TakeCare System

Developed By

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BS Information Technology

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Department of Computer Science & Software Engineering
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Final Approval

Dated:

It is certified that we have read the project report submitted by **Malik Akmal Naseer 352-FBAS/BSIT4/F18, Abdul Wasay 358-FBAS/BSIT4/F18** and we judge that this project is of sufficient standard to warrant its acceptance by the International Islamic University, Islamabad for the BS Degree in Information Technology.

Committee:

External Examiner

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DCS&SE, FBAS, IIUI _____

Internal Examiner

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DCS&SE, FBAS, IIUI _____

Supervisor

Dr. Tariq Sadad
Lecturer [Signature, Date]
DCS&SE, FBAS, IIUI _____

Dissertation

A dissertation submitted to the Department of Computer Science & Software Engineering, International Islamic University, Islamabad, as partial fulfilment of the requirements for the award of the degree of BS Information Technology

Dedication

I dedicate this project to my beloved parents, respected teachers and all those who prayed for our success.

Declaration

I hereby declare that this Software, neither as a whole nor as a part thereof has been copied out from any source. It is further declared that I have developed this Software entirely based on my efforts made under the sincere guidance of my teachers and supervisor.

No portion of the work presented in this report has been submitted in support of any application for any other degree or qualification of this or any other university or institute of learning.

Malik Akmal Naseer

(352-FBAS/BSIT4/F18)

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Acknowledgement

All praise to Almighty Allah, who gave me the understanding, courage and patience to complete this project.

Thanks to my parents and all well-wishers, who helped me during my most difficult times and it is due to their untiring efforts that I am in this position today.

I express my gratitude to my kind Teachers for providing me with the opportunity to learn and enhance my knowledge. She had been ready to help and guide me throughout the project

Project in Brief

Project Title:	TakeCare System
Objective:	The objective of the "TakeCare System" is to help patients with their health care problems. This project provides a system that automates the manual system
Undertaken By:	Malik Akmal Naseer, Abdul Wasay
Supervised By:	Dr Tariq Sadad [Supervisor Designation]
Date Started:	Dec 2021
Date Completed:	
Tools Used:	Django (Framework) Python (for backend development) HTML5 CSS3 JavaScript jQuery Bootstrap 5 Sqlite3(Database) Virtual Studio PyCharm
System Used:	
Operating System	✓ Windows 10

Table 1: Project Summary

Abstract

The “TakeCare System" is a platform that will solve the various problems in the medical field. The objective of the "TakeCare System" is to help patients with their health care problems. This project provides a system that automates the manual system and also provides an opportunity for the Lab, and pharmacy to increase their business domain and earnings. A customer can search for the drug they want, add it to the cart and then place the order and can also track the status of their order and cancel their order until the pharmacy confirms the order. Customers/patients can receive their order at the door. User can save their complete medical report/ history and also allow a patient/user to share their medical record with doctors. Admin can monitor whole system, they can add any new user, view, search, or active or deactivate any user account in the system. Our system is also providing multiple methods of contact or complaints about any issue users face in our system

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Chapter 1 Introduction

1.1 INTRODUCTION:

Lack of access to quality healthcare is a growing problem across the world. It is the basic human right to have access to quality health care. There are lots of problems related to the medical field that are faced by patients. As everyone has faced the problem of Covid 19 all over the world. Due to Covid-19 lot of burden is on the medical field. Whenever a patient visits the hospital, he does not know whether the desired doctor is available in the hospital or the appointment time is available or not. After checkups when the patients visit the pharmacies, he does not know whether the prescribed medicine is available or not. If the medicine is not available, he has to go to different pharmacies to get that required medicine, and if the patients have to do any lab test, he has to visit the lab, and then again, he has to come to the lab for the report, if the report is not ready, he will have to visit the lab again, which is tiresome and time-consuming.

In the TakeCare system, customers/Patients can search for their required doctor by name, city, and specialization, and get the appointment and also save their Medical record and share it to doctor. Customers can also place a medicine order and can receive the medicine at their doorstep at a discounted rate. They can also book a lab test from their home, and reports will be generated online.

In this project, we will use Django (python) for creating web solutions to solve the problem we defined above.

1.2 OVERVIEW:

This application will allow the patient to communicate with doctors, pharmacies and laboratories which will fulfil the requirements of patients. Our website will provide a business opportunity for laboratories and pharmacies to increase their earnings and business domain.

1.3 Tools and Technologies:

Following are the major tools and technologies that are used to make this project

1.3.1 Back-End:

- Django
- Python
- JavaScript
- Sqlite3

1.3.2 Front-End:

- HTML
- CSS
- JavaScript
- Bootstrap

1.3.3 Tools:

- Virtual Studio
- PyCharm
- Adobe Photoshop

Chapter 2 Existing Systems

2.1 Literature Review

The study completed in this chapter contains information from different sources like Ring a doctor etc. This chapter is structured in a way that includes the study of information and the basic concept of different online medical systems.

2.2 Existing Systems

The existing systems are hospitals or clines that work in a manual way such the patient need to visit for his appointments, prescriptions or to take any lab test that required a lot of time patient to complete this whole process and also hospitals are getting much burden. After the appointment patient also faces problems with the availability of medicines in pharmacies, if the medicine is not available in one pharmacy, then he needs to go to different pharmacies to get the required medicine which is a time-consuming and tiring process. These medical websites which we reviewed in our background study include.

- Ring a doctor
- Docgenie. in

2.2.1 Ring a doctor

Ring a doctor is a platform which will allow the patient to Search for doctors according to his illness and also get an appointment. Appointments can be online or in-cline. It also allows the patient to save his medical history on the portal and at the time of booking an appointment shared with the doctor.

2.2.2 Docgenie.in

Docgenie.in is a platform which only allows the patient to Search doctors according to his illness and also get an appointment. Appointments can be online or in-cline. It also allows the Patient to book a Lab test without leaving a room and read health blogs which will be written by verified and specialist doctors.

Chapter 3 System Analysis

3.1 PROBLEM STATEMENT:

Whenever a patient goes to the hospital, he does not know whether the desired doctor is available in the hospital or whether the appointment time is available or not. After checkups when the patients visit the pharmacies, he does not know whether the prescribed medications are available or not. If a medicine is not available, he has to go to different pharmacies to get that required medicine, and if the patients have to do any lab test, he has to visit the lab and then again, he has to come to the lab for the report, if the report is not ready, he will have to visit the lab again, which is tiresome and time-consuming.

This project will provide the facility to the patient to solve all these problems at his fingertip without even leaving his house.

3.2 PROBLEM SOLUTION

The patient has to login into the system. He can search the doctor according to his illness. The patient can decide whether the appointment should be online or at the clinic. Through our system patient's Appointment can be booked without leaving his house. The patient can place his medicine order and can receive the medicine at his doorstep. The patient can also book a lab test which can be done in the laboratory or at his home. In this system, the patient can also read some daily health tips which are given by our certified doctors, which are free of cost. The process is time-saving and customers are safe and secure.

3.3 Stakeholders

I. Admin
II. Patient/Customer
III. Doctors
IV. Pharmacy
V. Rider
VI. Laboratory

3.4 Features

TakeCare system provides various features to all users

- The system provides comfortable and convenient 24/7 healthcare.
- Through our system patients can be booked Appointments with our verified doctors without leaving their houses.
- The patient can place his medicine order and can receive the medicine at his doorstep.
- The patient can also book a lab test which can be done in a laboratory or at his home from his nearest laboratory.
- In this system, patients can also read some daily health tips which are given by our certified doctors, which are free of cost.
- The patient can save their medical reports in our system and download them at any time.
- The patient can share their medical report with doctors
- The process is time saving and customers are safe and secure
- TakeCare system can also provide a business opportunity to laboratories and pharmacies to increase their earnings and business domain
- This system can also provide a medicine expiry alert system to the pharmacies
- TakeCare also provides a convenient Customer support system for all users.

3.5 Use Case Diagram

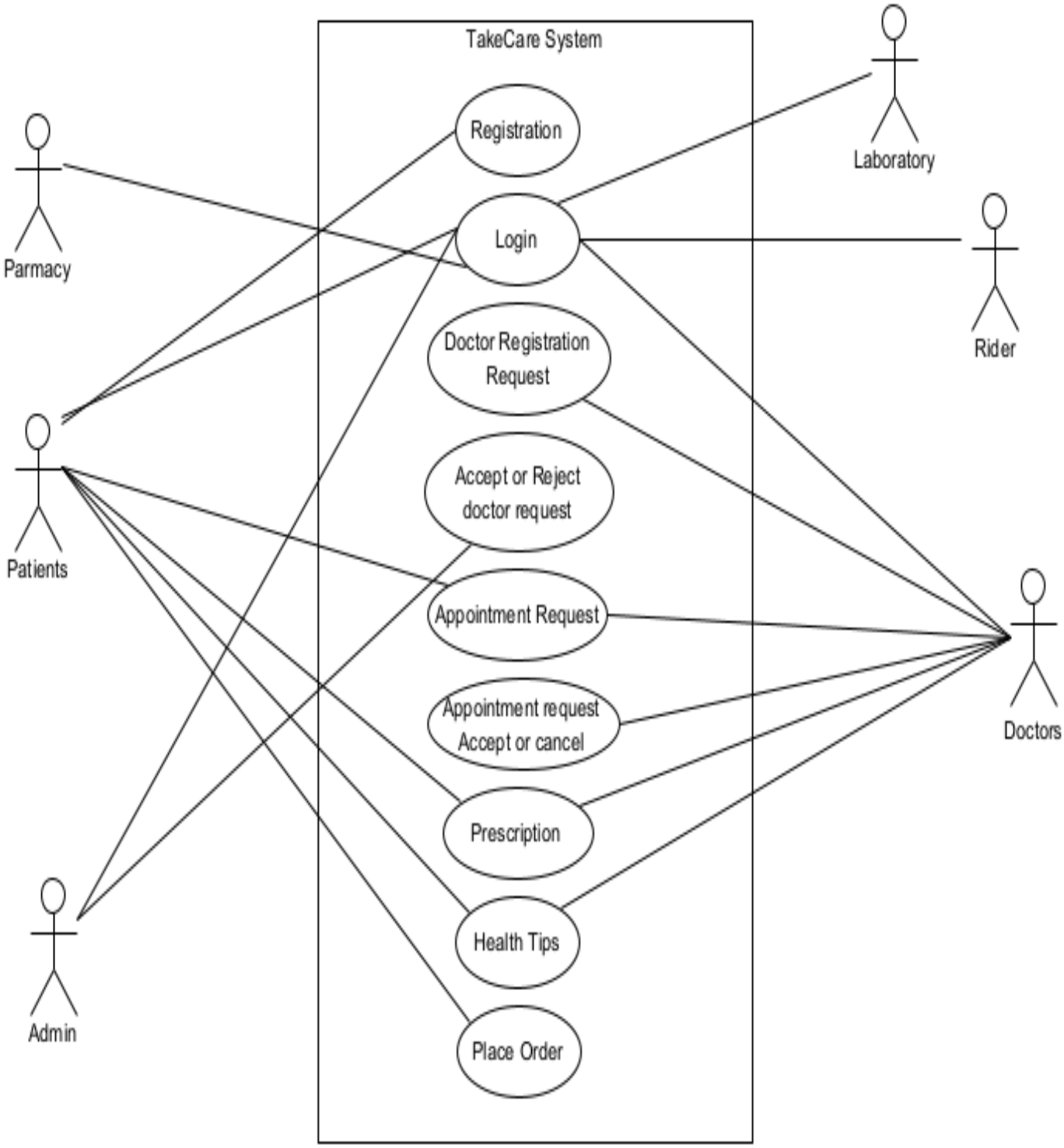

Figure 3.1(a) Use a case diagram

Figure 3.1(b) Use case diagram 1

3.6 Fully Dressed Use Cases in detail

U-1: Registration

Use Case ID	U-1
Use Case Name	**Registration**
Primary Actors	Patient/Customer
Description	Only Patients can register through this form
Pre-Condition	N/A
Post-Condition	Registration Completed Successfully.
Basic Flow	1. The patient can access the Registration Page 2. Patient enter required information 3. The account is Created Successfully.
Alternative Flow	N/A

Table 3.1: Registration

U-2 Login

Use Case ID	U-2
Use Case Name	**Login**
Primary Actors	Admin, Patient, Doctor, Rider, Pharmacist, Laboratory
Description	All Users are login through their login details
Pre-Condition	User must be Register in System
Post-Condition	User Login Successfully.
Basic Flow	1. All users access the login page 2. Enter their E-mail id and Password 3. Login Successfully
Alternative Flow	N/A

Table 3.2: Login

U-3 Doctor Registration Request

Use Case ID	U-3
Use Case Name	**Doctor Registration Request**
Primary Actors	Doctor
Description	Doctor submits a Request to join a TakeCare team as a doctor
Pre-Condition	N/A
Post-Condition	Your Request is Submitted Successfully, our team contact you within 24-48 working hours if your request is accepted
Basic Flow	1. Doctor access the doctor registration request page 2. Fill out the form (including full name, E-mail, PMC number, specialization, experience etc.) 3. Submit the form
Alternative Flow	The doctor is added by the admin

Table 3.3: Doctor Registration Request

U-4 Accept or Reject Doctor Registration Request

Use Case ID	U-4
Use Case Name	**Accept or Reject Doctor Registration Request**
Primary Actors	Admin
Description	Admin can accept or reject the Doctor's Request after checking the doctor's PMC number
Pre-Condition	Admin must be Login
Post-Condition	Doctor Registration Request Accept or Reject Successfully.
Basic Flow	1. Admin can access the Dashboard after login 2. See the number of new Doctors Request 3. Click to access the all-new doctor registration request. 4. After verification of doctor through PMC number and other information provided, admin can accept or reject the request.
Alternative Flow	N/A

Table 3.4: Accept or Reject Doctor Registration

U-5 Appointment Request

Use Case ID	U-5
Use Case Name	**Appointment Request**
Primary Actors	Patient
Description	The patient sent an Appointment request to the doctor.
Pre-Condition	The patient must be login
Post-Condition	Your Appointment request is sent successfully.
Basic Flow	1. Patients can Search the doctor by name, specialist or via city 2. Select a doctor 3. Select the appointment data and time 4. Fill out the form that provides the required patient information to the doctor 5. Confirm the Appointment request.
Alternative Flow	N/A

Table 3.5: Appointment Request

U-6 Doctor Accept or cancel request

Use Case ID	U-6
Use Case Name	**Doctor Accept or cancel request**
Primary Actors	Doctor
Description	The doctor can accept or cancel the Patient's Appointment request
Pre-Condition	The doctor must be login
Post-Condition	The appointment will be accepted or cancelled Successfully
Basic Flow	1. Doctor access to all Patient Appointment requests s 2. If the appointment time is available then the doctor accepts the Patient's Appointment request else cancel the Patient's Appointment request 3. The appointment is accepted or cancelled successfully
Alternative Flow	N/A

Table 3.6: Doctor Accept or cancel request

U- 7 Prescription

Use Case ID	U-7
Use Case Name	**Prescription**
Primary Actors	Doctor, Patient
Description	The doctor can prescribe the checkup of the patient Online/In-Cline
Pre-Condition	Appointment request must be accepted
Post-Condition	Appointment has completed
Basic Flow	Doctor Writes the prescription The patient downloads the printable doctor's prescription
Alternative Flow	N/A

Table 3.7: Prescription

U-8 Health Tips

Use Case ID	U-8
Use Case Name	**Health Tips**
Primary Actors	Doctor, Patient
Description	The doctor can Add, Remove, or Update health Tips. The patient can read a Health tip related to their problems
Pre-Condition	The doctor must be login. Patients do not need to login
Post-Condition	1. The doctor can add new health tips successfully 2. The patient can read a Health tip related to their problems
Basic Flow	1. Doctor access to add health tip page 2. Click on Add button to add a new health tip 3. A doctor can write the health tip and uploaded 4. A new health tip is added successfully 5. The patient can access to health tip page 6. Only Read the all-doctors health tips
Alternative Flow	N/A

Table 3.8: Health Tips

U-9 Place Order

Use Case ID	U-9
Use Case Name	**Place Order**
Primary Actors	Patient
Description	Patient place a medicine order
Pre-Condition	A patient must be login
Post-Condition	Your order is placed Successfully.
Basic Flow	1. Patient access to the Order medicine page 2. Display a list of medicine 3. Select a medicine from the list 4. Confirm the order 5. Your order is placed Successfully. 6. The system sent your request to the nearest Pharmacy
Alternative Flow	N/A

Table 3.9: Place Order

U-10 Track Order

Use Case ID	U-10
Use Case Name	**Track Order**
Primary Actors	Patient
Description	The patient can check the current status of the order
Pre-Condition	Patient place a medicine order
Post-Condition	Your order statues are Pending/Confirm/Cancel/Out for delivery/ Delivered
Basic Flow	1. Patients can access to order page 2. See the current order status Pending/Confirm/Cancel/Out for delivery/ Delivered
Alternative Flow	N/A

Table 3.10: Track Orders

U-11 Manage Orders

Use Case ID	U-11
Use Case Name	**Manage Orders**
Primary Actors	Pharmacist
Description	Pharmacists can view all new buyer requests, and complete the medicine orders
Pre-Condition	The pharmacist must be login
Post-Condition	Handled Buyer requests successfully
Basic Flow	1. Pharmacists receive a patient medicine order 2. Pharmacists check whether medicine is available or not 3. If the medicine is available then confirm the order and create the bill, then give it to the available rider. 4. The rider delivers it to patient
Alternative Flow	If the medicine is not available then the pharmacist cannel the order.

Table 3.11: Manage Orders

U-12 Medicine Order Deliver

Use Case ID	U-12
Use Case Name	**Medicine Order Deliver**
Primary Actors	Rider
Description	Rider delivers order
Pre-Condition	Rider logged in
Post-Condition	Order delivery completed Successfully
Basic Flow	1 Rider takes an order from Pharmacy 2 Rider flows the address of the patient on his dashboard 3 The rider delivers the order and bill to the patient's address and receives payment 4 Rider updates the system that the order is delivered 5 Order is completed successfully
Alternative Flow	N/A

Table 3.12: Medicine Order Deliver

U-13 Medicine expiry Alert System

Use Case ID	U-13
Use Case Name	**Medicine Expiry Alert System**
Primary Actors	Pharmacist
Description	Pharmacists receive an alert which medicine is expiry soon or expired
Pre-Condition	The pharmacist must be login
Post-Condition	Pharmacists receive an alert which medicine is expiry soon or expired
Basic Flow	1. Pharmacists login into the system 2. Display the number of medicine that are expiry soon or already expired dashboard 3. Pharmacists access the medicine expiry page 4. Display the list of medicine that expire soon or expired.
Alternative Flow	N/A

Table 3.13: Medicine expiry Alert System

U-14 Add Medicines

Use Case ID	U-14
Use Case Name	**Add Medicines**
Primary Actors	pharmacist
Description	Pharmacists add new Medicine
Pre-Condition	Pharmacists must be login
Post-Condition	Medicine added Successfully
Basic Flow	1. Pharmacist access to add new medicine page 2. Fill out the form such as Medicine name, image, expiry date, price etc. 3. New Medicine is added into the system successfully
Alternative Flow	N/A

Table 3.14: Add Medicines

U-15 Book Lab Test

Use Case ID	U-15
Use Case Name	**Book Lab Test**
Primary Actors	Patient
Description	The patient can book a Lab test
Pre-Condition	The patient must be login
Post-Condition	Your Lab test is booked successfully, our team contact you in 6-12 working hours for confirmation
Basic Flow	1. Patients search a lab by name, city 2. A select laboratory then selects a test 3. Fill out the form to provide required information such as contact no, Address etc. 4. Your Lab test is booked, our team contact you in 6-12 working hours for confirmation
Alternative Flow	N/A

Table 3.15: Book Lab Test

U-16 Lab Test Taken

Use Case ID	U-16
Use Case Name	**Lab Test Taken**
Primary Actors	Laboratory, Patient
Description	A laboratory person goes to a patient's house and takes a sample for test, and receives payment
Pre-Condition	1. Booked Lab test 2. Lab test is confirmed by Laboratory
Post-Condition	Test is taken
Basic Flow	1 A laboratory person goes to the patient's house and takes a sample for the test 2 Receive payment from the patient 3 Submit the sample to the laboratory
Alternative Flow	If home sampling is not possible for the booked test, then the laboratory admin can cancel the test request or the patient go to the laboratory for a test

Table 3.16: Lab Test Taken

U-17 Online Lab Test Report

Use Case ID	U-17
Use Case Name	**Online Lab Test Report**
Primary Actors	Laboratory System Admin, Patient
Description	Laboratory System Admin uploads the lab test report. Patients do not need to go to the lab for reports, they can download the report from the website
Pre-Condition	1. Laboratory System Admin, Patient should be login 2. Lab Test is Taken
Post-Condition	1. A test report is uploaded 2. The test report is downloaded by the patient
Basic Flow	3 Liberationist access to the Patient-Test page 4 Search Patient by id, name 5 Upload the test report on the system 6 Patients receive a test result through the system
Alternative Flow	N/A

Table 3.17: Online Lab Test Report

U-18 Add Doctors, Pharmacy, Laboratories

Use Case ID	U-18
Use Case Name	**Add Doctors, Pharmacy, Laboratories**
Primary Actors	Admin
Description	Admin can add a new Doctor/ Pharmacy/Laboratory into the System
Pre-Condition	Admin Login
Post-Condition	Doctor/ Pharmacy/Laboratory is added into the System
Basic Flow	1. Admin access to Add new Doctor/ Pharmacy/Laboratory page 2. Fill the form 3. New Doctor/ Pharmacy/Laboratory is added successfully
Alternative Flow	N/A

Table 3.18: Add Doctors, Pharmacy, Labs

U-19 Monitor Whole System

Use Case ID	U-19
Use Case Name	**Monitor Whole System**
Primary Actors	Admin
Description	Admin can monitor the whole system
Pre-Condition	Admin must be login
Post-Condition	System runs smoothly
Basic Flow	Admin can view all types of users Admin can disable/enable any user in the system
Alternative Flow	N/A

Table 3.19: Monitor Whole System 1

3.7 System Sequence Diagrams (SSD)

SD-01: Registration

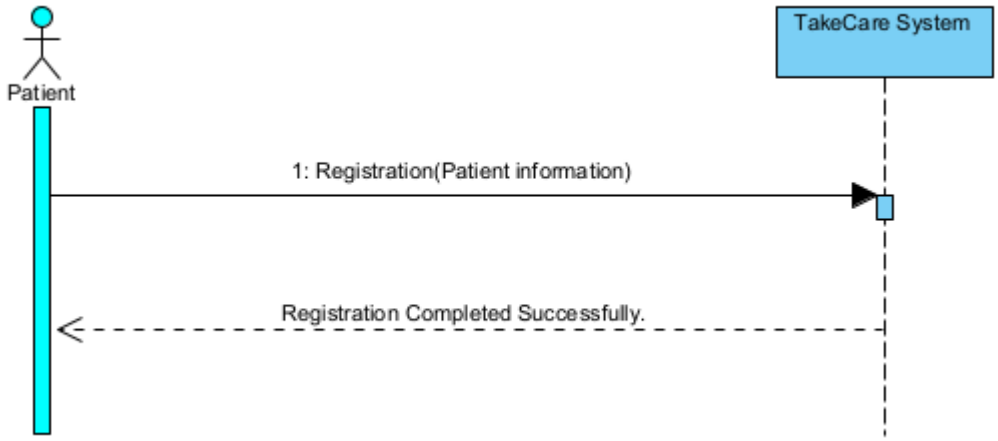

Figure 3.2 registration sequence diagram

SD-02: Login

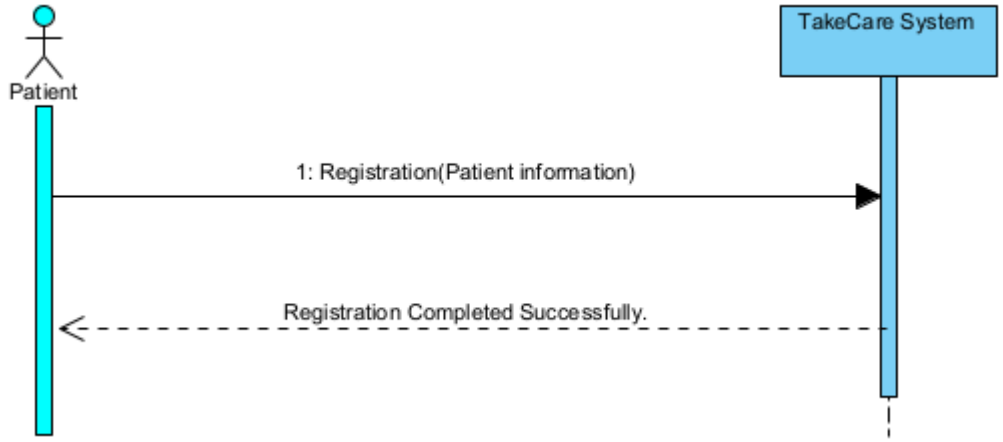

Figure 3.3 login sequence diagram

SD-3: Doctor Registration Request

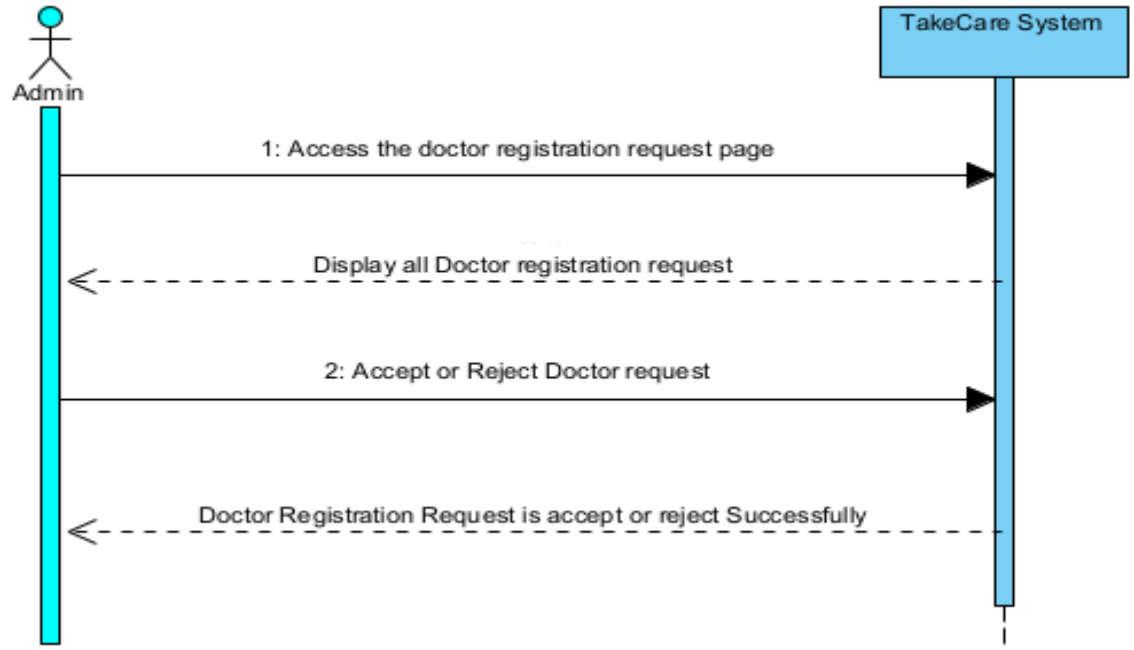

Figure 3.4 Doctor registration request

SD-4: Accept or Reject Doctor Registration Request

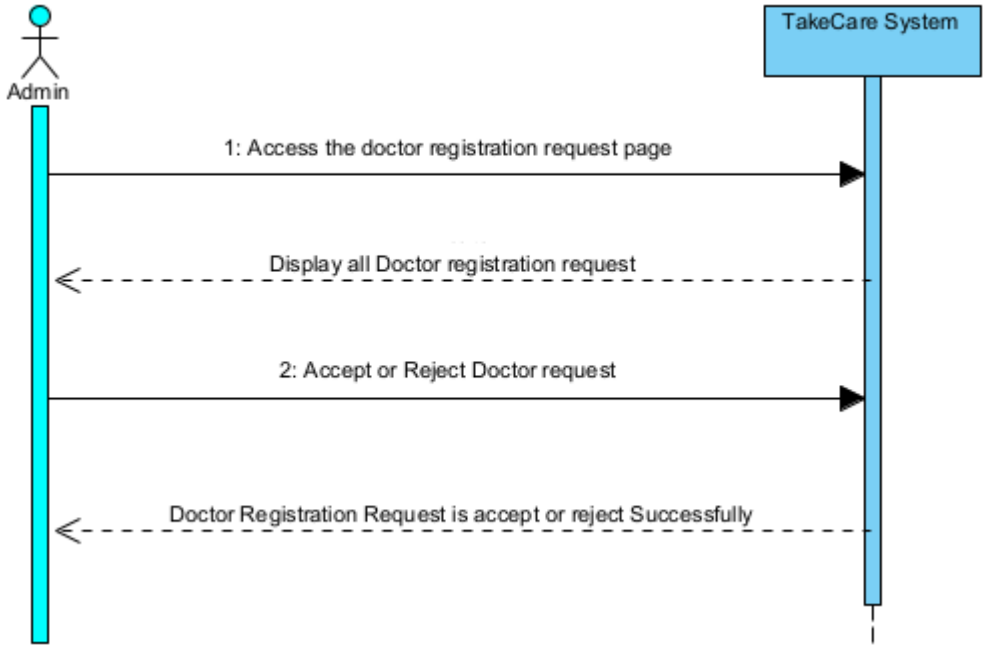

Figure 3.5Accept or reject doctor registration

SD-5: Appointment Request

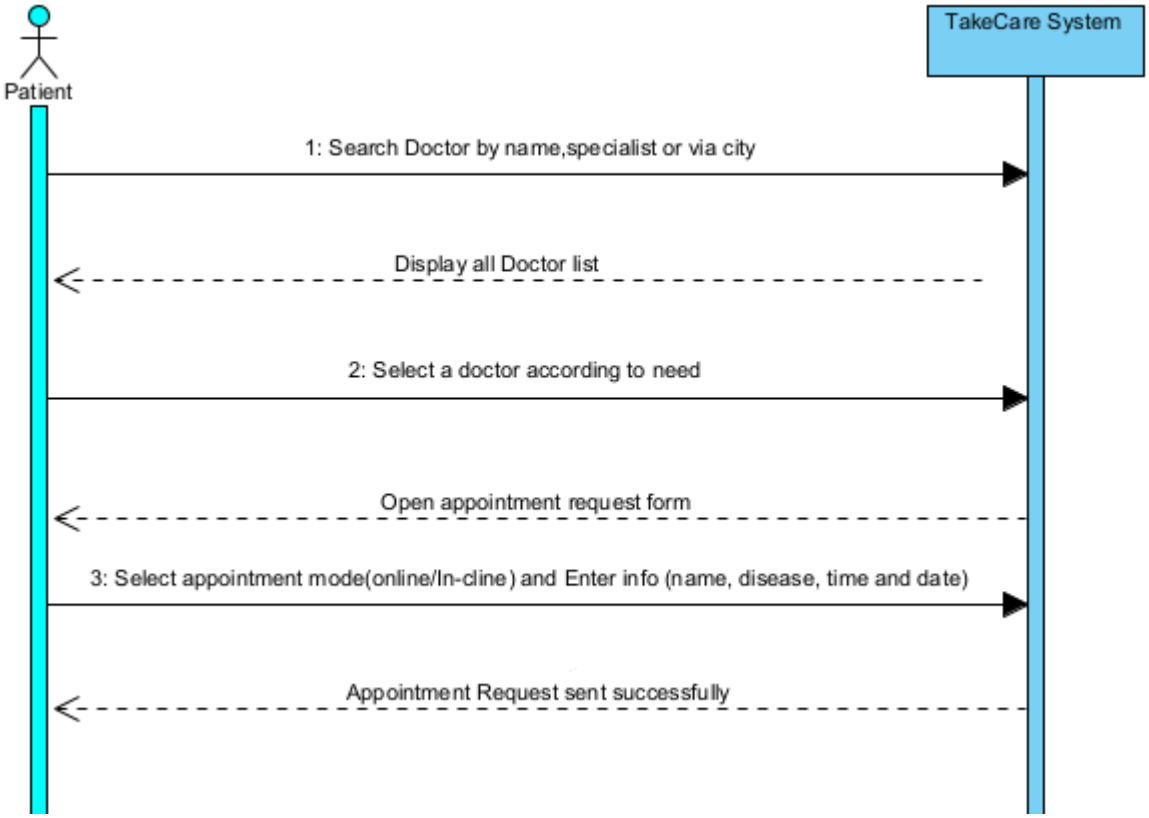

Figure 3.6 Appointment request

SD-6: Doctor Accept or cancel request

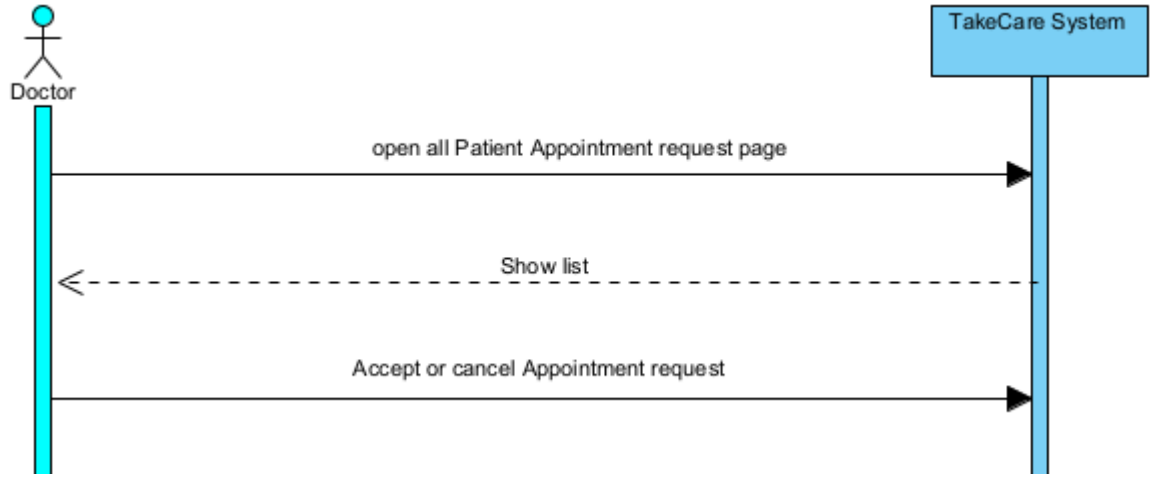

Figure 3.7 Doctor Accept or reject the appointment

SD-7: Prescription

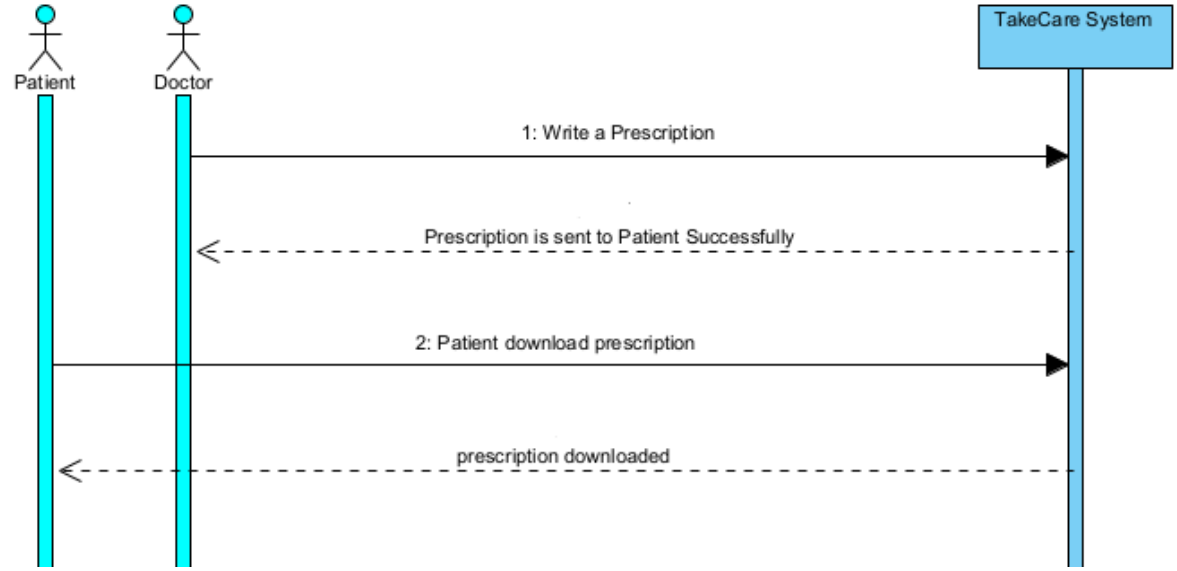

Figure 3.8 Prescription sequence diagram

SD-8: Health Tips

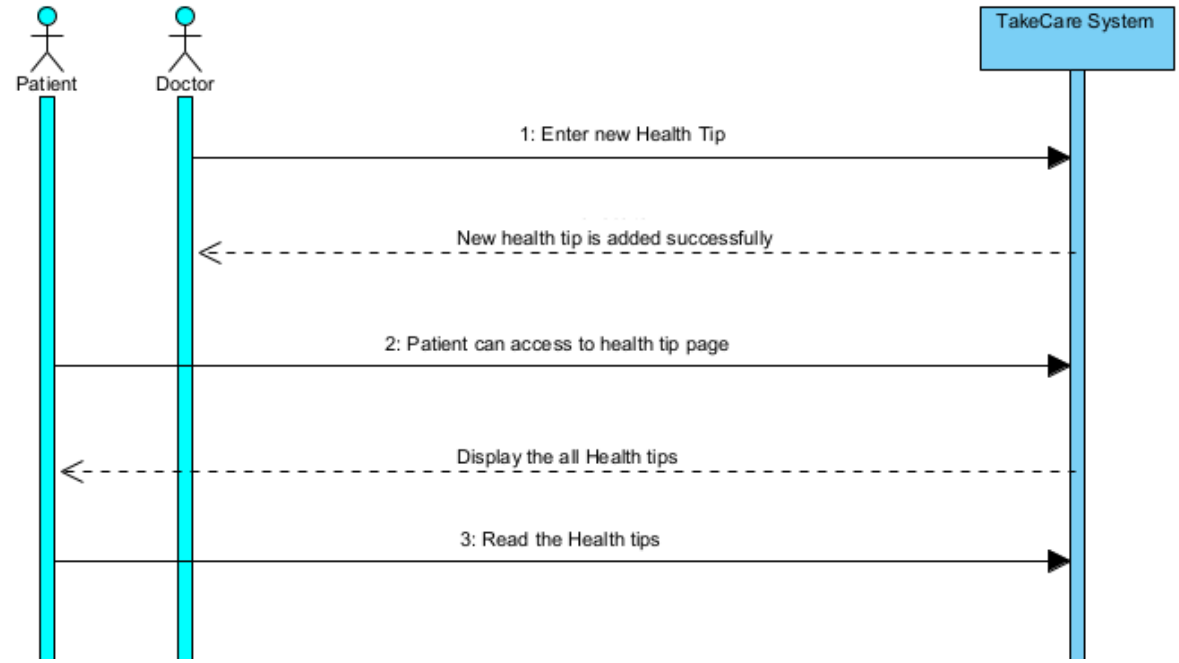

Figure 3.9 Health Tips sequence diagram

SD-9: Place Order

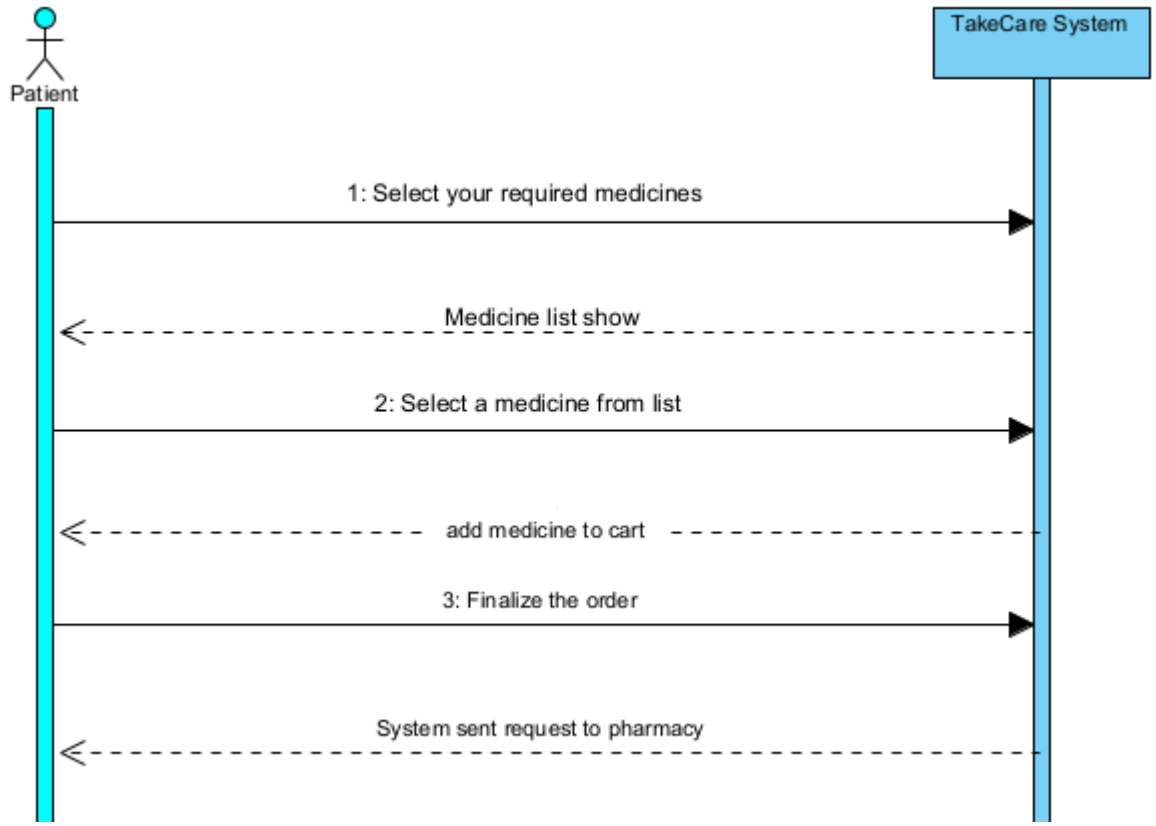

Figure 3.10 Place order sequence diagram

SD-10: Track Order

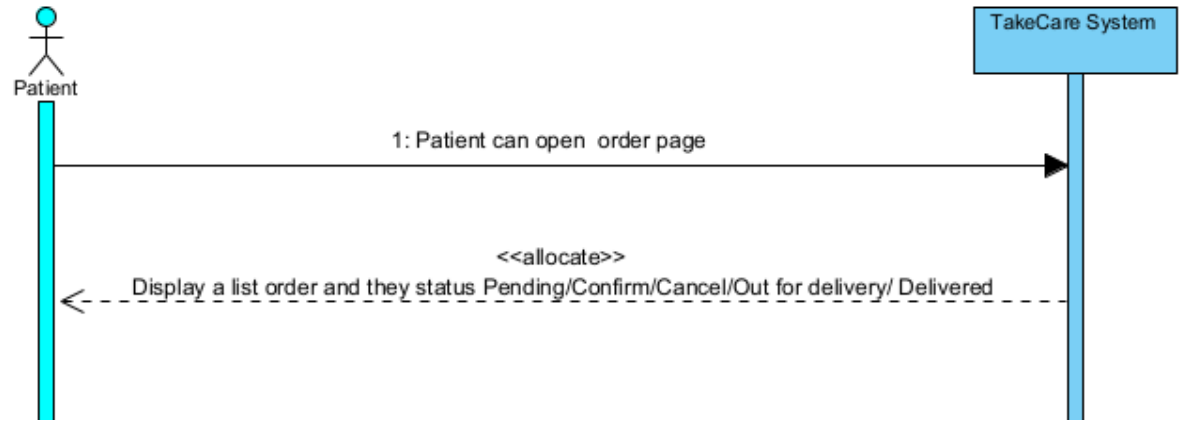

Figure 3.11 Track order sequence diagram

SD-11: Manage Order

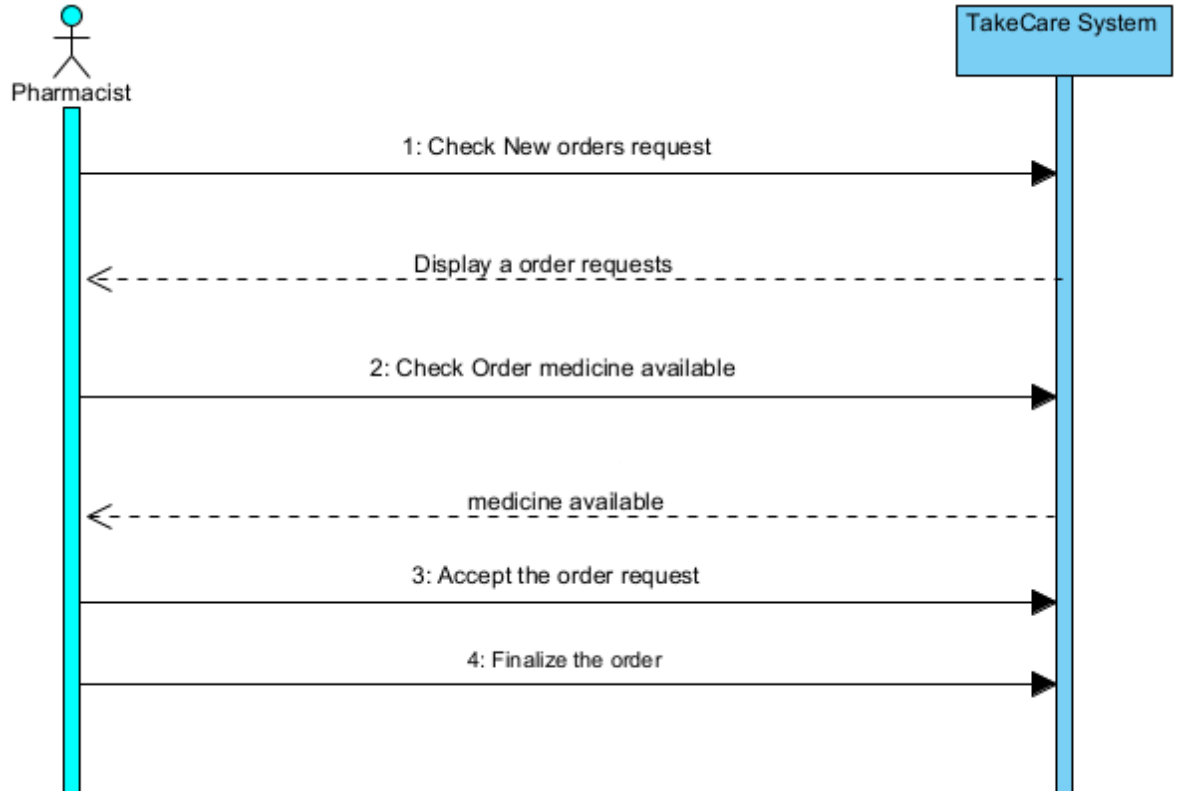

Figure 3.12 Manage order sequence diagram

SD-12: Order Deliver

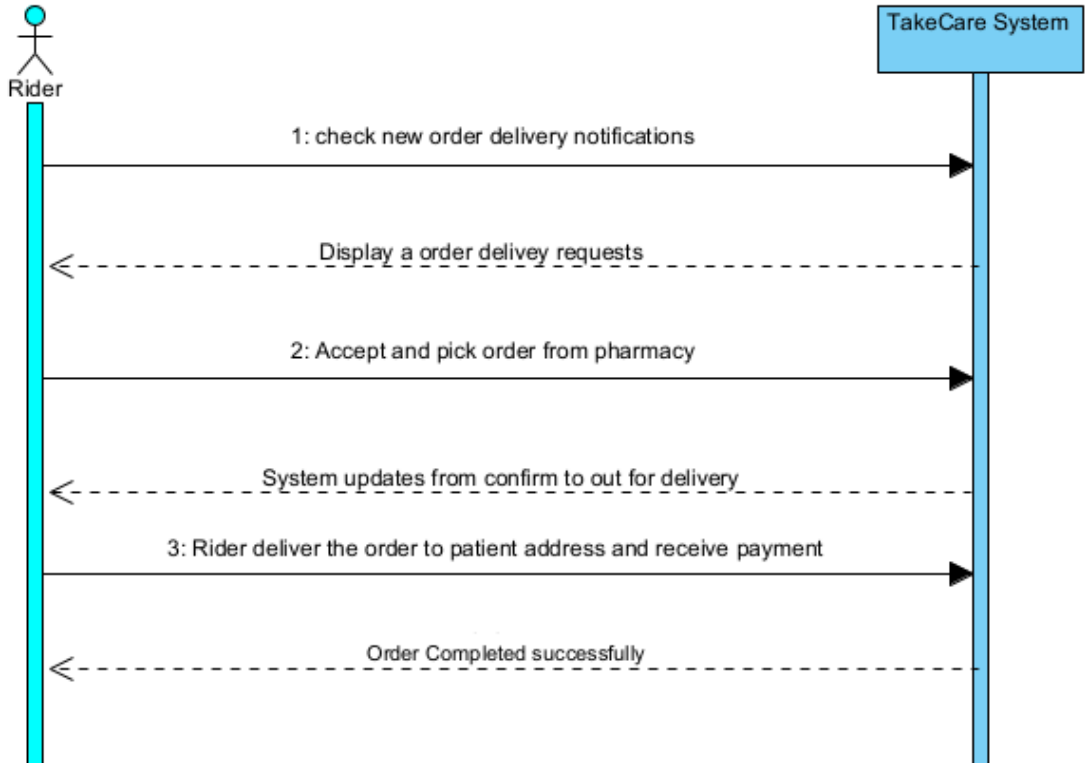

Figure 3.13 Order deliver sequence diagram

SD-13: Medicine expiry Alert System

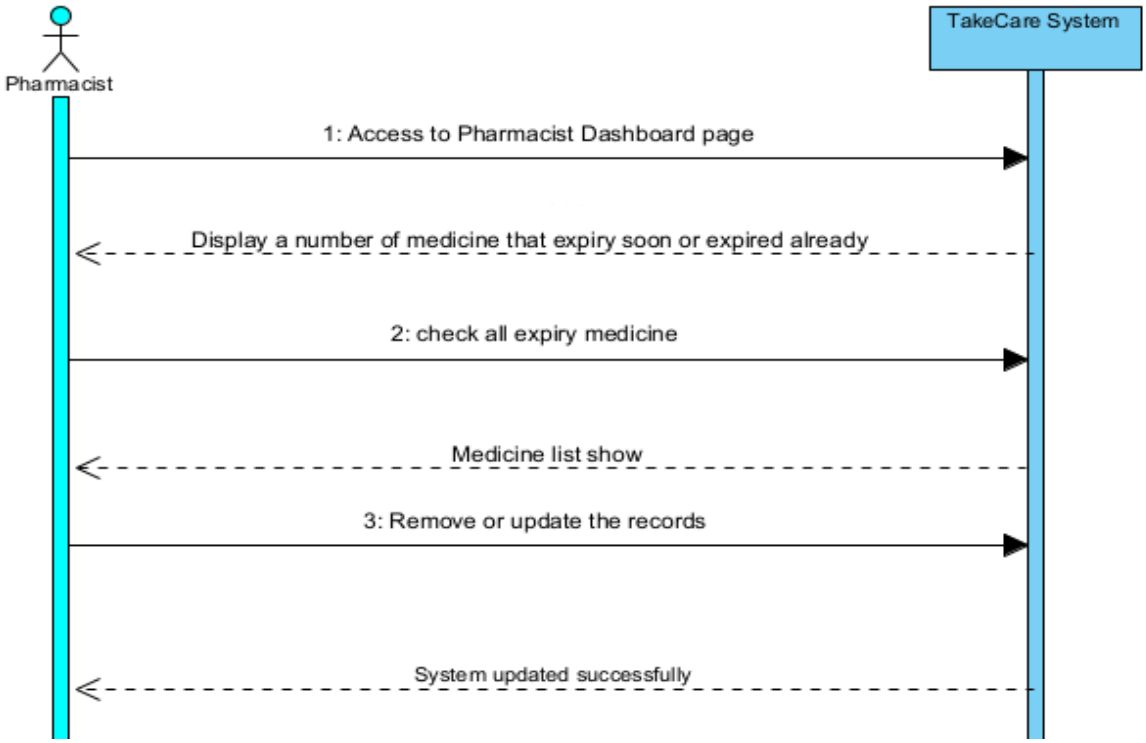

Figure 3.14 Medicine expiry Alert System

SD-14: Add Medicines

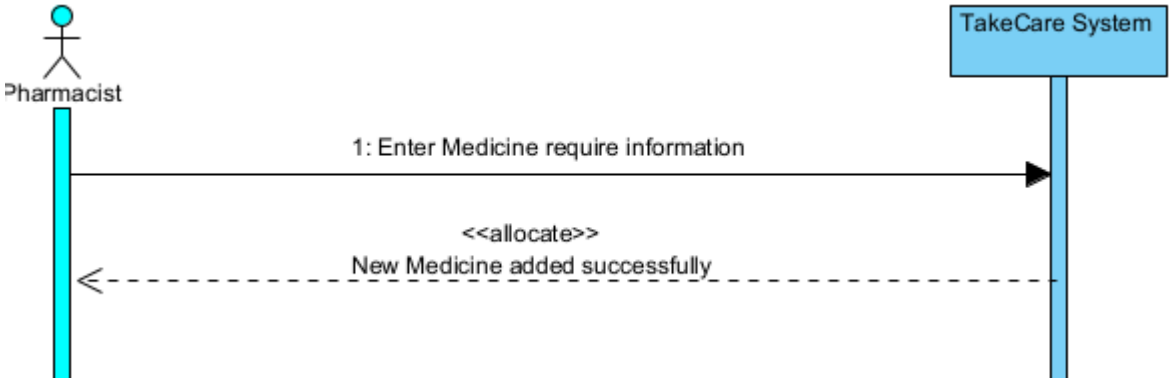

Figure 3.15 Add medicine sequence diagram

SD-15: Book Lab Test

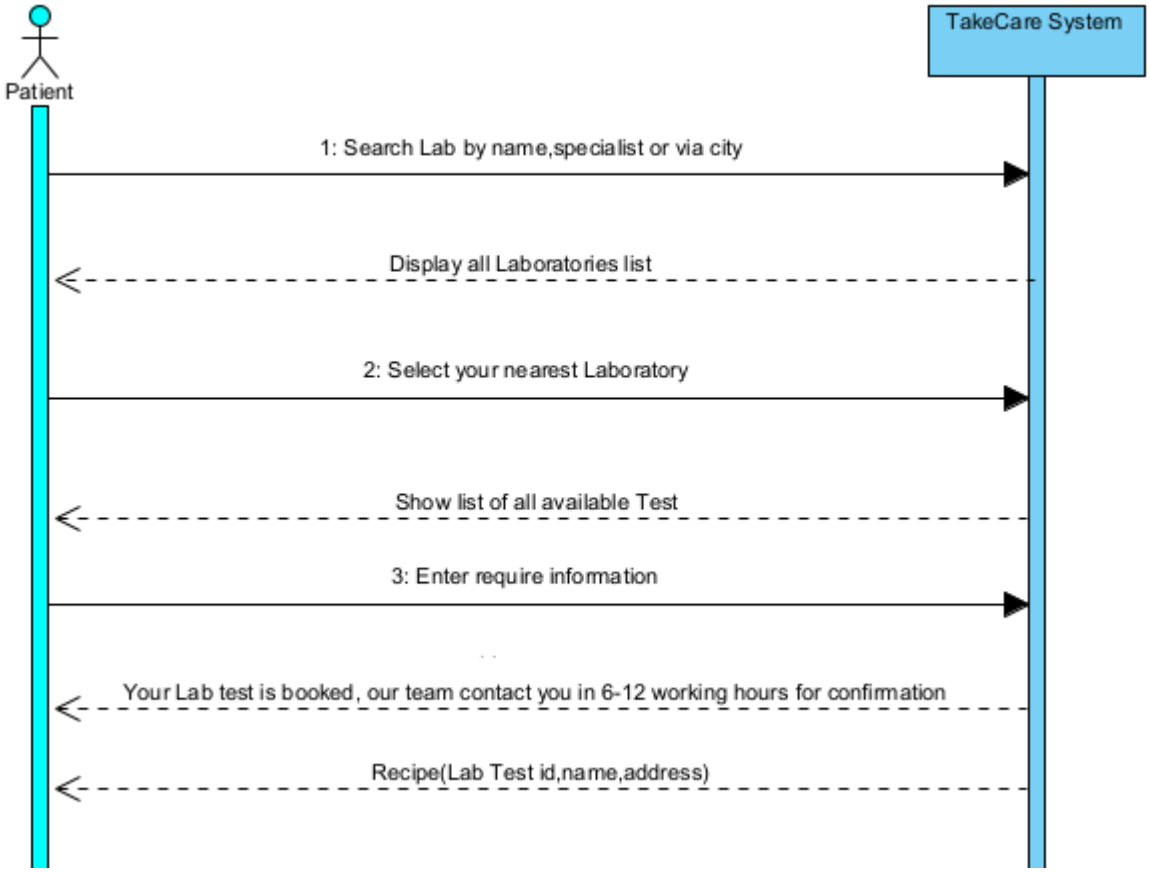

Figure 3.16 Book Lab Test sequence diagram

SD-16: Lab Test Taken

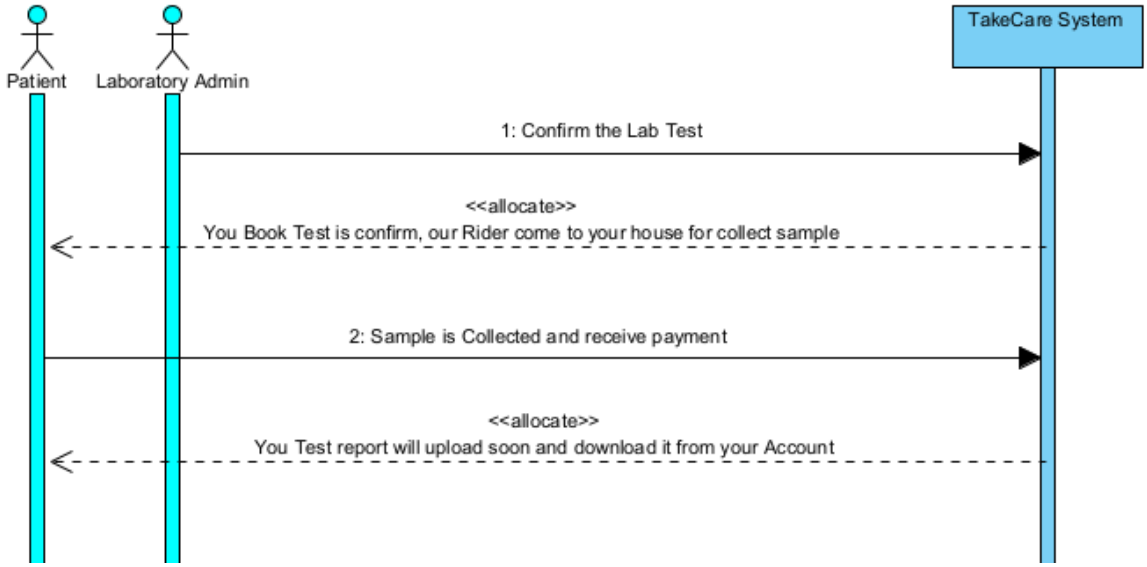

Figure 3.17 Lab test taken sequence diagram

SD-17: Online Lab Test Report

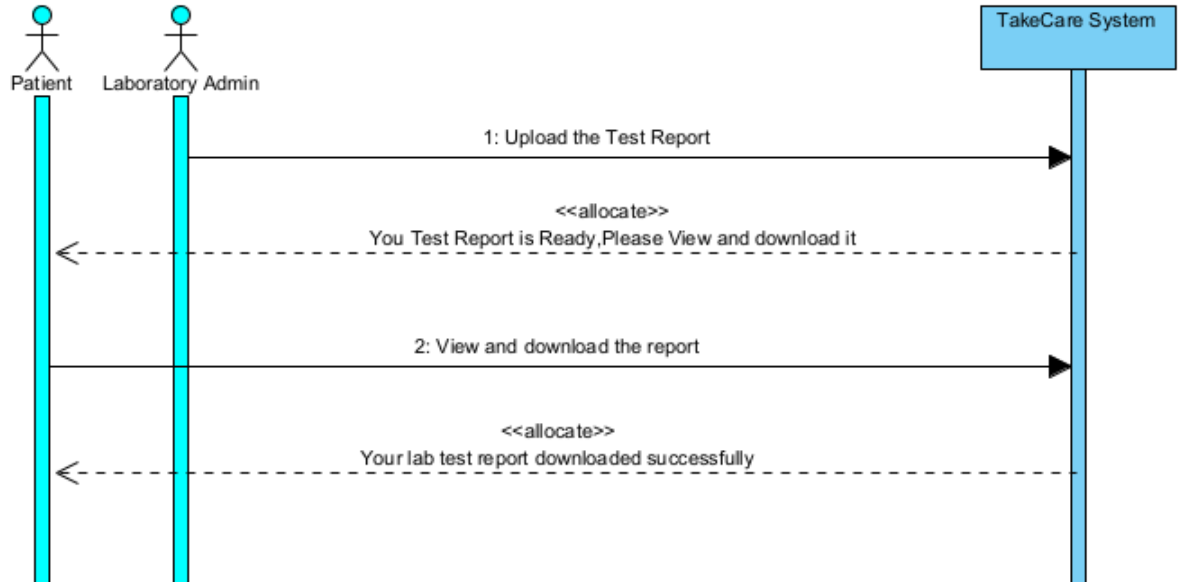

Figure 3.18 Online lab test report sequence diagram

SD-18: Add Doctors, pharmacies, Laboratories

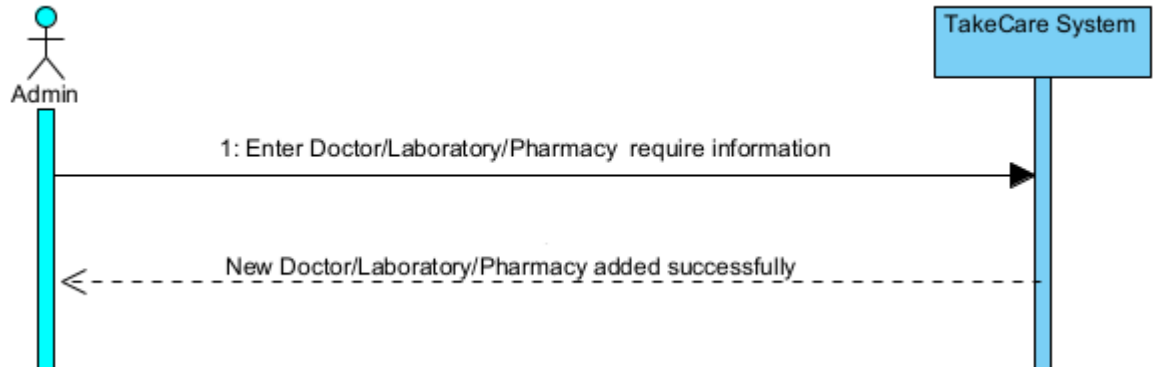

Figure 3.19 Add doctor, pharmacy and Labs

SD-19: Monitor Whole System

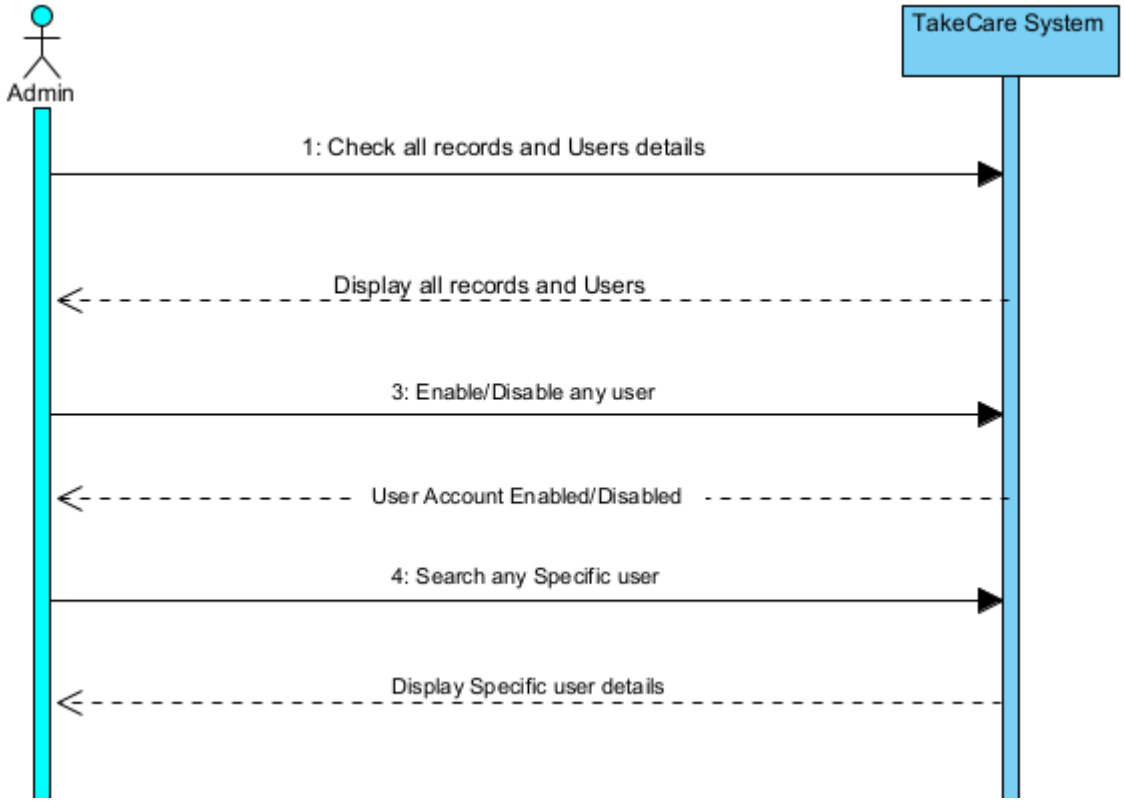

Figure 3.20 Monitor the whole system sequence

3.8 Domain Model

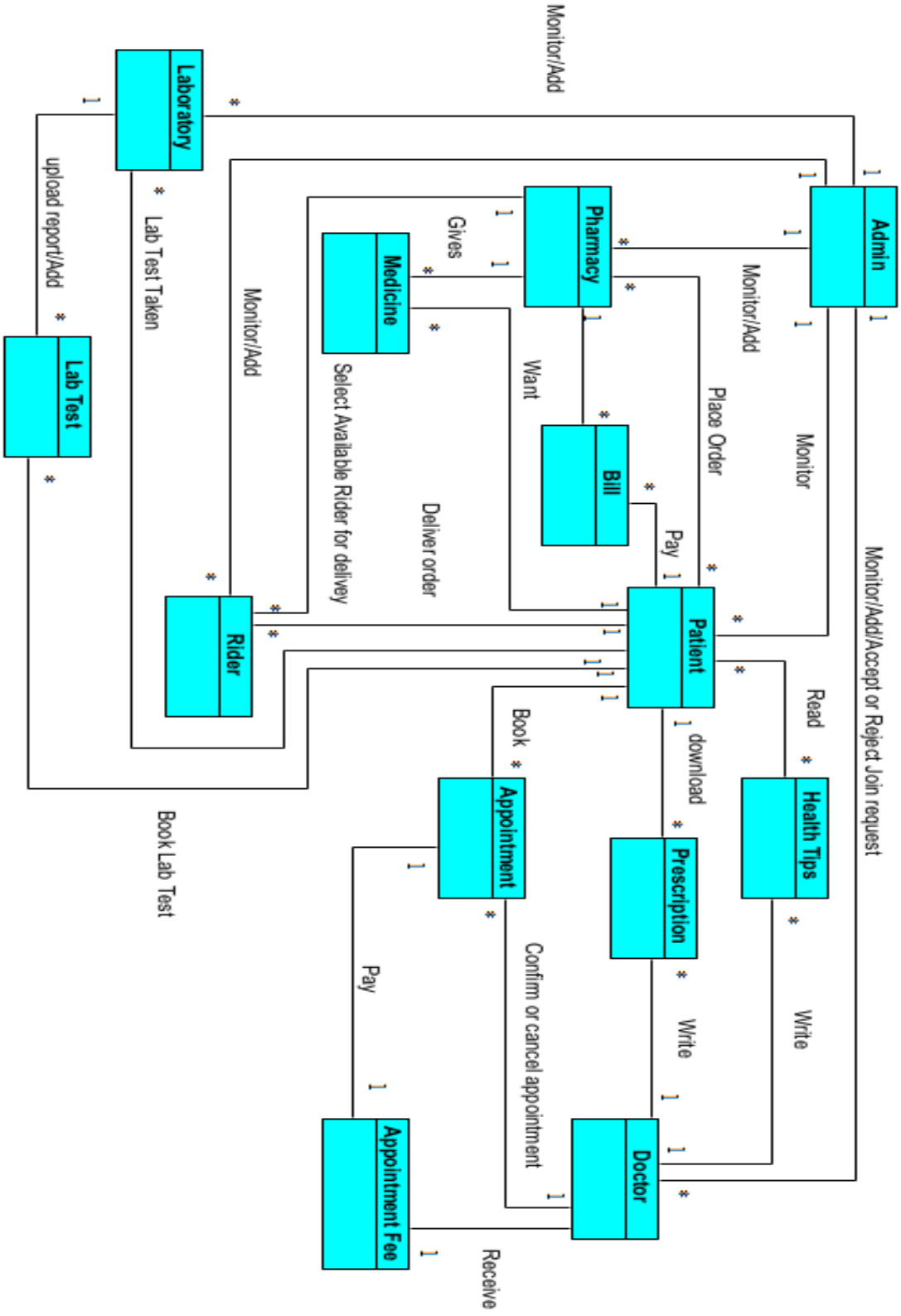

Figure 3.21 Domain Model 1

Chapter 4 System Design

4.1. Activity Diagrams

The Activity Diagram will show the flow of control and activities of all users in the system

4.1.1. Admin Activity Diagram

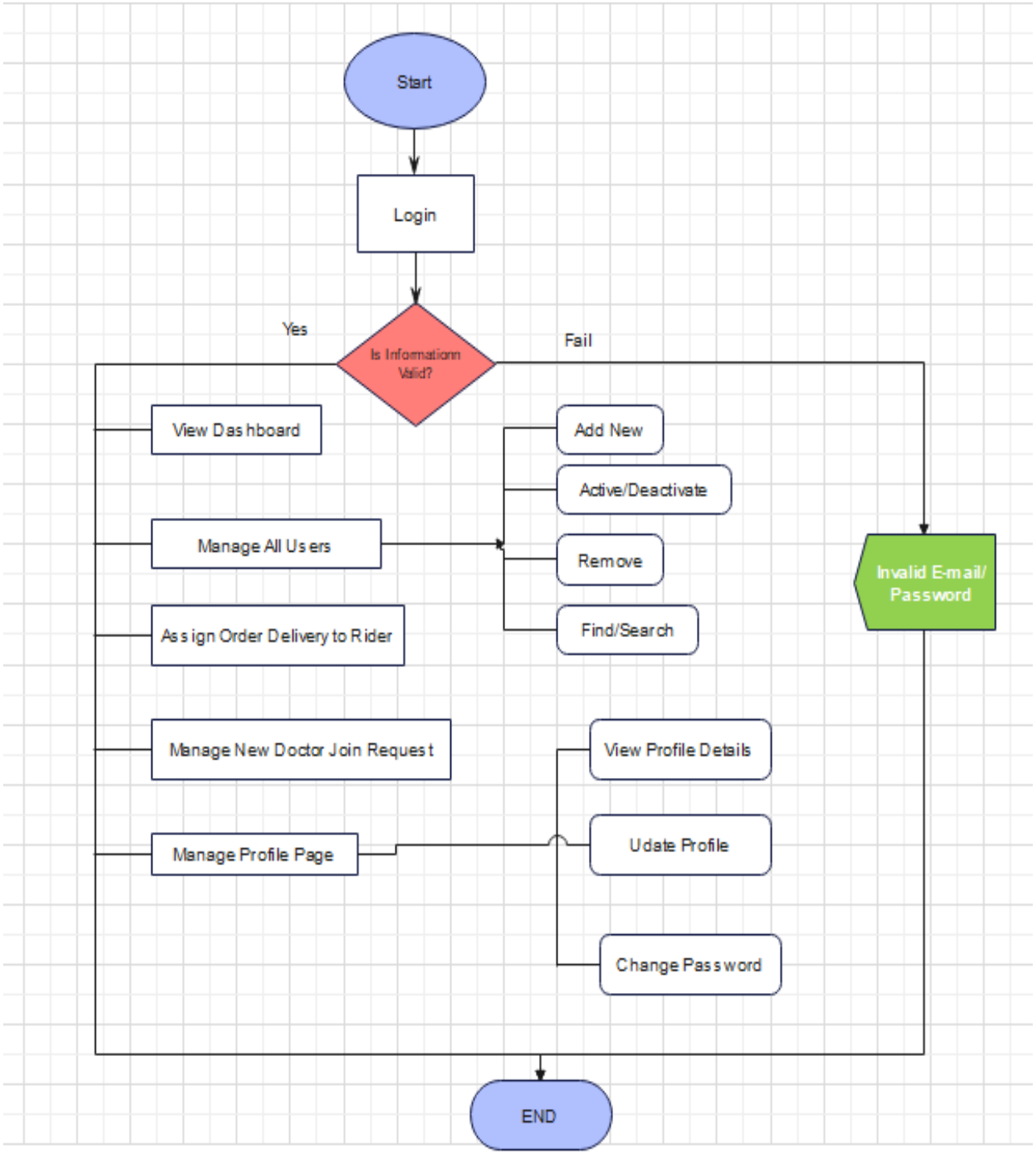

Figure 4.1 Admin Activity Diagram 1

4.1.2. Customer Activity Diagram

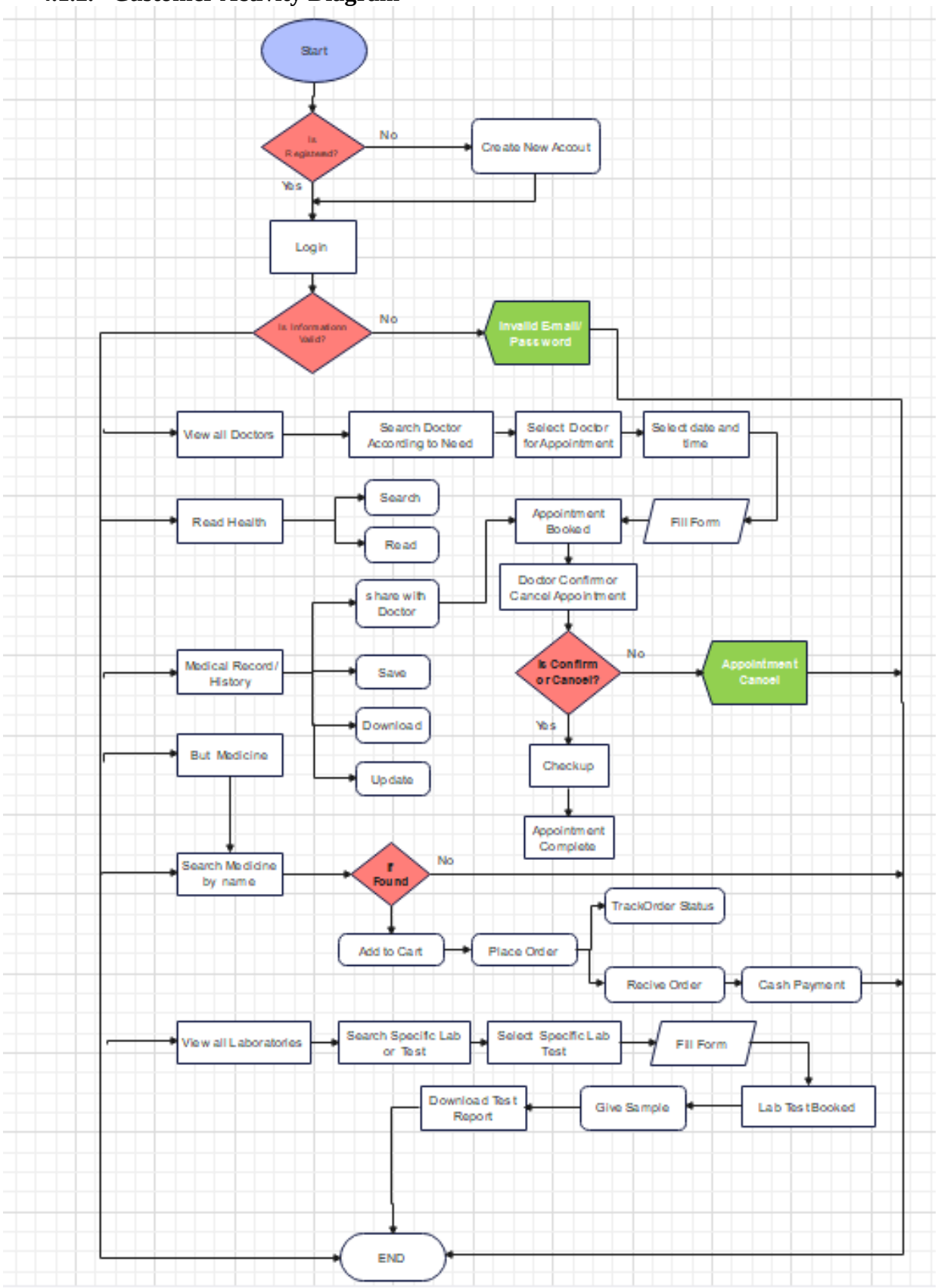

Figure 4.2 Patient Activity Diagram 1

4.1.3. Doctor Activity Diagram

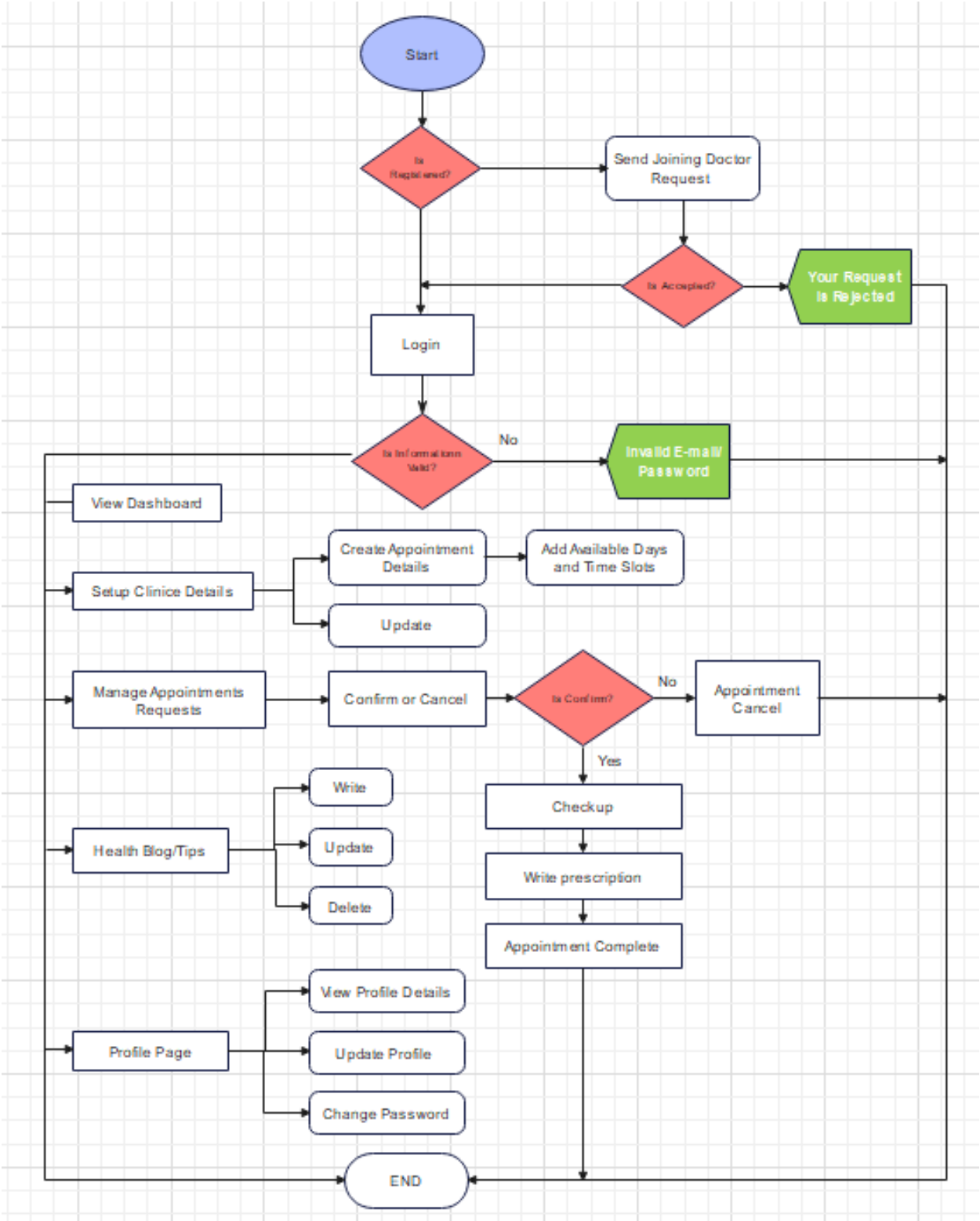

Figure 4.3 Doctor Activity Diagram 1

4.1.4. Laboratory Activity Diagram

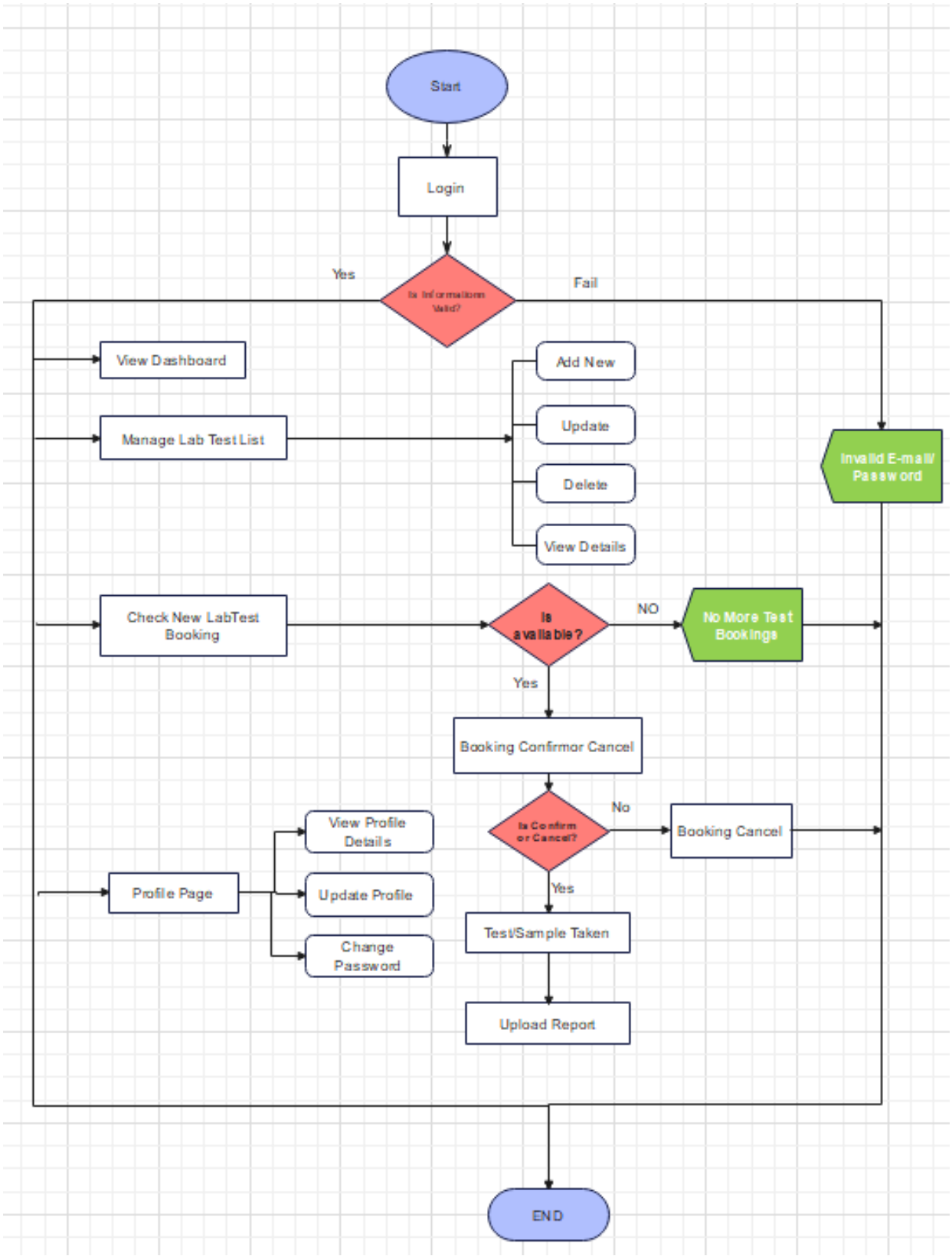

Figure 4.4 Laboratory Activity Diagram 1

4.1.5. Pharmacy Activity Diagram

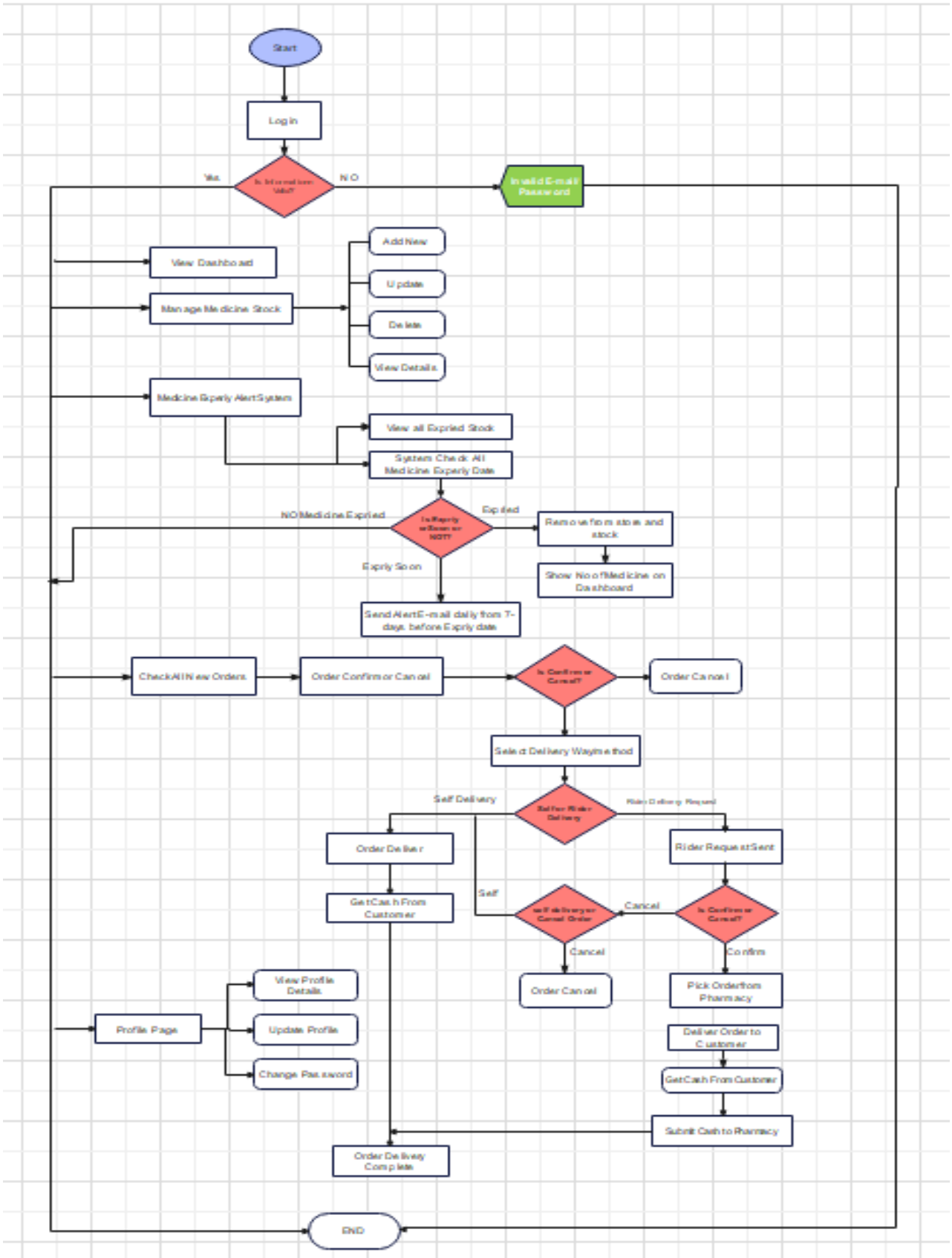

Figure 4.5 Pharmacy Activity Diagram 1

4.1.6. Rider Activity Diagram

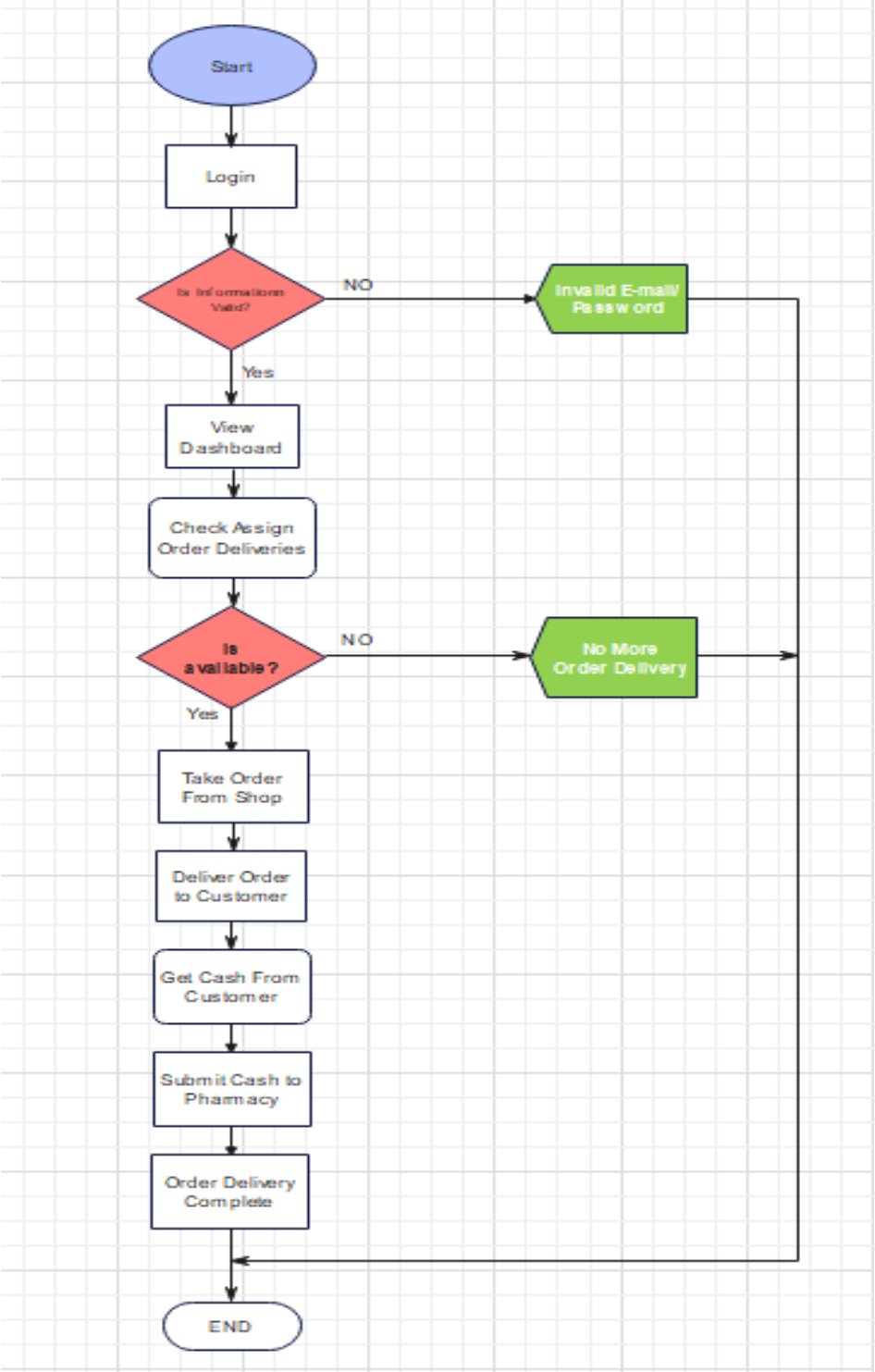

Figure 4.6 Rider Activity Diagram 1

4.2. Class Diagram

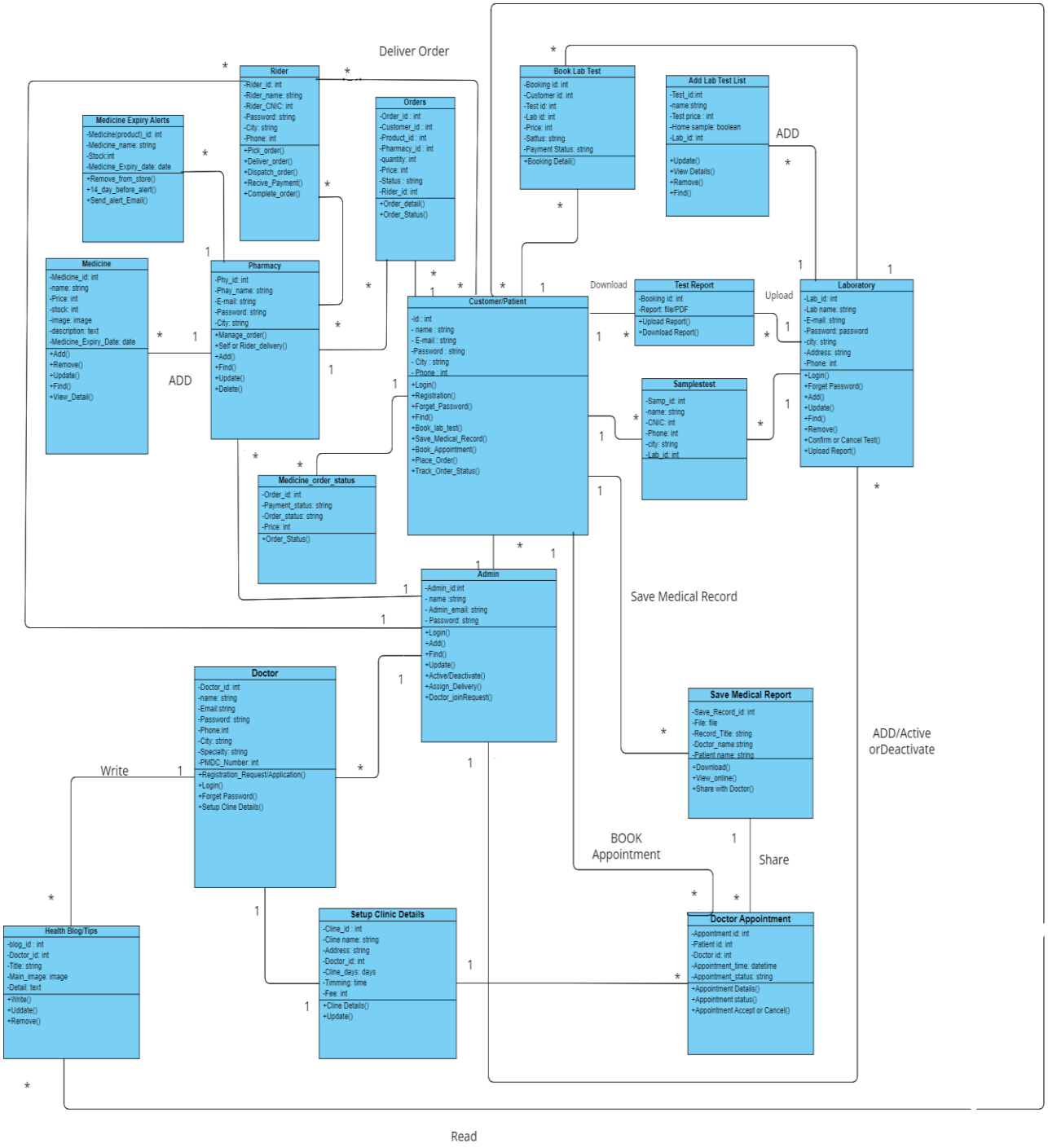

Figure 4.7 Class Diagram 1

4.3. ERD Diagram

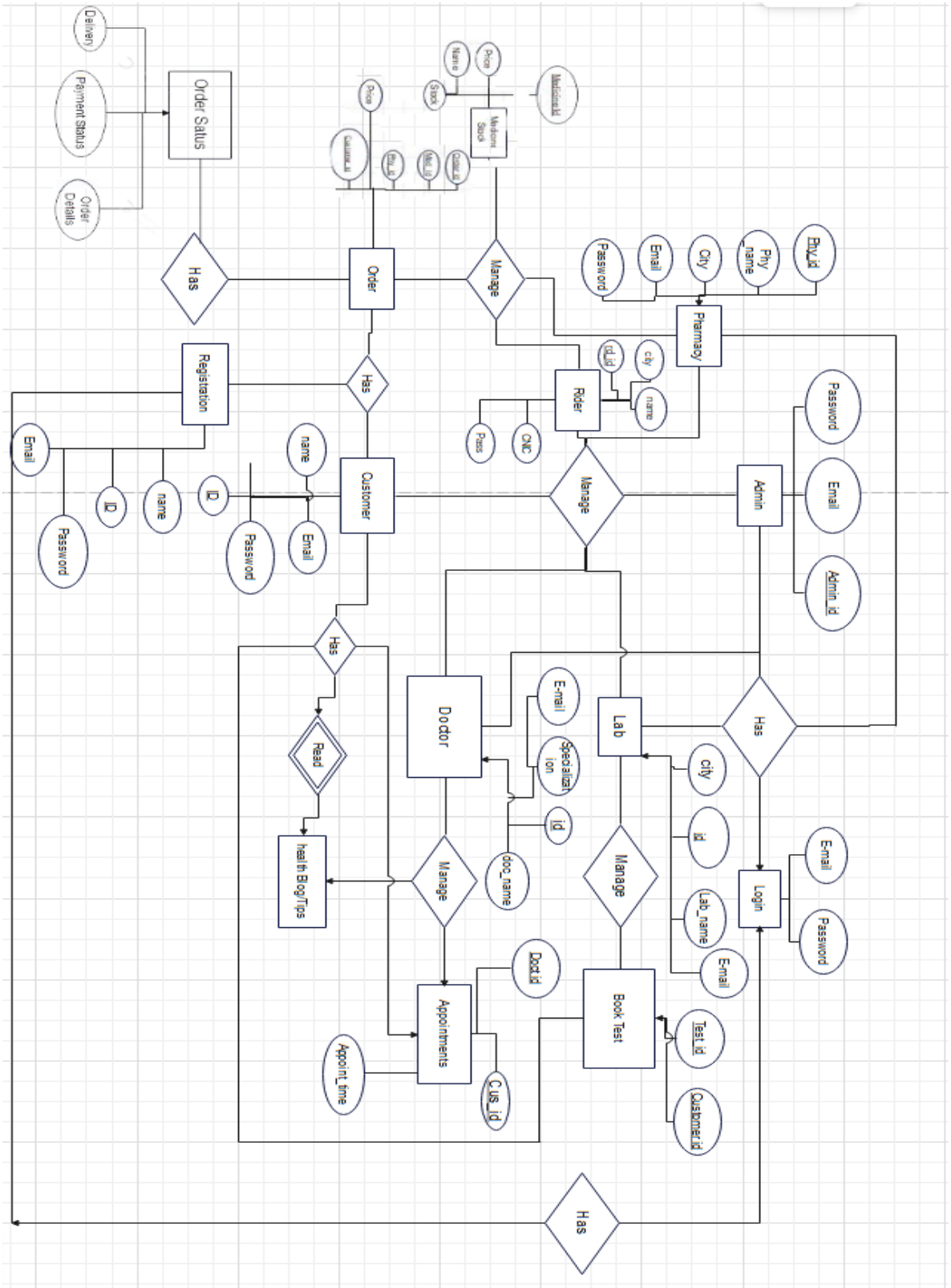

Figure 4.8 ERD 1

Chapter 5: Implementation

5.1. Detail Implementation of Tool and Technologies that Use

Following are the details of tools, languages and technologies we have used in our "TakeCare System"

5.1.1. Django

Django is a well-known full-stack framework. Django is used for developing a web application. That will use Python for the back-end development of websites and HTML, bootstrap, CSS, and JavaScript for front-end development. In this project, we will use Django version 4.0 for development.

5.1.2. Python

Python is a well-Known and most powerful and more secure programming language. In this project "TakeCare System" we use python for back-end development and we use python version 3.9.

5.1.3. SQLite3

SQLite3 is a type of database system (DBMS). It is the default database of Django. It is very easy to create tables and queries. SQLite is fast, small, featured and easy to manage. we use SQLite3 database in our project.

5.1.4. HTML5

HTML (hypertext makeup language) is a programming language that is used for creating a basic structure of web pages. It will instruct a browser how page structure. It includes forms, heading, tables and text etc.

5.1.5. CSS3

CSS (Cascading Style Sheet) is a Programming language that is used to create beautiful views of pages. It will instruct a browser how what the page looks like. And also help to make the view Responsive. CSS is a key component of the World Wide Web. It always works with HTML.

5.1.6. PyCharm

PyCharm is a tool designed for 'pure Python' development. It will provide smart code completion, code inspection as well as automatic code refactoring and rich navigation capabilities.

5.2. Development Diagram

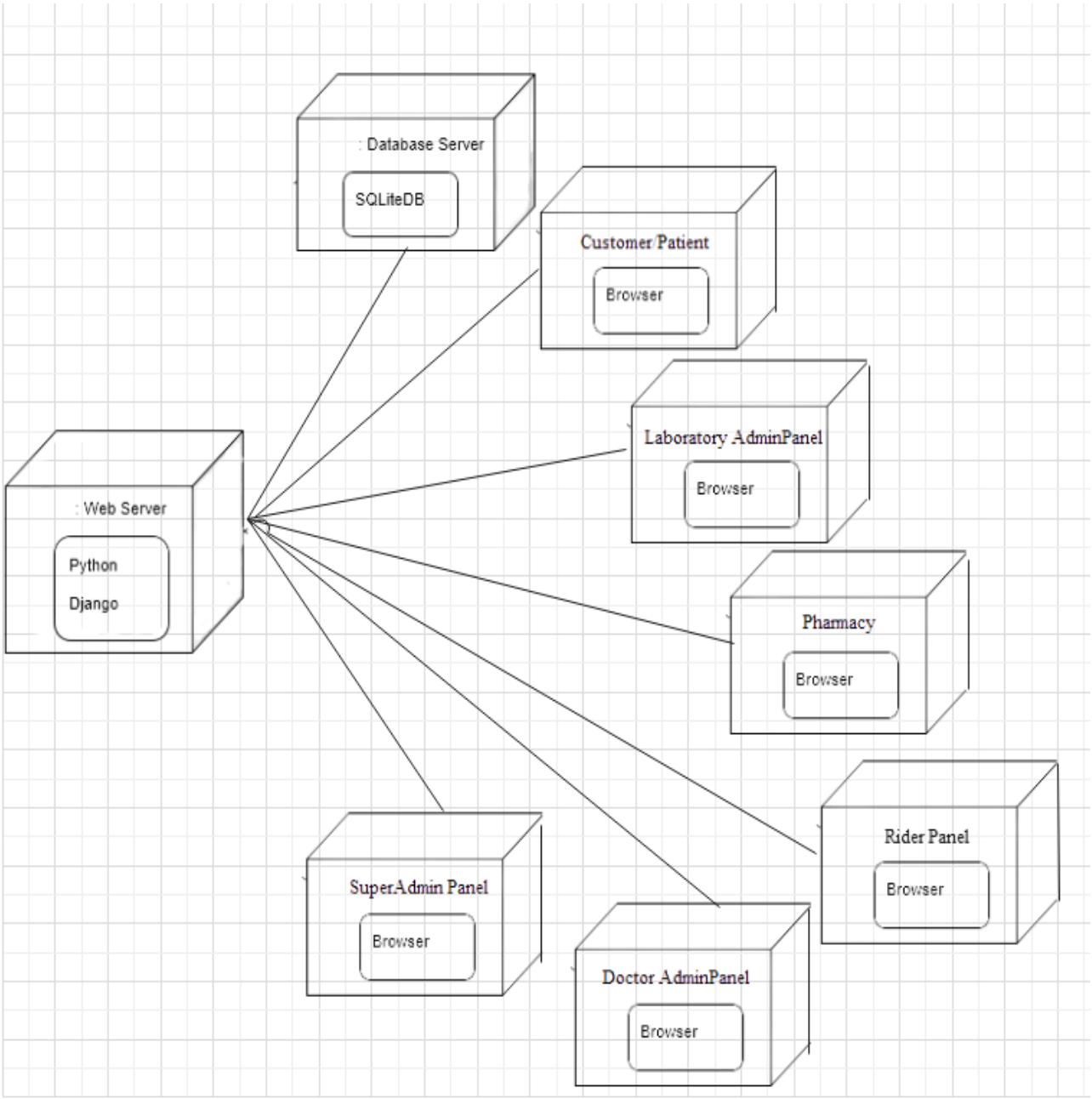

Figure 5.1 Development Diagram 1

5.3. Package Diagram

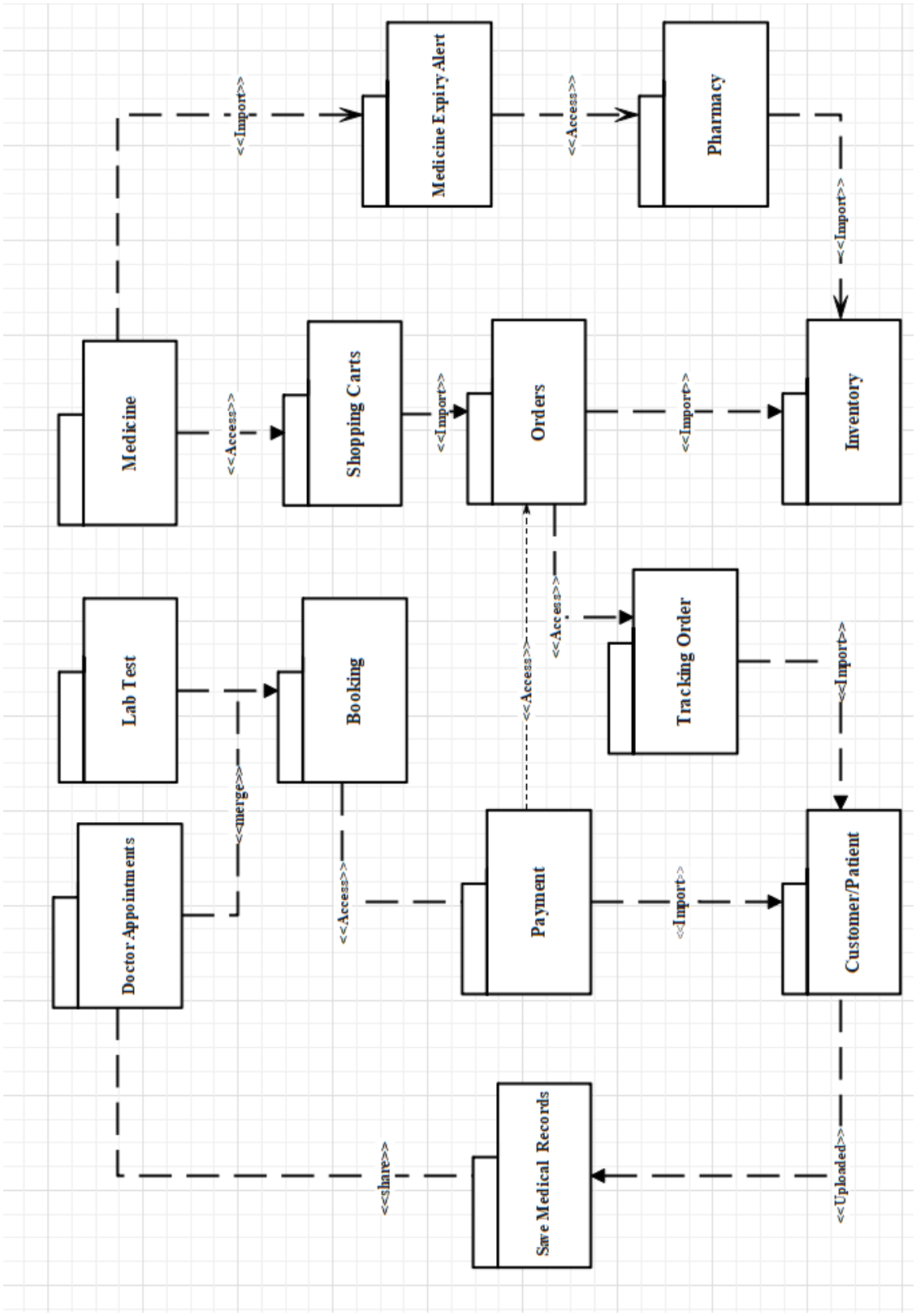

Figure 5.2 Package Diagram 1

5.4. Component Diagram

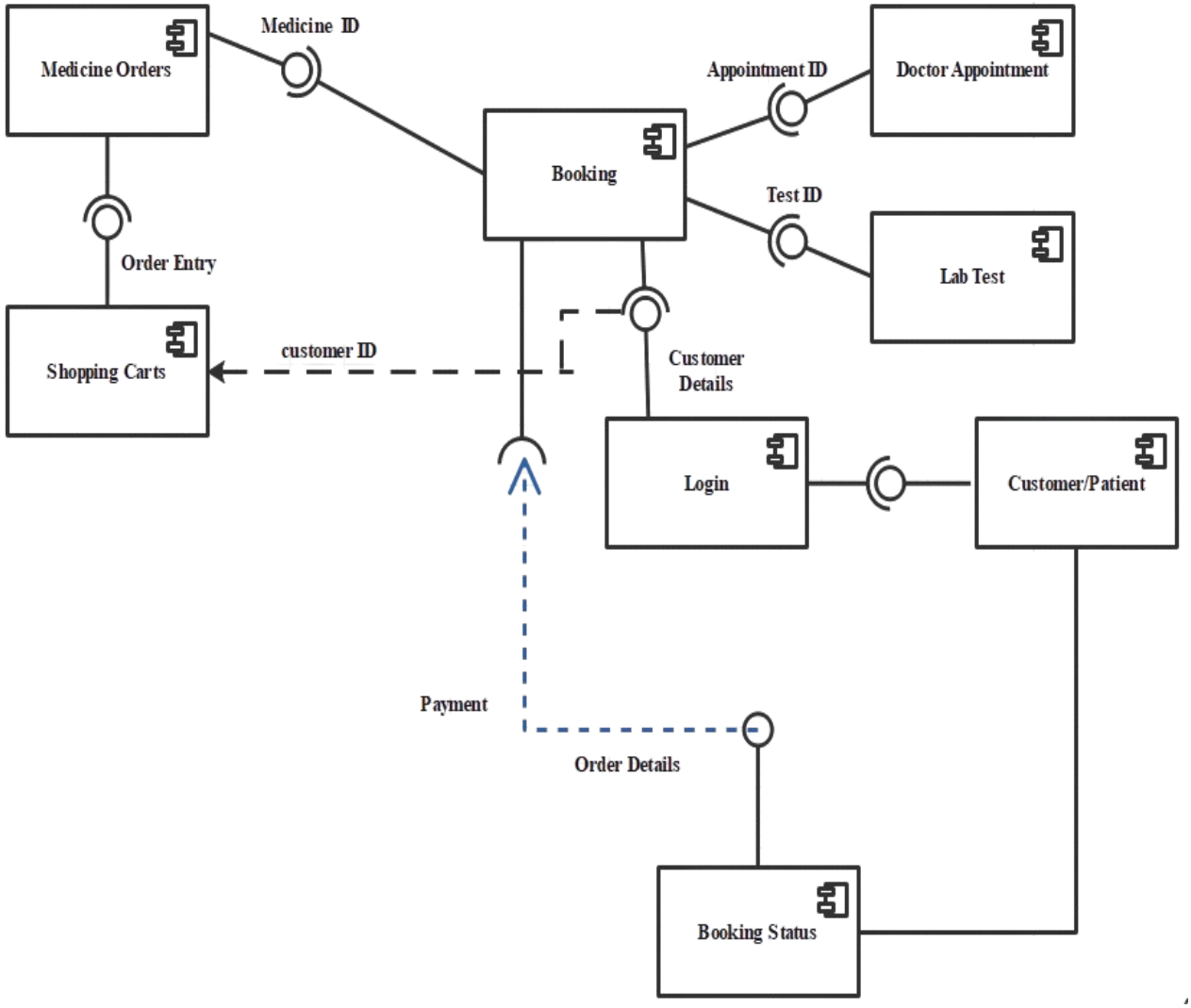

Figure 5.3 Component Diagram 1

Chapter 06 Testing

6.1. System Testing

Testing is a very important step before deploying any Project. It is very important to check the code with different scenarios and inputs. It shows the behavior of the system under different conditions.

6.2. Test Cases

Following are the Test Cases of our Project (TakeCare System)

TC-ID-01: Registration

TC-ID-01: Registration	
Test Case ID:	**TC-ID-01**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	This Test is design to check Customer/Patient Register Successfully to our system
Preconditions	• Stable internet connection is required • Customer/Patient account with same E-mail or Phone number must be not already exist in system database
Testing Process	1. Patient can access the Registration Page 2. Patient enter required information 3. Account is Created Successfully.
Post Condition	Customer/Patient Registration Completed Successfully.

Table 6.1 Registration 1

TC-02: Login

TC-ID-02: Login	
Test Case ID:	**TC-ID-02**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	This Test is design to check Customer/Patient can Login Successfully to our system
Preconditions	• Stable internet connection is required • All users must be register to our system
Testing Process	1. Enter the valid E-mail id and Password 2. System Check User is Active or Deactivated by admin
Post Condition	All users Login Successfully.

Table 6.2 Login Test 1

TC-03: Doctor Registration Request

TC-ID-03: Doctor Registration Request	
Test Case ID:	**TC-ID-03**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass, E-mail
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	• This Test is design to check doctor request is submits or not to our system • On submit Doctor receive conformation E-mail
Preconditions	• Stable internet connection is required
Testing Process	1. Fill the Doctor Registration Form 2. Doctor with same E-mail or PMC number must be not already exist in system database 3. On successfully submit doctor request receive conformation E-mail
Post Condition	Doctor registration request submits successfully.

Table 6.3 Doctor Registration Test 1

TC-04: Accept or Reject Doctor Registration Request

TC-ID-04: Accept or Reject Doctor Request	
Test Case ID:	**TC-ID-04**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass, E-mail
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	• Admin can accept or reject the Doctor Request after check doctor PMC number • On Accept Doctor receive conformation E-mail with Create Password link
Preconditions	• Stable internet connection is required • Admin must be Login
Testing Process	1. Admin can access the Dashboard after login 2. See the number of new Doctor Request 3. Click to access the all-new doctor registration request. 4. After verification of doctor through PMC number and other information provide, admin can accept or reject request. 5. On Accept Doctor receive conformation E-mail with Create Password link
Post Condition	Doctor Registration Request Accept or Reject Successfully.

Table 6.4 Accept/Reject Doctor Request 1

TC-05: Appointment Request

TC-ID-05: Doctor Appointment Request	
Test Case ID:	**TC-ID-05**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	This test is design to checked patient cab sent an Appointment request to doctor.
Preconditions	Stable internet connection is required Patient must be Login
Testing Process	. Patient can Search the doctor by name, specialist or via city . Select a doctor . Select the appointment date and time . Fill the form that provide a required patient information to doctor . Conform the Appointment request
Post Condition	Your Appointment request is sent successfully.

Table 6.5 Doctor Appointment Request 1

TC-06: Doctor Accept or cancel request

TC-ID-06: Doctor Appointment Request	
Test Case ID:	**TC-ID-06**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	• This test is design to checked Doctor can accept or cancel Patient Appointment request
Preconditions	• Stable internet connection is required • Doctor must be Login
Testing Process	1. Doctor access to all Patient Appointment request 2. If appointment time is available than doctor accept the Patient Appointment request else cancel the Patient Appointment request 3. Appointment is accepted or cancel successfully
Post Condition	Appointment will be accepted or cancel Successfully

Table 6.6 Doctor Accept or Reject Appoint 1

TC-07 Save Medical Reports

TC-ID-07: Save Medical Reports/Records	
Test Case ID:	**TC-ID-07**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	• This test is design to checked User can save their Medical Reports/Records to our System • User can download or update anytime
Preconditions	• Stable internet connection is required • Patient/User must be Login
Testing Process	1. Patient access to Save Medical Record page 2. Display Form 3. Enter the Record related information and attach medical record file 4. Your Record is saved successfully 5. Now Patient/User can View/Download Record file any time
Post Condition	Patient/Customer can save/Update/Download your Medical Record Successfully.

Table 6.7 Save Medical Reports

TC-08 Add to Carts

TC-ID-08: Add to Carts	
Test Case ID:	**TC-ID-08**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	• This test is design to checked Medicine order is placed Successfully
Preconditions	• Stable internet connection is required
Testing Process	1. Patient access to Order medicine page 2. Display a list of medicine 3. Select a medicine from list 4. Add to Shopping Carts 5. Medicine is added to cart Successfully.
Post Condition	Medicine is added to cart Successfully.

Table 6.8 Add to Carts 1

TC-09 Place Medicine Order

TC-ID-09: Place Medicine Orders	
Test Case ID:	**TC-ID-09**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	• This test is design to checked Medicine order is placed Successfully
Preconditions	• Stable internet connection is required • Patient/Customer must be Login
Testing Process	1. Patient access to Order medicine page 2. Display a list of medicine 3. Select a medicine from list 4. Add to Shopping Carts 5. Confirm the order 6. Your order is placed Successfully.
Post Condition	Patient/Customer order is placed Successfully.

Table 6.9 Place Medicine Order 1

TC-10 Tracking Order

TC-ID-10: Tracking Orders	
Test Case ID:	**TC-ID-10**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	• This test is design to checked Medicine order is placed Successfully
Preconditions	• Stable internet connection is required • Patient/Customer must be Login • Patient must be a place medicine order
Testing Process	1. Patient access to Order Status page 2. Display a list of medicine Orders 3. See current order status Pending/Confirm/Cancel /Out for delivery/ Delivered
Post Condition	Your order statues are Pending/Confirm/Cancel/Out for delivery/ Delivered

Table 6.10 Tracking Orders 1

TC-11 Manage Orders

TC-ID-11: Manage Orders	
Test Case ID:	**TC-ID-11**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	• This test is design to checked Pharmacist can view all new buyer request, and complete the medicine orders
Preconditions	• Stable internet connection is required • Pharmacist must be Login
Testing Process	1. Pharmacist receive a patient medicine order 2. Pharmacist check medicine is available or not 3. If medicine is available than confirm the order and create bill, then give it to available rider. 4. Rider delivers it to patient
Post Condition	Handled Buyer request successfully

Table 6.11 Manage Orders 1

TC-12 Medicine Order Deliver

TC-ID-12: Medicine Order Deliver	
Test Case ID:	**TC-ID-12**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	• This test is design to checked Pharmacist can view all new buyer request, and complete the medicine orders
Preconditions	• Stable internet connection is required • Pharmacist, Rider must be Login
Testing Process	1. Pharmacist can self-deliver or Rider request 2. If Rider Request, admin assign a delivery to rider 3. Rider takes an order from Pharmacy 4. Rider flows the address of patient on his dashboard 5. Rider delivers the order and bill to patient address and receive payment 6. Rider updates the system that order is delivered 7. Order is completed successfully
Post Condition	Order delivery completed Successfully

Table 6.12 Medicine Order Deliver 1

TC-13 Medicine expiry Alert System

TC-ID-13: Medicine expiry Alert System	
Test Case ID:	**TC-ID-13**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	• This test is design to checked system give an alert to Pharmacist dashboard which medicine expiry soon or expired
Preconditions	• Stable internet connection is required • Pharmacist must be Login
Testing Process	1. Pharmacist login into system 2. Display number of medicine that expiry soon or already expired dashboard 3. Pharmacist access the medicine expiry page 4. Display the list of medicine that expiry soon or expired
Post Condition	Pharmacist receive an alert which medicine expiry soon or expired

Table 6.13 Medicine expiry Alert System 1

TC-14 Add Medicines

TC-ID-14: ADD Medicine	
Test Case ID:	**TC-ID-14**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	• This test is design to checked Pharmacist add new Medicine
Preconditions	• Stable internet connection is required • Pharmacist must be Login
Testing Process	1. Pharmacist login into system 2. Pharmacist access to add new medicine page 3. Fill the form such as Medicine name, image, expiry date, price etc. 4. New Medicine is added into system successfully
Post Condition	Medicine added Successfully

Table 6.14 Add Medicines 1

TC-15 Book Lab Test

TC-ID-15: Book Lab Test	
Test Case ID:	**TC-ID-15**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	• This test is design to checked Patient/Customer can book a Lab test
Preconditions	• Stable internet connection is required • Patient/Customer must be Login
Testing Process	1. Patient/Customer search a lab by name, city 2. Select laboratory than select test 3. Fill the form to provide required information such as contact no, Address etc. 4. Your Lab test is booked, our team contact you in 6-12 working hours for confirmation
Post Condition	Your Lab test is booked successfully, our team contact you in 6-12 working hours for confirmation

Table 6.15 Book Lab Test 1

TC-16 Online Lab Test Report

TC-ID-16: Online Lab Test Report	
Test Case ID:	**TC-ID-16**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	• Laboratory System Admin upload the lab test report. Patient do not need to go to lab for report, they can download report form website
Preconditions	• Stable internet connection is required • Patient/Customer must be Login • Lab test must be book and test taken
Testing Process	1. Liberationist access to Patient-Test page 2. Search Patient by id, name 3. Upload the test report on system 4. Patient receive a test result through system
Post Condition	• Test report is uploaded • Test report is downloaded by the patient

Table 6.16 Online Lab Test Report 1

TC-17 Add New Doctor/ Pharmacy/Laboratory/Rider

TC-ID-17: Add new Doctor/ Pharmacy/Laboratory/Rider	
Test Case ID:	**TC-ID-17**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	• Admin can Add new users
Preconditions	• Stable internet connection is required • Admin must be Login
Testing Process	1. Admin access to Add new Doctor/Rider/ Pharmacy/Laboratory page 2. Fill the form 3. New Doctor/Pharmacy/Laboratory/Rider is added successfully
Post Condition	• Doctor/ Pharmacy/Laboratory/Rider is added into System successfully

Table 6.17 Add any new user 1

TC-18 Active/Deactivated any User

TC-ID-18: Active/Deactivated any User	
Test Case ID:	**TC-ID-18**
Test Status	**Pass**
Product Name	TakeCare System
Test Item	Web Application, SQLite Compass
Documented On	24/07/2022
Version Number	1.0.0
Test Case Overview	• Admin can Active/Deactivate any user account
Preconditions	• Stable internet connection is required • Admin must be Login
Testing Process	4. Admin can search or select specific users 5. Admin can Active/Deactivate any user account
Post Condition	• User is Active/deactivate successfully

Table 6.18 Active/Deactivated any User 1

Chapter 7: Conclusion

7.1. Conclusion

In this project, we have developed a web application that makes the process of getting a doctor appointment, lab test and medicine purchase very easy and convenient for patient/customers. Our main goal was to develop fast, simple and reliable software. We make our project easy to use and user friendly and there is no verboseness in it. We have used advanced technology to make this software efficient.

We design this project to provide multiple quality health care services to user and also provides an opportunity for the Lab, and pharmacy to increase their business domain and earnings.

Let's we divide this project services into four parts. First, Patient/customer create account then search a doctor according to need and select data and time then booked an appointment. User can save they medical record on portal and share it to doctor. User can also search and select test then book a lab test. After the test taken and lab upload a test report and user download that test report. User can read a health tip. User can search a medicine which he wants, add to cart and then place an order and also Track his order status and he can be cancel his order until pharmacy confirm this order. Customer/patient can receive his order on door-step

Secondly, if any doctor wants to become a part of our doctor team, then doctor fill the request form and submits it. Admin can accept or reject the doctor request after verification through PMC number. If accept then system create a doctor account and send an e-mail with create password link. Doctor first creates password through link and login and setup they profile and clinic and appointment details and on appointment request they can confirm or cancel any appointment and also write a health blog.

Thirdly, lab can add new lab test, view, search and updated any test details. Lab admin can accept and cancel lab test booking. If confirm then take a patient test and upload the teat report on portal. Patient do not need to come to lab for report, they can download that report.

Fourthly, Pharmacy admin can add, view, search, remove, update any new Medicine. On medicine order pharmacy can confirm or cancel order due to different reason. If confirm then pharmacy have two option self-delivery or rider request. On rider request, Rider will take a product from shop. Then Rider will deliver the product and get payment on Cash after

receiving the cash rider will update the payment status from his dashboard. Our system will also provide a medicine expiry alert system.

Admin can monitor whole system, they can add any new user, view, search, or active or deactivate any user account in the system. Our system is also providing multiple methods of contact or complaints about any issue users face in our system.