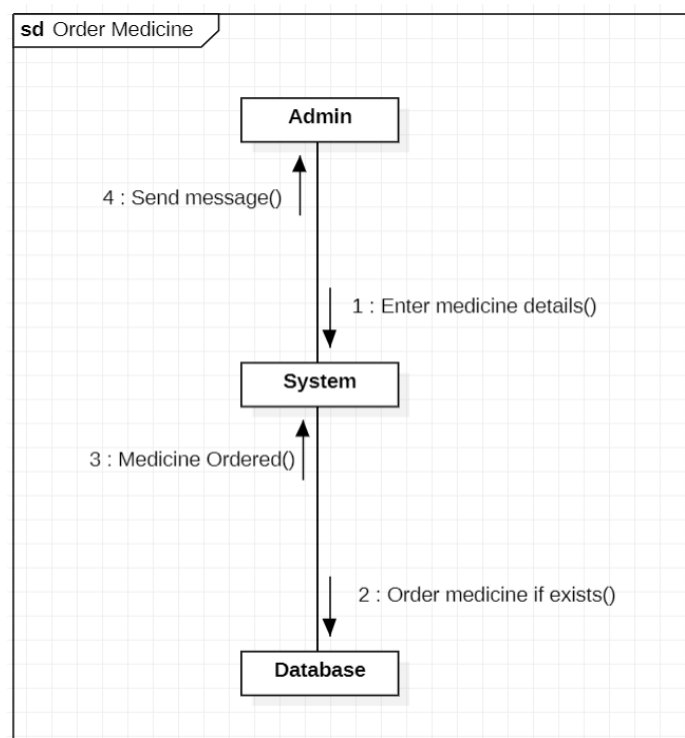
f. Delete Patient



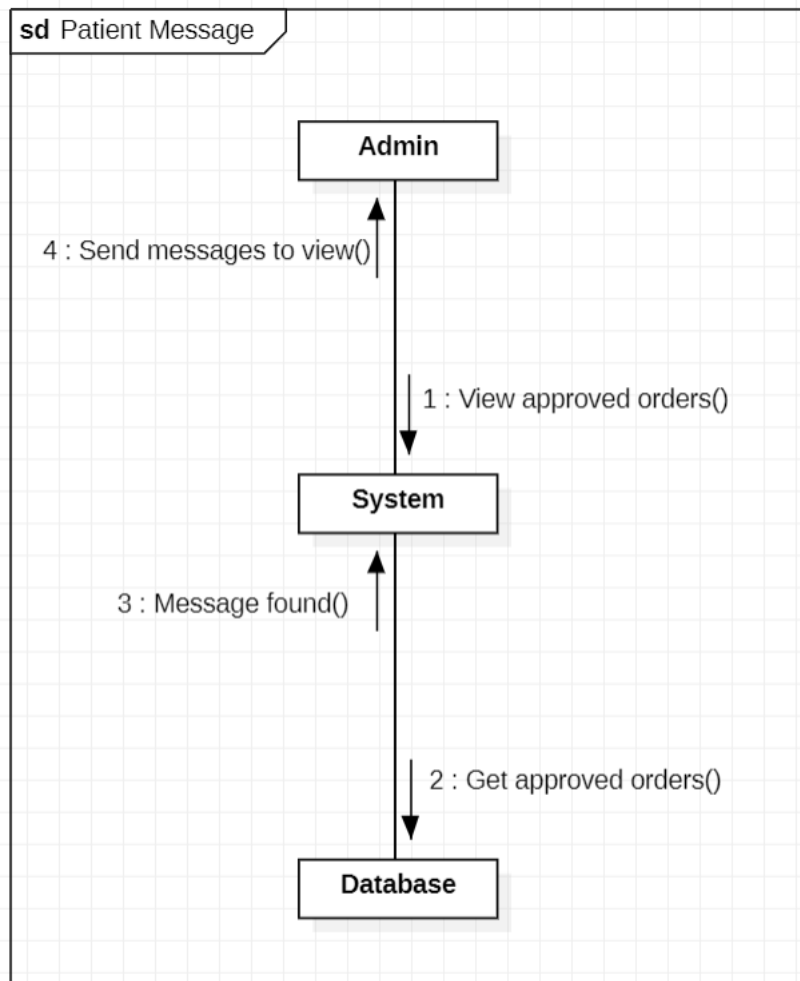
g. Approve Order



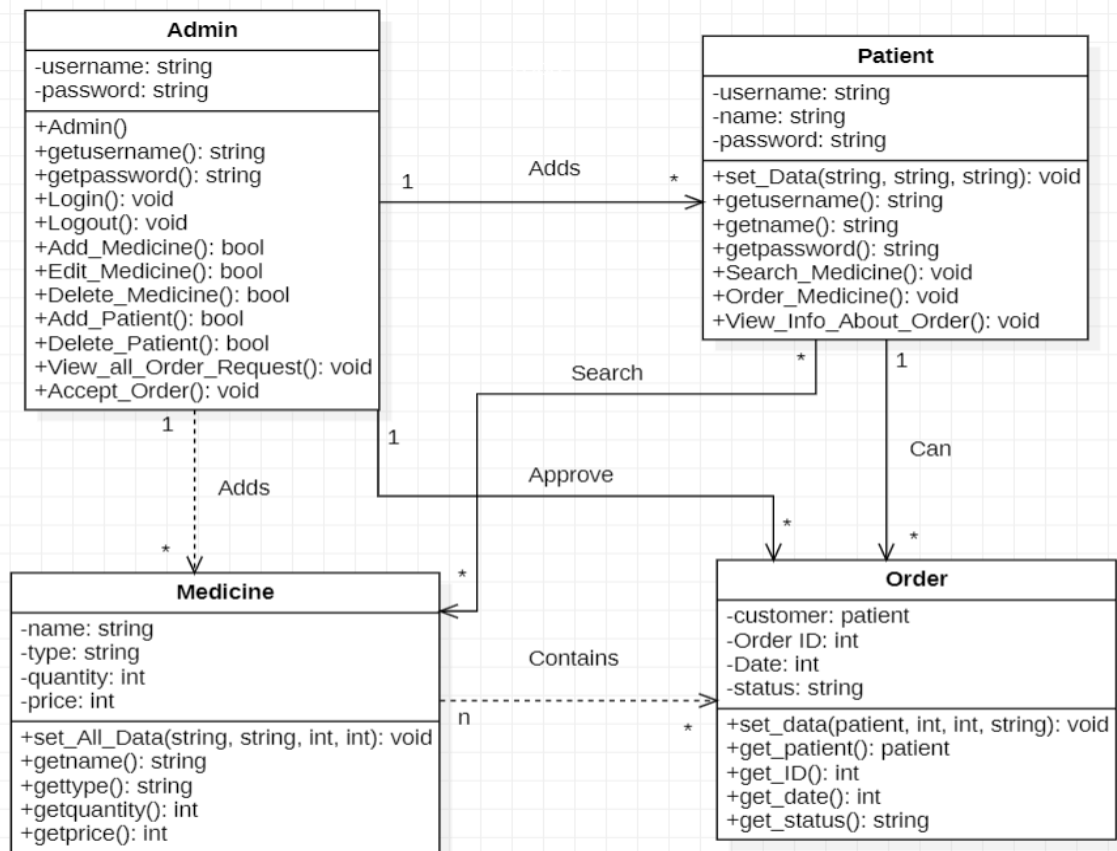
h. Order Medicine



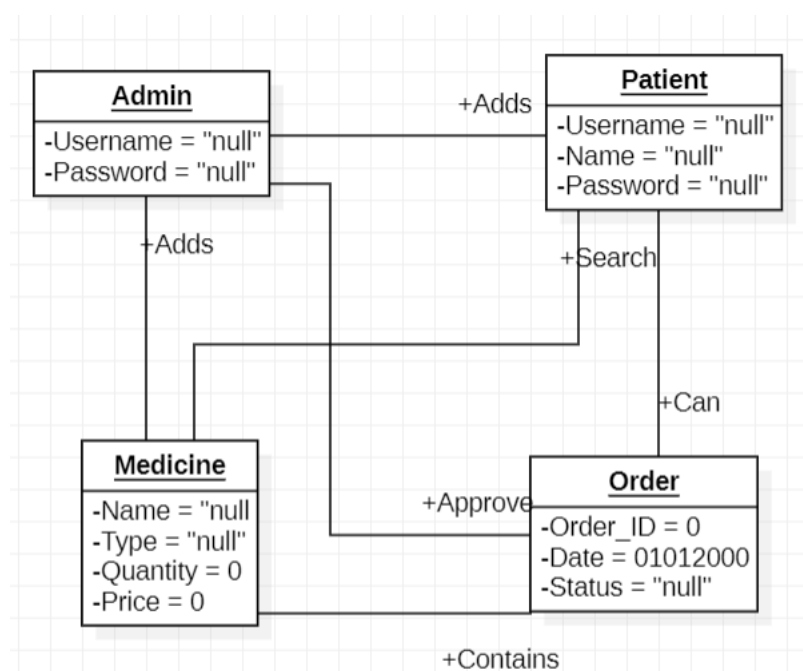
i. Patient Message



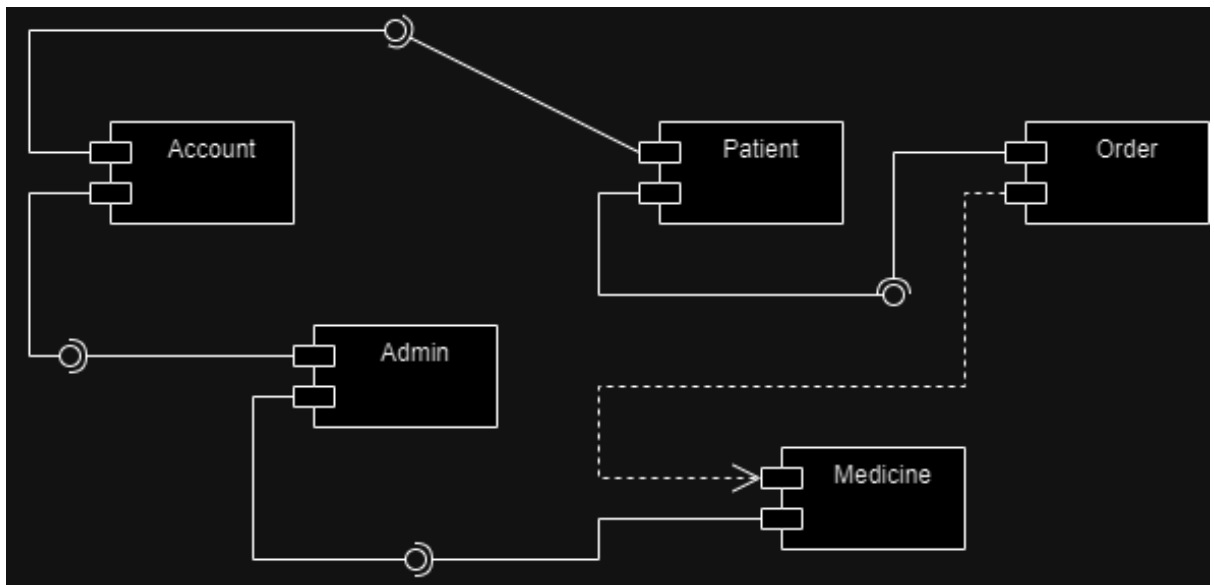
3.6 Class Diagram



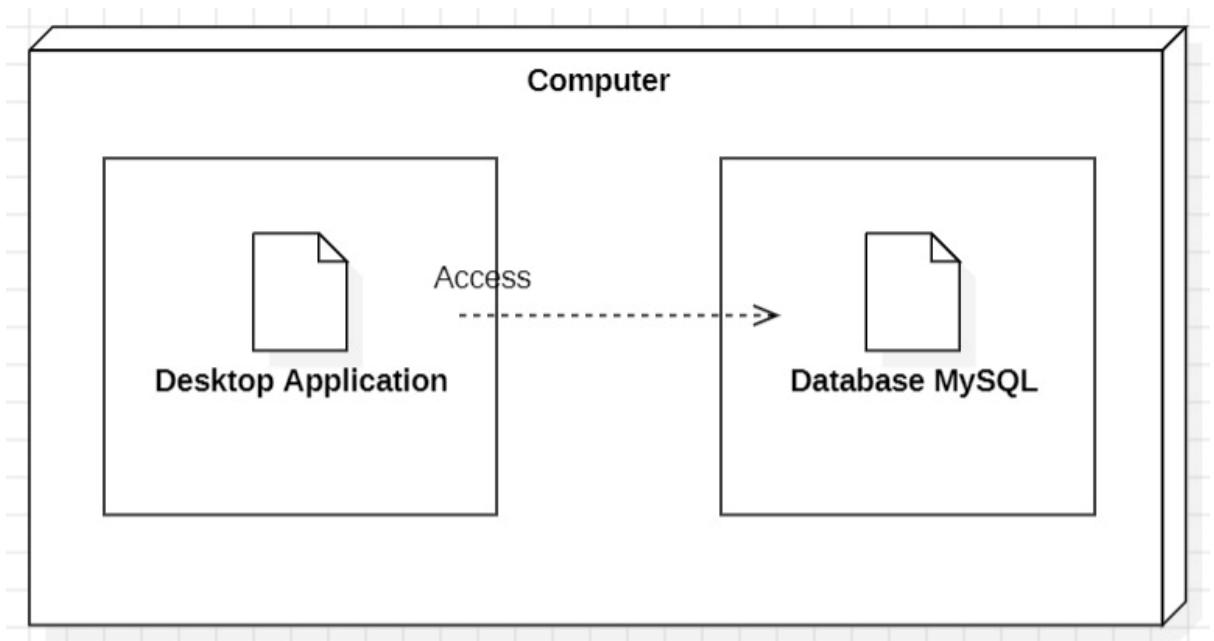
3.7 Object Diagram



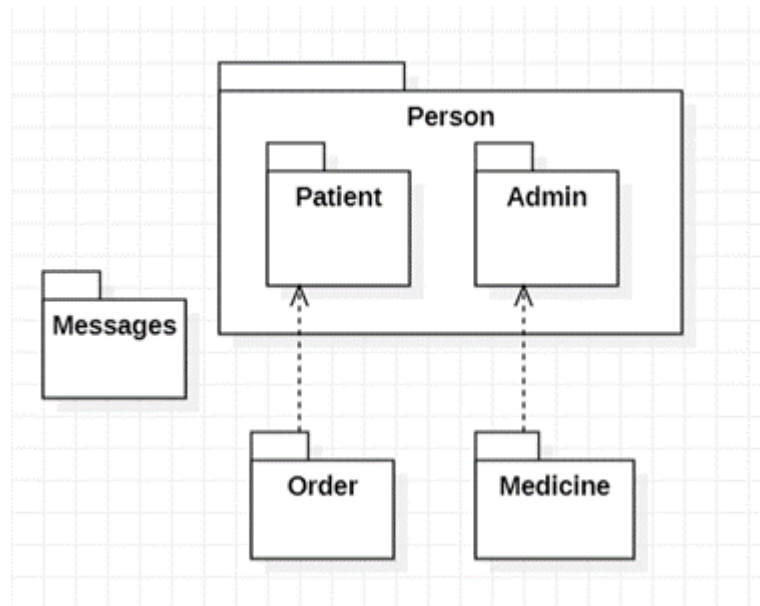
3.8 Component Diagram



3.9 Deployment Diagram



3.10 Package Diagram



Chapter 4

Experimentation and testing

The goal of incorporating multiple testing techniques into your development cycle is to guarantee that your product can function successfully under a variety of situations and at various phases. These are often divided into functional and non-utilitarian testing. Testing the application against the business requirements is an example of useful testing. It combines all test types used to guarantee that each component of a piece of software performs as expected by leveraging scenarios provided by the plan group or business examiner. These testing procedures are usually led as a group and include:

- Unit testing
- Integration testing

Non-functional testing methods include all test kinds that focus on a piece of software's are some examples:

- Performance testing
- Security testing
- Usability testing
- Compatibility testing

4.1 Functional Testing

4.1.1 Unit Testing

Unit testing involves the testing of each unit or an individual component of the software application. It is the first level of functional testing. The aim behind unit testing is to validate unit components with its performance.

4.1.1.1 Admin Login Screen

This module is used to let admin log in to the pharmacy management system.

The components of admin login screen are

- Password Text Field
- Login Button
- Patient Link

Password Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	246810	Accepted	Accepted	Pass
2	123456	Rejected	Rejected	Pass
3	Aleena123	Rejected	Rejected	Pass
4	Zain456	Rejected	Rejected	Pass

Login Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the login button	Admin must be logged in and go to the dashboard page	Accepted	Pass

Patient Login link

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User click on the patient link	User must go to the patient login page	Accepted	Pass

4.1.1.2 Patient Login Screen

This module is used to let patient log in to the pharmacy management system

The components of patient login screen are

- Username Text Field
- Password Text Field
- Login Button
- Patient Link

Username Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Username text field is empty	Enter all fields	Rejected	Pass
2	Patient enters an existing username	Accepted	Accepted	Pass
3	Patient enters a non-existing username	Username or password incorrect	Rejected	Pass

Password Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Password Text field is empty	Fill all fields	Rejected	Pass
2	Patient enters an existing password	Accepted	Accepted	Pass
3	Patient enters a non-existing password	Username or password incorrect	Rejected	Pass

Login Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Patient clicks on the login button	Patient must be logged in and go to dashboard page	Accepted	Pass

Patient Login link

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User click on the admin link	User must go to the admin login page	Accepted	Pass

4.1.1.3 Admin Dashboard

This module is used to tell admin about the top medicine, top patient, total sale and pending order etc.

The components of admin dashboard are

- Medicine button
- Patient button
- Order Request button
- Logout Button

Medicine Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the medicine button	Admin will go to medicine page	Accepted	Pass

Patient Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the patient button	Admin will go to patient page	Accepted	Pass

Order Request Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the order request button	Admin will go to order request page	Accepted	Pass

Logout Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the logout button	Admin will be logged out form the system and go to login page	Accepted	Pass

4.1.1.4 Admin Medicine

This module is used to let admin to add, edit and delete medicine from the system.

The components of admin medicine screen are

- Dashboard button
- Patient button
- Order Request button
- Logout Button
- Medicine Name Text Field
- Medicine Quantity Text Field
- Medicine Price Text Field
- Medicine Type Text Field
- Add Button
- Edit Button
- Delete Button
- Table Row

Dashboard Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the dashboard button	Admin will go to dashboard page	Accepted	Pass

Patient Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the patient button	Admin will go to patient page	Accepted	Pass

Order Request Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the order request button	Admin will go to order request page	Accepted	Pass

Logout Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the logout button	Admin will be logged out form the system and go to login page	Accepted	Pass

Medicine Name Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Text field is empty	Rejected	Rejected	Pass
2	Medicine name is entered	Accepted	Accepted	Pass
3	Default value "Medicine Name"	Rejected	Rejected	Pass

Medicine Quantity Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Text field is empty	Rejected	Rejected	Pass
2	Medicine quantity is entered in integer	Accepted	Accepted	Pass
3	Default value "Quantity"	Rejected	Rejected	Pass
4	Medicine quantity is in string	Rejected	Rejected	Pass

Medicine Price Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Text field is empty	Rejected	Rejected	Pass
2	Medicine price is entered in integer	Accepted	Accepted	Pass
3	Default value "Price"	Rejected	Rejected	Pass
4	Medicine price is in string	Rejected	Rejected	Pass

Medicine Type Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Text field is empty	Rejected	Rejected	Pass
2	Medicine type is entered	Accepted	Accepted	Pass
3	Default value "Medicine Type"	Rejected	Rejected	Pass

Add Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the add button	Medicine must be added to the PMS	Accepted	Pass

Edit Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the edit button	Medicine must be edited	Accepted	Pass

Delete Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the delete button	Medicine must be deleted	Accepted	Pass

Table Row

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Row is clicked	Clicked row data will be shown into the text fields	Accepted	Pass

4.1.1.5 Admin Patient

This module is used to add and delete patient from the PMS.

The components of admin patient screen are

- Dashboard button
- Patient button
- Order Request button
- Logout Button
- Patient Name Text Field
- User Name Text Field
- Password Text Field
- Add Button
- Delete Button
- Table Row

Dashboard Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the dashboard button	Admin will go to dashboard page	Accepted	Pass

Patient Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the patient button	Admin will go to patient page	Accepted	Pass

Order Request Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the order request button	Admin will go to order request page	Accepted	Pass

Logout Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the logout button	Admin will be logged out from the system and go to login page	Accepted	Pass

Patient Name Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Text field is empty	Rejected	Rejected	Pass
2	Patient name is entered	Accepted	Accepted	Pass
3	Default value "Patient Name"	Rejected	Rejected	Pass

User Name Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Text field is empty	Rejected	Rejected	Pass
2	Username is entered	Accepted	Accepted	Pass
3	Default value "User Name"	Rejected	Rejected	Pass

Password Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Text field is empty	Rejected	Rejected	Pass
2	Aleena2003	Accepted	Accepted	Pass
3	Default value "Password"	Rejected	Rejected	Pass
4	Aleena	Password length must be greater than 8	Rejected	Pass
5	Zainulabideen	Must be a combination of letters and numbers	Rejected	Pass

6	12345567	Must be a combination of letters and numbers	Rejected	Pass
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Add Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the add button	Patient must be added to the PMS	Accepted	Pass

Delete Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the delete button	Patient must be deleted from the system	Accepted	Pass

Table Row

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Row is clicked	Clicked row data will be shown into the text fields	Accepted	Pass

4.1.1.6 Admin Order Request

Admin can approve and view all orders using this module

The components of admin order request screen are

- Dashboard button
- Patient button
- Order Request button
- Logout Button
- Order Type Text Field
- Search Button
- Table Row

Dashboard Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the dashboard button	Admin will go to dashboard page	Accepted	Pass

Patient Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the patient button	Admin will go to patient page	Accepted	Pass

Order Request Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the order request button	Admin will go to order request page	Accepted	Pass

Logout Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the logout button	Admin will be logged out from the system and go to login page	Accepted	Pass

Order Type Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Text field is empty	Rejected	Rejected	Pass
2	Order type is entered	Accepted	Accepted	Pass
3	Default value "Order Type"	Rejected	Rejected	Pass

Search Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admins clicks on the search button	All orders must be shown in the table that has the same order type as of text field	Accepted	Pass

Table Row

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	In last column of row, approve button is clicked	Order will be approved and status will be changed to pending	Accepted	Pass

4.1.1.7 Patient Dashboard

Patient can view the pending order and top used medicine of the system using this module.

The components of patient dashboard screen are

- Order Medicine button
- Account button
- Message button
- Logout Button

Order Medicine Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the order medicine button	User will go to order medicine page	Accepted	Pass

Account Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the account button	User will go to the account page	Accepted	Pass

Message Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the message button	User will go to message page	Accepted	Pass

Logout Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the logout button	User will be logged out from the system and go to login page	Accepted	Pass

4.1.1.8 Patient Order Medicine

Patient can be able to order and search medicine using this module.

The components of patient order medicine screen are

- Dashboard button
- Account button
- Message button
- Logout Button
- Medicine Name Text field
- Medicine Type Text field
- Medicine Quantity Text Field
- Search Button
- Order Button
- Table Row

Dashboard Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the dashboard button	User will go to dashboard	Accepted	Pass

Account Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the account button	User will go to the account page	Accepted	Pass

Message Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the message button	User will go to message page	Accepted	Pass

Logout Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the logout button	User will be logged out from the system and go to login page	Accepted	Pass

Medicine Name Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Text field is empty	Rejected	Rejected	Pass

2	Medicine name is entered	Accepted	Accepted	Pass
3	Default value "Medicine Name"	Rejected	Rejected	Pass

Medicine Quantity Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Text field is empty	Rejected	Rejected	Pass
2	Medicine quantity is entered in integer	Accepted	Accepted	Pass
3	Default value "Quantity"	Rejected	Rejected	Pass
4	Medicine quantity is in string	Rejected	Rejected	Pass

Medicine Type Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Text field is empty	Rejected	Rejected	Pass
2	Medicine type is entered	Accepted	Accepted	Pass
3	Default value "Medicine Type"	Rejected	Rejected	Pass

Search Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Patient clicks on the search button	All medicines must be shown in the table that have same medicine name and type as of text field	Accepted	Pass

Order Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Patient clicks on the order button	Medicine must be Ordered	Accepted	Pass

Table Row

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Row is clicked	Clicked row data will be shown into the text fields	Accepted	Pass

4.1.1.9 Patient Account Screen

Patient can be able to view and edit his login credentials using this module.

The components of patient account screen are

- Dashboard button
- Order Medicine button
- Message button
- Logout Button
- Name Text field
- Username Text field
- Password Text Field
- Edit Button

Dashboard Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the dashboard button	User will go to dashboard	Accepted	Pass

Order Medicine Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the order medicine button	User will go to the order medicine page	Accepted	Pass

Message Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the message button	User will go to message page	Accepted	Pass

Logout Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the logout button	User will be logged out from the system and go to login page	Accepted	Pass

Name Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Text field is empty	Rejected	Rejected	Pass
2	Name is entered	Accepted	Accepted	Pass

3	Default value "Name"	Rejected	Rejected	Pass
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Username Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Text field is empty	Rejected	Rejected	Pass
2	Username is entered	Accepted	Accepted	Pass
3	Default value "Username"	Rejected	Rejected	Pass

Password Text Field

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Text field is empty	Rejected	Rejected	Pass
2	Aleena2003	Accepted	Accepted	Pass
3	Default value "Password"	Rejected	Rejected	Pass
4	Aleena	Password length must be greater than 8	Rejected	Pass
5	Zainulabideen	Must be a combination of letters and numbers	Rejected	Pass
6	12345567	Must be a combination of letters and numbers	Rejected	Pass

Edit button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Patient clicks on the edit button	Patient information must be edited	Accepted	Pass

4.1.1.10 Patient Message Screen

Patient can view all his messages using this module.

The components of patient message screen are

- Dashboard button
- Order Medicine button
- Account button
- Logout Button

Dashboard Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the dashboard button	User will go to dashboard	Accepted	Pass

Order Medicine Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the order medicine button	User will go to the order medicine page	Accepted	Pass

Account Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the account button	User will go to account page	Accepted	Pass

Logout Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the logout button	User will be logged out from the system and go to login page	Accepted	Pass

4.1.2 Integration Testing

After every unit is completely tried, it is coordinated with different units to make modules or segments that are intended to perform explicit errands or exercises. These are then tried as gathering through joining testing to guarantee entire segments of an application act true to form (i.e., the associations between units are consistent). These tests are frequently outlined by client situations, like signing into an application or opening records. Coordinated tests can be led by either engineers or free analyzers and are normally included a mix of robotized utilitarian and manual tests.

4.1.2.1 Admin Login Screen

This module is used to let admin log in to the pharmacy management system.

The components of admin login screen are

- Password Text Field
- Login Button
- Patient Link

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Password is empty	Enter password	Rejected	Pass
2	Password is incorrect	Incorrect Password	Rejected	Pass
3	Admin clicks on the login button	Admin must be logged in and go to the dashboard page	Accepted	Pass
4	User click on the patient link	User must go to the patient login page	Accepted	Pass

4.1.2.2 Patient Login Screen

This module is used to let patient log in to the pharmacy management system

The components of patient login screen are

- Username Text Field
- Password Text Field
- Login Button
- Patient Link

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Username and password are correct	Patient will be logged in and go to dashboard page	Accepted	Pass
2	Username and password are empty	Fill all fields	Rejected	Pass
3	Username is empty	Fill all fields	Rejected	Pass
4	Password is empty	Fill all fields	Rejected	Pass
5	Username is incorrect	Incorrect username or password	Rejected	Pass
6	Password is incorrect	Incorrect username or password	Rejected	Pass
7	Username and password are incorrect	Incorrect username or password	Rejected	Pass
8	User click on the admin link	User must go to the admin login page	Accepted	Pass

4.1.2.3 Admin Dashboard

This module is used to tell admin about the top medicine, top patient, total sale and pending order etc.

The components of admin dashboard are

- Medicine button
- Patient button
- Order Request button
- Logout Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the medicine button	Admin will go to medicine page	Accepted	Pass
2	Admin clicks on the patient button	Admin will go to patient page	Accepted	Pass
3	Admin clicks on the order request button	Admin will go to order request page	Accepted	Pass
4	Admin clicks on the logout button	Admin will be logged out form the system and go to login page	Accepted	Pass

4.1.2.4 Admin Medicine

This module is used to let admin to add, edit and delete medicine from the system.

The components of admin medicine screen are

- Dashboard button
- Patient button
- Order Request button
- Logout Button
- Medicine Name Text Field
- Medicine Quantity Text Field
- Medicine Price Text Field
- Medicine Type Text Field
- Add Button
- Edit Button
- Delete Button
- Table Row

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the dashboard button	Admin will go to dashboard page	Accepted	Pass
2	Admin clicks on the patient button	Admin will go to patient page	Accepted	Pass
3	Admin clicks on the order request button	Admin will go to order request page	Accepted	Pass
4	Admin clicks on the logout button	Admin will be logged out form the system and go to login page	Accepted	Pass
5	Text fields are empty	Fill all fields	Rejected	Pass
6	Medicine name is empty	Fill all fields	Rejected	Pass

7	Medicine Type is empty	Fill all fields	Rejected	Pass
8	Medicine Quantity is empty	Fill all fields	Rejected	Pass
9	Medicine Price is empty	Fill all fields	Rejected	Pass
10	Default values in text fields	Invalid input	Rejected	Pass
11	Already existing medicine name for adding medicine	Medicine already exists	Rejected	Pass
12	All fields contain data and non-existing medicine name is entered for adding medicine	Medicine will be added to the PMS	Accepted	Pass
13	Non-existing medicine name for editing and deleting medicine	Medicine does not exist	Rejected	Pass
14	All fields contain data and existing medicine name is entered for editing medicine	Medicine will be edited	Accepted	Pass
15	Existing medicine name is entered for deleting medicine	Medicine will be deleted	Accepted	Pass
16	Row is clicked	Clicked row data will be shown into the text fields	Accepted	Pass

4.1.2.5 Admin Patient

This module is used to add and delete patient from the PMS.

The components of admin patient screen are

- Dashboard button
- Patient button
- Order Request button
- Logout Button
- Patient Name Text Field
- User Name Text Field
- Password Text Field
- Add Button
- Delete Button
- Table Row

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the dashboard button	Admin will go to dashboard page	Accepted	Pass
2	Admin clicks on the patient button	Admin will go to patient page	Accepted	Pass
3	Admin clicks on the order request button	Admin will go to order request page	Accepted	Pass
4	Admin clicks on the logout button	Admin will be logged out from the system and go to login page	Accepted	Pass
5	Text fields are empty	Fill all fields	Rejected	Pass
6	Patient name is empty	Fill all fields	Rejected	Pass
7	Username is empty	Fill all fields	Rejected	Pass
8	Password is empty	Fill all fields	Rejected	Pass
9	Already existing username for adding patient	Username already exists	Rejected	Pass
10	All fields contain data and non-existing username is entered for adding patient	Patient will be added to the PMS	Accepted	Pass
11	Non existing username for deleting patient	Patient does not exist	Rejected	Pass
12	Non existing password for deleting patient	Patient does not exist	Rejected	Pass
13	Non existing patient name for deleting patient	Patient does not exist	Rejected	Pass
14	All fields contain data and non-existing patient info is entered for deleting patient	Patient will be added to the PMS	Accepted	Pass
15	Row is clicked	Clicked row data will be shown into the text fields	Accepted	Pass

4.1.2.6 Admin Order Request

Admin can approve and view all orders using this module

The components of admin order request screen are

- Dashboard button
- Patient button
- Order Request button
- Logout Button
- Order Type Text Field
- Search Button
- Table Row

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	Admin clicks on the dashboard button	Admin will go to dashboard page	Accepted	Pass
2	Admin clicks on the patient button	Admin will go to patient page	Accepted	Pass
3	Admin clicks on the order request button	Admin will go to order request page	Accepted	Pass
4	Admin clicks on the logout button	Admin will be logged out form the system and go to login page	Accepted	Pass
5	Order type text field is empty	Enter order type	Rejected	Pass
6	Default value “Order Type” in text field	Invalid data	Rejected	Pass
7	Order type contains some text for searching orders	All orders of that type will be shown into the table	Accepted	Pass
8	In last column of row of table, approve button is clicked	Order will be approved and status will be changed to pending	Accepted	Pass

4.1.2.7 Patient Dashboard

Patient can view the pending order and top used medicine of the system using this module.

The components of patient dashboard screen are

- Order Medicine button
- Account button
- Message button
- Logout Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the order medicine button	User will go to order medicine page	Accepted	Pass
2	User clicks on the account button	User will go to the account page	Accepted	Pass
3	User clicks on the message button	User will go to message page	Accepted	Pass
4	User clicks on the logout button	User will be logged out from the system and go to login page	Accepted	Pass

4.1.2.8 Patient Order Medicine

Patient can be able to order and search medicine using this module.

The components of patient order medicine screen are

- Dashboard button
- Account button
- Message button
- Logout Button
- Medicine Name Text field
- Medicine Type Text field
- Medicine Quantity Text Field
- Search Button
- Order Button
- Table Row

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the dashboard button	User will go to dashboard	Accepted	Pass
2	User clicks on the account button	User will go to the account page	Accepted	Pass
3	User clicks on the message button	User will go to message page	Accepted	Pass
4	User clicks on the logout button	User will be logged out from the system and go to login page	Accepted	Pass
5	Medicine name text field is empty	Fill all fields	Rejected	Pass
6	Medicine type text field is empty	Fill all fields	Rejected	Pass
7	Text fields are empty	Fill all fields	Rejected	Pass
	Default values for text fields	Invalid Input	Rejected	Pass
8	Medicine name and type are entered for searching medicine	All medicines will be shown that have same medicine name and type as of text field	Accepted	Pass
9	Non existing medicine name for ordering medicine	Medicine does not exist	Rejected	Pass
10	Invalid medicine quantity	Medicine does not exist	Rejected	Pass
11	Quantity not available	Quantity must be less than available quantity	Rejected	Pass
12	Existing medicine name, type and available quantity are entered for ordering medicine	Medicine Ordered	Accepted	Pass
13	Row is clicked	Clicked row data will be shown into the text fields	Accepted	Pass

4.1.2.9 Patient Account Screen

Patient can be able to view and edit his login credentials using this module.

The components of patient account screen are

- Dashboard button
- Order Medicine button
- Message button
- Logout Button
- Name Text field
- Username Text field
- Password Text Field
- Edit Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the dashboard button	User will go to dashboard	Accepted	Pass
2	User clicks on the order medicine button	User will go to the order medicine page	Accepted	Pass
3	User clicks on the message button	User will go to message page	Accepted	Pass
4	User clicks on the logout button	User will be logged out from the system and go to login page	Accepted	Pass
5	Name text field is empty	Fill all fields	Rejected	Pass
6	Username text field is empty	Fill all fields	Rejected	Pass
7	Password text field is empty	Fill all fields	Rejected	Pass
8	Password does not contain a combination of letters and numbers	Invalid password	Rejected	Pass
9	Password length is less than 8	Invalid password	Rejected	Pass
10	Text fields are empty	Fill all fields	Rejected	Pass
11	Existing username is entered	Username already exists	Rejected	Pass
12	All fields are valid	Information will be edited	Accepted	Pass

4.1.2.10 Patient Message Screen

Patient can view all his messages using this module.

The components of patient message screen are

- Dashboard button
- Order Medicine button
- Account button
- Logout Button

<i>Sr no.</i>	<i>Input</i>	<i>Expected Result</i>	<i>Test Result</i>	<i>Result</i>
1	User clicks on the dashboard button	User will go to dashboard	Accepted	Pass
2	User clicks on the order medicine button	User will go to the order medicine page	Accepted	Pass
3	User clicks on the account button	User will go to account page	Accepted	Pass
4	User clicks on the logout button	User will be logged out from the system and go to login page	Accepted	Pass

4.1.3 System Testing

System testing is a black box testing method used to evaluate the completed and integrated system, as a whole, to ensure it meets specified requirements. The functionality of the software is tested from end-to-end.

4.1.3.1 Admin Login

Test Case ID	ID_001	Test Case Description	Admin Login
Created By	Aleena	Reviewed By	Zain ul Abideen

QA Testers Log

Review Comments

Tester's Name	Aleena	Date Tested	5-Dec-2023	Test Case	Pass
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S#	Prerequisites
1	Have computer/laptop

S#	Test Data
1	Password=246810

Test Scenario

Verify on entering password, admin can login.

Step#	Step Details	Expected Results	Actual Results	Pass/Fail
1	Enter password	Password entered	As expected,	Pass
2	Click Login	Admin logged in	As expected,	Pass

Post Condition

Admin must be logged in to the system

4.1.3.2 Patient Login

Test Case ID	ID_002	Test Case Description	Patient Login
Created By	Aleena	Reviewed By	Zain ul Abideen

QA Testers Log

Review Comments

Tester's Name	Aleena	Date Tested	5-Dec-2023	Test Case	Pass
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S#	Prerequisites
1	Have computer/laptop

S#	Test Data
1	Password=Aleena30
2	Username=Aleena

Test Scenario

Verify on entering password and username, patient can login.

Step#	Step Details	Expected Results	Actual Results	Pass/Fail
1	Enter username	Username entered	As expected,	Pass
2	Enter password	Password entered	As expected,	Pass
3	Click Login	Patient logged in	As expected,	Pass

Post Condition

Patient must be logged in to the system

4.1.3.3 Add and Delete Patient

Test Case ID	ID_003	Test Case Description	Add and delete patient
Created By	Aleena	Reviewed By	Zain ul Abideen

QA Testers Log

Review Comments

Tester's Name	Aleena	Date Tested	5-Dec-2023	Test Case	Pass
----------------------	--------	--------------------	------------	------------------	------

S#	Prerequisites
1	Have computer/laptop

S#	Test Data
1	Password=Zain2003
2	Username=Zain24
3	Name=Zain

Test Scenario

Patient can add or deleted by entering patient name, password and username

Step#	Step Details	Expected Results	Actual Results	Pass/Fail
1	Enter username	Username entered	As expected,	Pass
2	Enter password	Password entered	As expected,	Pass
3	Enter name	Name entered	As expected,	Pass
4	Click Add	Patient Added	As expected,	Pass
5	Click Delete	Patient Deleted	As expected,	Pass

Post Condition

Patient must be added or deleted from the system

4.1.3.4 Add, edit and delete medicine

Test Case ID	ID_004	Test Case Description	Add, edit and delete medicine
Created By	Aleena	Reviewed By	Zain ul Abideen

QA Testers Log

Review Comments

Tester's Name	Aleena	Date Tested	5-Dec-2023	Test Case	Pass
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S#	Prerequisites
1	Have computer/laptop

S#	Test Data
1	Medicine Name = Panadol
2	Medicine Type = Antibiotic
3	Quantity = 20
4	Price = 20

Test Scenario

Medicine can be added, edited or deleted into the system by verifying medicine name, type, quantity and price.

Step#	Step Details	Expected Results	Actual Results	Pass/Fail
1	Enter medicine name	Medicine name entered	As expected,	Pass
2	Enter medicine type	Medicine type entered	As expected,	Pass
3	Enter medicine quantity	Medicine quantity entered	As expected,	Pass
4	Enter medicine price	Medicine price entered	As expected,	Pass
5	Click Add	Medicine Added	As expected,	Pass
6	Click Delete	Medicine Deleted	As expected,	Pass
7	Click Edit	Medicine Edited	As expected,	Pass

Post Condition

Medicine must be added, edited or deleted from the system

4.1.3.5 Approve Order

Test Case ID	ID_005	Test Case Description	Approve order
Created By	Aleena	Reviewed By	Zain ul Abideen

QA Testers Log

Review Comments

Tester's Name	Aleena	Date Tested	5-Dec-2023	Test Case	Pass
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S#	Prerequisites
1	Have computer/laptop

S#	Test Data
1	Order = Approved
2	Order = Pending
3	Order = Completed

Test Scenario

Admin can approve order if it is unapproved.

Step#	Step Details	Expected Results	Actual Results	Pass/Fail
1	Click approve	Order Approved	As expected,	Pass

Post Condition

Order must be approved

4.1.3.6 Search and Order Medicine

Test Case ID	ID_006	Test Case Description	Order Medicine
Created By	Aleena	Reviewed By	Zain ul Abideen

QA Testers Log

Review Comments

Tester's Name	Aleena	Date Tested	5-Dec-2023	Test Case	Pass
----------------------	--------	--------------------	------------	------------------	------

S#	Prerequisites
1	Have computer/laptop

S#	Test Data
1	Medicine name = Panadol
2	Medicine Type = Antibiotic
3	Medicine Quantity = 5

Test Scenario

Medicine can be ordered if exists with sufficient quantity

Step#	Step Details	Expected Results	Actual Results	Pass/Fail
1	Enter medicine name	Medicine name entered	As expected,	Pass
2	Enter medicine type	Medicine Type entered	As expected,	Pass
3	Enter medicine quantity	Medicine Quantity entered	As expected,	Pass
4	Click search	Medicine searched	As expected,	Pass
5	Click Order	Medicine ordered	As expected,	Pass

Post Condition

Medicine must be ordered if quantity is sufficient.

4.1.3.7 Edit account info

Test Case ID	ID_007	Test Case Description	Edit Account Info
Created By	Aleena	Reviewed By	Zain ul Abideen

QA Testers Log

Review Comments

Tester's Name	Aleena	Date Tested	5-Dec-2023	Test Case	Pass
----------------------	--------	--------------------	------------	------------------	------

S#	Prerequisites
1	Have computer/laptop

S#	Test Data
1	Password = Zain2403
2	Username = Zain2003
3	Name = Zain

Test Scenario

Account info can be edited by the patient

Step#	Step Details	Expected Results	Actual Results	Pass/Fail
1	Enter username	Username entered	As expected,	Pass
2	Enter password	Password entered	As expected,	Pass
3	Enter name	Name entered	As expected,	Pass
4	Click Edit	Info edited	As expected,	Pass

Post Condition

Patient personal info must be edited.

4.2 Non-Functional Testing

Non-Functional Testing is defined as a type of Software testing to check non-functional aspects (performance, usability, reliability, etc.) of a software application. It is designed to test the readiness of a system as per nonfunctional parameters which are never addressed by functional testing. Non-functional testing is equally important as functional testing and affects client satisfaction. These testing methods include:

4.2.1 Performance Testing

4.2.1.1 Load testing

We done this testing under the heavy load of the data and system can take 100 - 1000 ms to be processed and initiate the system. After initiating it takes 10 – 30 ms to settle all the rest application and then start working properly and made applications functional. Estimated initiating time for application is 30 - 150 ms in heavy data loaded environment.

<i>Sr No.</i>	<i>Functionality</i>	<i>Estimated Load Time (seconds)</i>
1	Splash Screen	3 to 5
2	Admin Login Screen	0.5 to 1
3	Admin Dashboard	0.5 to 1
4	Admin Medicine	1 to 2
5	Admin Patient	2 to 3
6	Admin Order Request	1 to 2
7	Patient Login Screen	0.5 to 1
8	Patient Dashboard	0.5 to 1
9	Patient Order Medicine	1 to 2
10	Patient Account Screen	0.2 to 0.5
11	Patient Message Screen	0.5 to 1

4.2.1.2 Stress testing

We have done stress testing under heavy load of data and putting that load to the system and load data more than its capacity. By increasing desired load into the system then the system takes the approx. time given below. System can take the approximate time given below.

<i>Sr No.</i>	<i>Functionality</i>	<i>Estimated Load Time (seconds)</i>
1	Splash Screen	3 to 5
2	Admin Login Screen	1 to 2
3	Admin Dashboard	1 to 2
4	Admin Medicine	2 to 3
5	Admin Patient	3 to 4
6	Admin Order Request	2 to 3
7	Patient Login Screen	1 to 2
8	Patient Dashboard	1 to 2
9	Patient Order Medicine	2 to 3
10	Patient Account Screen	0.5 to 1
11	Patient Message Screen	1 to 2

4.2.1.3 Endurance testing

We done this testing under the heavy load of the data and putting that load. Over a Longer amount of time to understand how your system will act overtime, which is a more time-consuming procedure than load or stress testing.

<i>Sr No.</i>	<i>Endurance Test</i>
1	Add many users so that system may not be able to handle them
2	Add many medicines so that system cannot handle.
3	Send many messages to user so that the system sustained to load messages
4	Order many items so that system cannot load orders.

4.2.1.4 Spike testing

We done this testing under the heavy load of the data and putting that load of same amount of data over a longer amount of time to understand how your system will behave when the load is suddenly and drastically increase.

<i>Sr No.</i>	<i>Spike Test</i>
1	Enter many wrong email and password again and again
2	Order many items so to create load on admin to approve orders
3	Send many messages to user.
4	Unable to handle multiple user requests

4.2.2 Security Testing

With the upward push of cloud-primarily based totally trying out degrees and virtual attacks, there may be a growing fear and call for the safety of data used and saved with inside the software. Security trying out is a useless programming trying out method used to decide whether the facts and data in a framework are secure. By trying out this system for flaws, the intention is to purposefully discover get away clauses and safety dangers with inside the framework that could bring about unauthorized get admission to or facts inadequacy. There are numerous kinds of this trying out procedure, every of which aimed to affirm 5 key protection standards:

4.2.2.1 Integrity

We managed integrity of our system by user access controls. User must have to sign in by giving his/her details i.e. name and password to enter in the system and Manager can sign in and enter his/her password to the system.

4.2.2.2 Confidentiality

To avoid unauthorized persons, we demand password from the user when he/she sign in to our system and make sure to do it confidentially with the help of encryption method and asks user to change his/her password after a year to make confidentiality stronger.

4.2.2.3 Authentication

User cannot able to sign in into the system if he/she does not enter the username and password that is register into the system so we can make sure it is the right person and when user sign in his/her account into a different device.

4.2.2.4 Authorization

To recognize the authorized person, we ask for sign in to the system. It assures that only authorized person will be entered to the system and handle all the rest procedure of handling all the system. We focus on the security of our application because it contains all the data information of the system.

4.2.2.5 Availability

System must be available 24/7 and provider services to the users. User can send request and book provider any time and send message and post any problem to the solution explore.

4.2.3 Usability Testing

Usability testing is a trying technique that actions a framework usability from the end-client point of view and is regularly performed during the framework or acknowledgment testing stages. The objective is to decide if the noticeable plan and feel of an application meet the planned work stream for different cycles, like signing into a framework. Our frameworks UI configuration is not difficult to use for the clients and work process can be effectively comprehend capable by the client. We performed acknowledgment testing that shows that client can't turn out badly and didn't confront any interruption in our framework plan.

<i>Sr No.</i>	<i>System Flow</i>
1	After sign in to the system, dashboard screen will be shown to user.
2	User can be able to navigate to order medicine, account, message.
3	User can search or order medicine from the medicine panel.
4	User can edit his personal info in the account panel.
5	Click on the message button to view all received messages from admin.
6	Click on the logout button to logout from the system.

4.2.4 Compatibility Testing

It is utilized to measure how an application or piece of programming will work in various conditions. It is utilized to watch that your item is viable with numerous working frameworks, stages, programs, or goal designs. The objective is to guarantee that out framework usefulness is reliably upheld across any climate you anticipate that your end users should utilize. We perform compatible testing on our project by running it on different systems. We performed this test on our application by running its .exe file on different devices.

Chapter 5

Results and Outputs

5.1 Admin Login

Login

.....

Login

Patient

5.2 Admin Dashboard

Dashboard

Medicine


Patient

Order Request


Logout

Admin Dashboard


Total Patients : 0




No medicine



Total Sale : 0



Pending orders : 0



5.3 Add, Delete, and Edit Medicine

Dashboard

Medicine

Patient

Order Request

Logout

Medicine

AddDelete

Edit

ID	name	type	quantity	price	status
----	------	------	----------	-------	--------

5.4 Add, and Delete Patient

Dashboard

Medicine

Patient

Order Request

Logout

Patient

AddDelete

ID	username	name	password	status
----	----------	------	----------	--------

5.5 Approve Order

Dashboard

Medicine

Patient

Order Request

Logout

All Orders

Order Type Show

ID	patient_ID	order_date	status
1	1	12/12/2023	Approve

5.6 Patient Login

Login

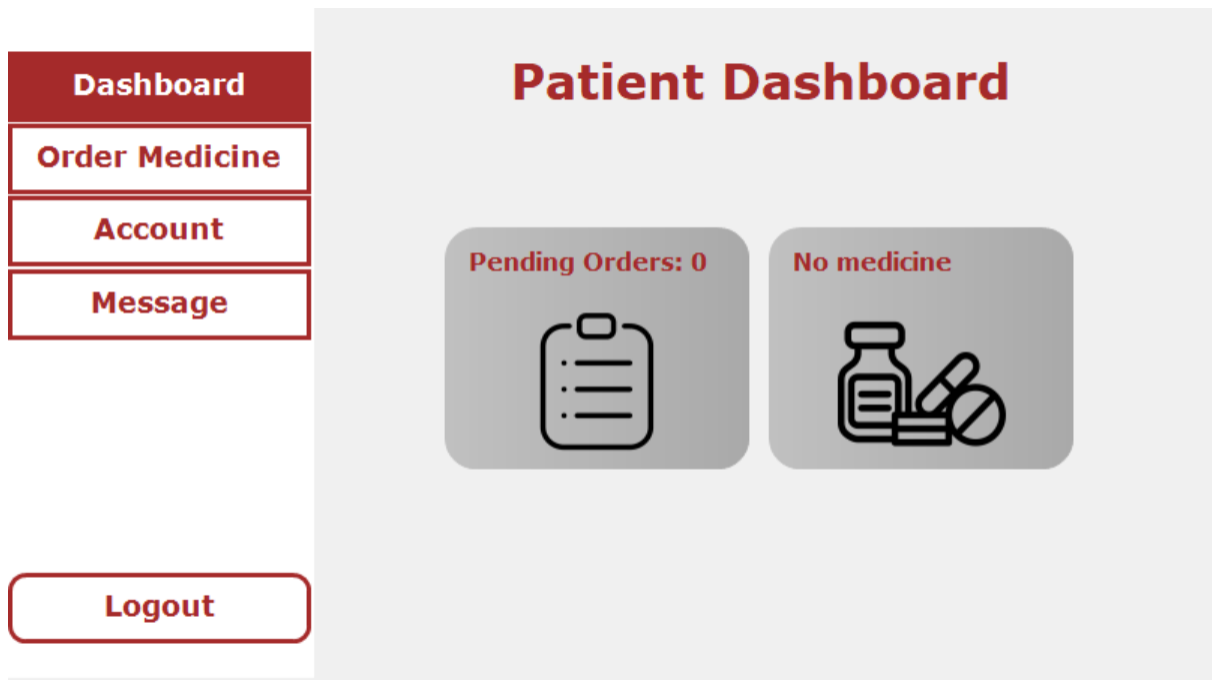
Username|

.....

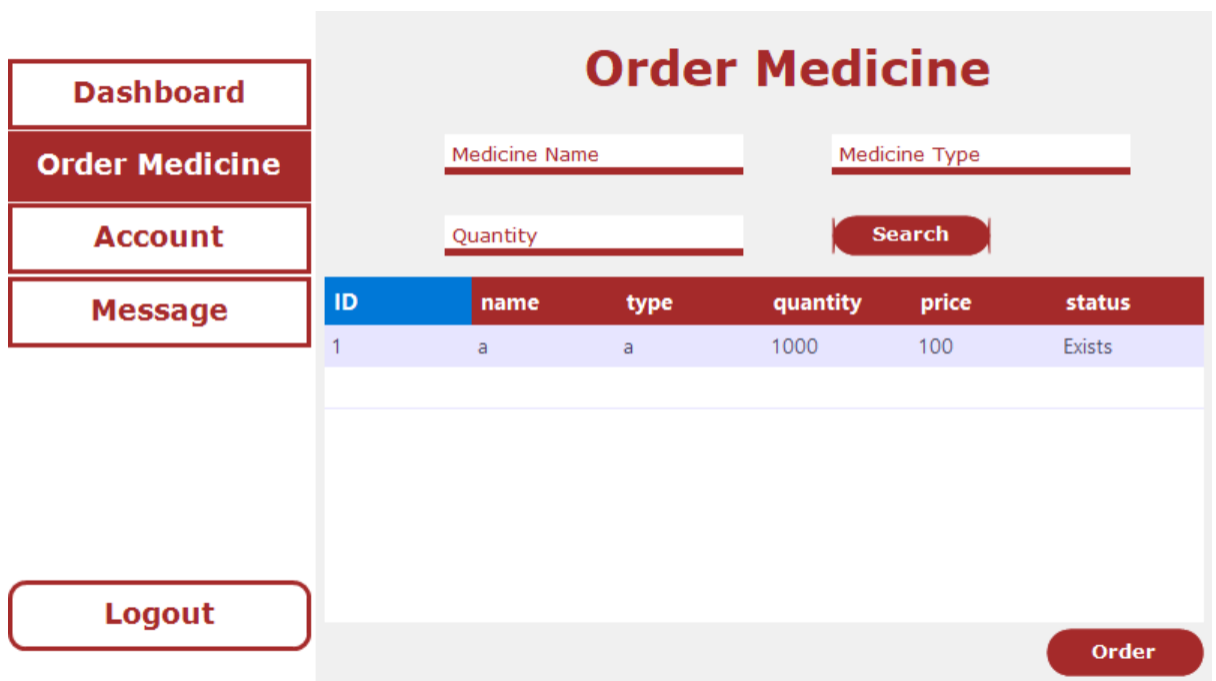
Login

Admin

5.7 Patient Dashboard



5.8 Order Medicine



5.9 Patient Information

Dashboard

Order Medicine

Account

Message

Logout

Patient Information

zain

zain

nazu2432003

Edit

5.10 Patient Messages

<div>Dashboard</div> <div>Order Medicine</div> <div>Account</div> <div>Message</div> <div>Logout</div>	All Messages		
	ID	Patient_ID	message
	1	1	Order Placed. Wait for it to b...
	2	1	Order Approved. Wait for it t...

Chapter 6

Conclusion and Future Scope

6.1 Conclusion

Overall, the PMS project has demonstrated its effectiveness in improving the overall operation and management of a pharmacy. The successful implementation of the system has provided numerous benefits to both pharmacy staff and customers. Quick and efficient transactions, accurate medication information retrieval, and prescription management enhance customer satisfaction.

6.2 Future Scope

While the current PMS offers a comprehensive solution, there are opportunities for further development and enhancements:

- Integration with Electronic Medical Records (EMRs) and other healthcare platforms can further enhance patient care and information exchange.
- A mobile app for pharmacists and customers can provide convenient access to essential features and functionality.
- Development of comprehensive analytics and reporting dashboards can provide deeper insights into pharmacy performance and trends.
- Integrating machine learning and AI algorithms can automate tasks, predict demand, and optimize inventory management even further.

Chapter 7

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