



Daffodil
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Covid-19 Response

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This project submitted in partial fulfillment of the requirement for the degree of

B.sc in Software Engineering

Department of Software Engineering

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APPROVAL

This project titled on “**Covid-19 Response web project**”, submitted by **Prashanta Saha (ID: 171-35-1894)** to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Software Engineering and approval as to its style and contents.

BOARD OF EXAMINERS

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DECLARATION

I hereby declare that I have taken this project under the supervision **Md. Fahad Bin Zamal, Assistant Professor, Department of Software Engineering, and Daffodil International University**. I also declare that I have submitted neither this project nor any part of it for award of any degree.

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Chapter 1

Introduction

1.1 Project Overview

“Covid-19 Response” is a web based project. Through, this system Patient can easily find health service. Patient is needed to log in the system for getting health service. Other hand, Admin add health service, such as ICU bed seat, Oxygen Cylinder bottle supplier. If anyone interest donate plasma he/she can registration in this system. If any patient need a plasma therapy then patient easily contact a plasma donor. Patient search health service by his/her around location in this system. Admin add doctor for patient treatment. If any patients need treatment then patients can request for consultant. Admin confirm that by specialty and doctor consultant a patient.

1.2 Purpose

The COVID-19 pandemic in Bangladesh is part of the worldwide pandemic of coronavirus disease 2019 caused by severe acute respiratory syndrome coronavirus.

The virus was confirmed to have spread to Bangladesh in March 2020. The first three known cases were reported on 8 March 2020. Since then, the pandemic has spread day by day over the whole nation.

In this pandemic, Intensive Care Unit (ICU) most important for affected people. The number of Intensive Care Unit (ICU) beds is insufficient compared to the population of the country.

According to experts, if Bangladesh is not fully prepared to fight the threat imposed by this deadly virus, things might become very alarming in the near future. They said that those infected with the virus show neurological and respiratory complications, which are life threatening and for treating such patients, ICU is a must to ensure close monitoring and medication.

In line with international standards a 100-bed hospital should have at least five ICUs.

In reality, hospitals in Bangladesh have only 1,169 ICU beds (432 govt, 737 private) in total against a population of 161,356,039 people.

1.3 Benefits and Beneficiaries

My proposed project is **Medical-Health-Care** that will special help the patient for searching ICU beds, oxygen cylinder, plasma donor. Since my project will not only solve one specific problem, it is also effective in solving many problems at the same time so I think my field of work involves a lot of people at the same time.

- My system will help to find ICU bed. If anyone need ICU bed ,he/she search the ICU bed and emergency determination one ICU bed.
 - If anyone needs emergency oxygen purveyance then they can contact to oxygen supplier through this system and easily meetup their emergency.
 - My system will provide information to the users according to their searching location.
 - My system will provide information about a new normal patient. If anyone needs plasma then contact a new normal patient.
 - If any patient needs consultant, then he/she contact a doctor.
-
- Patient
 - Admin
 - Doctor
 - Donor

1.4 Project Objective

This system will save time. People can easily find or determine their health services search by near location. They can manage ICU bed, Oxygen Cylinder, plasma donor. If any patient need consultant patient get consultant by specially doctor

1.5 Goals

Usually we don't find minimum health service at this pandemic situation. This is a best media to find a health service. It also can solve plasma donor information.

1.6 Project Motivation

Our motivation is do somethings for people that will be solved their problems. In addition, our course teacher (Md. Fahad Bin Zamal) sir motivate us for do something different. We really want to thank our teacher for helping us in this project and for motivating us. In addition, always said one things do not worry about it, you all can do it and go ahead.

1.7 Project Problem Statement

Government have a project that name is 'Shohojodha'. Its about solve a find plasma donor. But this project problem is people cannot find easily plasma donor by his/her around location.

In this project I am solve this problem. People can manage a plasma donor around his/her location.

1.8 Stakeholder

There are three types of user in the system. The first user is Super Admin, second is Patient, third is Doctor.

Super Admin: Super admin have permission add health service, doctor, plasma donor. Super admin confirm patient booking health service Such as ICU bed, Oxygen Cylinder, Consultant. So super admin log in the system with his valid number and password then he will be able to access the system and do his work.

Patient: Patient get health service from this system. So patient log in the system with his valid number and password then he/she will be able to access the system and do his work.

Doctor: Doctor Can consultant patient. So Doctor log in the system with his valid number and password then he will be able to access the system and do his work.

Donor: Donor can donate plasma. So donor log in the system with his valid number and password then he/she will be able to access the system and do his work.

Chapter 2

Software Requirement Specification (SRS)

2.1 Functional Requirement

Functional requirements refer to the function, which is necessary for the system. They are mandatory to run the application. There is no system without functional requirements. Now, we are going to discuss functional requirement for this project.

2.1.2 Priority Chart

It is a technique to assemble the requirements according to priority. Using this technique, we can easily categorized the functional requirements that can be performed by my system and can identify which function should get High Priority and which one should get Medium Priority and which one get Low Priority.

FR ID	DESCRIPTION	PRIORITY
FR01	Login	High
FR02	Update profile	Medium
FR03	Super admin can manage patient consultant request	High
FR04	Super admin can Manage ICU bed	High
FR05	Super admin can manage Oxygen cylinder supplier	High
FR06	Super admin view manage plasma donor information	Medium
FR07	Super Admin can add a doctor	High
FR08	Patient or plasma donor can registration	High
FR09	Patient can request for consultant.	Medium
FR10	Patient can view consultant request confirmation	High
FR11	Patient can View health service	Medium
FR12	Patient can view plasma donor information	Medium
FR13	Patient can book health service	High
FR14	Patient can view book status	High
FR15	Doctor can view appointment patient and confirm by doctor status	Medium
FR16	Doctor can Consultant appointment patient	High
FR17	People can apply registration for vaccine	Medium
FR18	Donor Can create his/her info	High
FR19	Donor Can update his/her info	Medium
FR 20	Forget Password	High

Table:2.1 Priority of the system features based on Priority Chart

2.1.3 Functional Description

2.1.2

FR01	Log In		
Description	Authenticate user can log in to the system using their phone number and password.		
Stakeholders	Super Admin, Patient, Doctor	Priority	High

2.1.2 Update Profile

FR02	Update Profile		
Description	Authenticate user can Update their profile.		
Stakeholders	Super Admin, Patient, Doctor	Priority	Medium

2.1.3 Super admin can manage patient consultant request

FR03	View Patient consultant request		
Description	If any patient request for consultant then a super admin can confirm patients consultant request or update patient request information		
Stakeholders	Super Admin	Priority	High

2.1.4 Super admin can Manage Icu bed

FR04	Add ICU bed under a hospital		
Description	Super admin can add ICU bed under a dedicated hospital or update ICU bed.		
Stakeholders	Super Admin	Priority	High

2.1.5 Super admin can Manage Oxygen cylinder supplier

FR05	Add oxygen cylinder supplier		
Description	Super admin can add Oxygen cylinder supplier or update Oxygen cylinder supplier info.		
Stakeholders	Super Admin	Priority	High

2.1.6 Super admin can view plasma donor information

FR06	Add plasma donor		
Description	Super admin can view a plasma donor or donor information.		
Stakeholders	Super Admin	Priority	Medium

2.1.7 Super Admin can add a doctor

FR07	Add a doctor		
Description	For covid treatment, a super admin add a special doctor for patients		
Stakeholders	Super Admin.	Priority	High

2.1.8 Patient or plasma donor can registration

FR08	Patient or plasma donor can registration		
Description	For a treatment or book health service patient must have a registration. If anyone interest can donate plasma then he/she can registration`		
Stakeholders	Patient	Priority	High

2.1.9 Patient can request consultant

FR09	Consultant request		
Description	If any Patient need a treatment then he/she can request a consultant.		
Stakeholders	Patient	Priority	Medium

2.1.10 Patient can view request consultant confirmation

FR10	View Confirmation		
Description	Patient can view his/her consultant confirmation.		
Stakeholders	Patient	Priority	High

2.1.11 Patient can View Health service

FR11	View health service		
Description	Any patient or guest can view hospital health service. Such as icu bed seat or oxygen cylinder bottle.		
Stakeholders	Patient	Priority	Medium

2.1.12 Patient can view plasma donor information

FR12	View plasma donor		
Description	If any patients need a plasma therapy then patients can easily contact a plasma donor.		
Stakeholders	Patient	Priority	High

2.1.13 Patient can book Health service

FR13	Book health service		
Description	If any patient need a icu bed or oxygen cylinder emergency then patient can easily book icu bed or oxygen cylinder.		
Stakeholders	Patient	Priority	High

2.1.14 Patient can view book status

FR14	View Book status		
Description	If any patient need a icu emergency then patient can easily book icu bed and patient can confirm by book status.		
Stakeholders	Patient	Priority	High

2.1.15 Doctor can view appointment patient and confirm by doctor status

FR15	View patient appointment		
Description	Doctor can view patient appointment list and confirm doctor status.		
Stakeholders	Doctor	Priority	High

2.1.16 Doctor can Consultant appointment patient

FR16	Consultant Patient		
Description	Doctor treatment patient by appointment list.		
Stakeholders	Doctor	Priority	High

2.1.17 People can apply for vaccine

FR17	Registration Vaccine		
Description	All people can registration for vaccine by their own NID card.		
Stakeholders	Doctor	Priority	Medium

2.1.18 Donor Can create his/her info

FR18	Donor create his/her info		
Description	Donor create his/her info.		
Stakeholders	Donor	Priority	High

2.1.19 Donor Can update his/her info

FR19	Donor update his/her info		
Description	Donor update his/her info.		
Stakeholders	Donor	Priority	Medium

2.1.20 Recover Password

FR20	Recover Password		
Description	Authenticate users can recover password using their email.		
Stakeholders	Super Admin, Patient, Donor	Priority	High

2.2 Non-Functional Requirements

2.2.1 Performance Requirements

NFR-01	The landing function will response within second
Description	While the actors browsing the system the landing function will show within a second.
Stakeholders	Super Admin, Patient, Doctor, Guest

2.2.2 Reliability and Availability

NFR-02	The system must be available 24x7
Description	The system are available 24 hours in a day. This system will be never fall.
Stakeholders	Super Admin, Patient, Doctor, Guest

2.2.3 Maintainability and Supportability

NFR-03	The system helps to update information all the time
Description	Super admin can add hospital and can add Health service under this hospital. If any patient book any health service then automatically update health service, such as ICU bed seat, Oxygen Cylinder. If Patient need consultant then patient take treatment by a doctor. Always keep safe all the information.
Stakeholders	Super Admin, Patient, Doctor

2.2.4 Security

NFR-04	System keep secure all information.
Description	Every actors must enter in system with authentic information. Without authentic information, no one can enter the system. In addition, all the system always keep secured.
Stakeholders	Super Admin, Patient, Doctor

Chapter 3

Requirement Analysis

3.1 Use Case diagram

3.1.1 Super Admin



Figure 3.1: Use Case Diagram for Super Admin

3.1.2 Patient



Figure 3.2: Use Case Diagram for Patient

3.1.3 Doctor

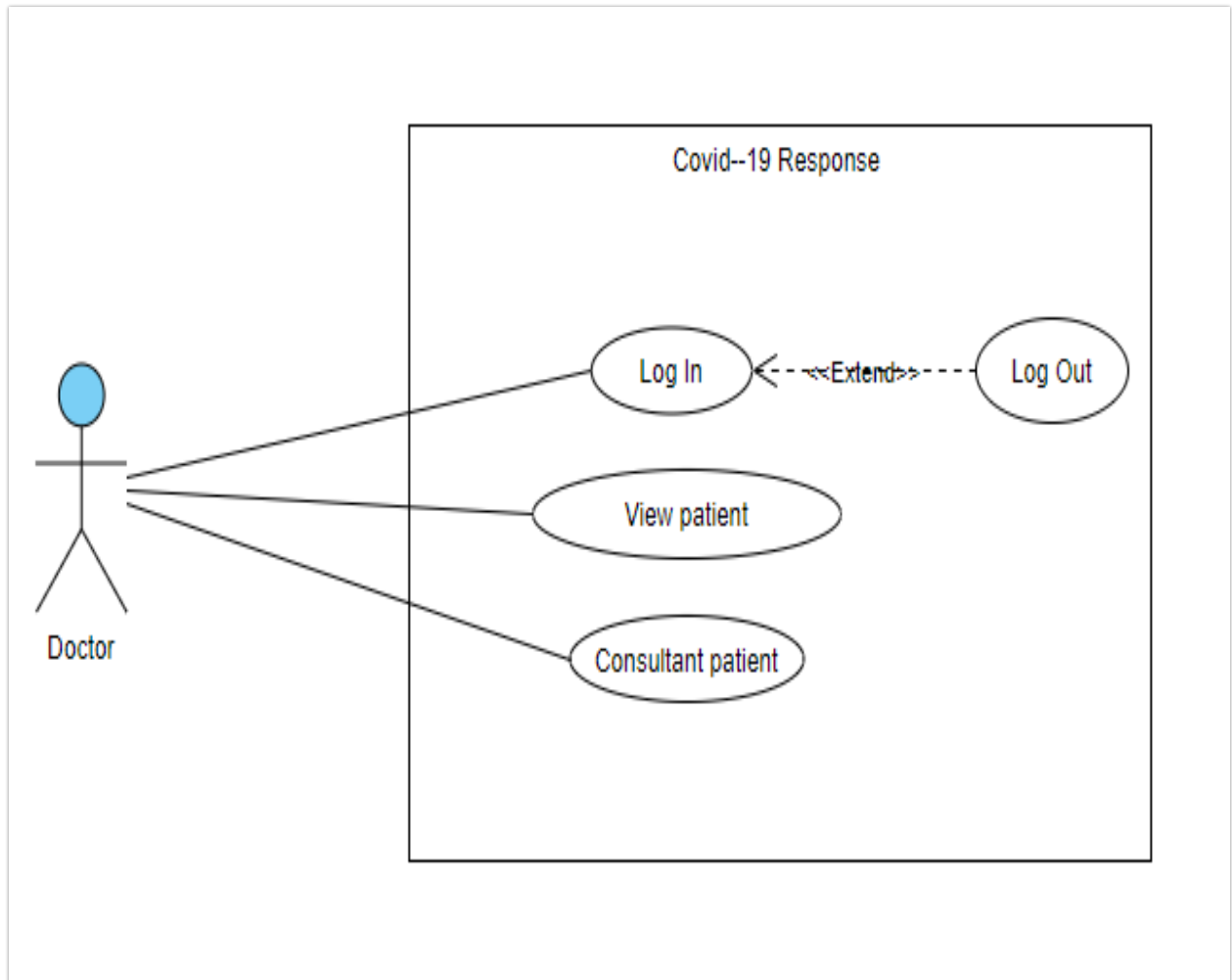


Figure 3.3: Use Case Diagram for Doctor

3.1.4 Donor

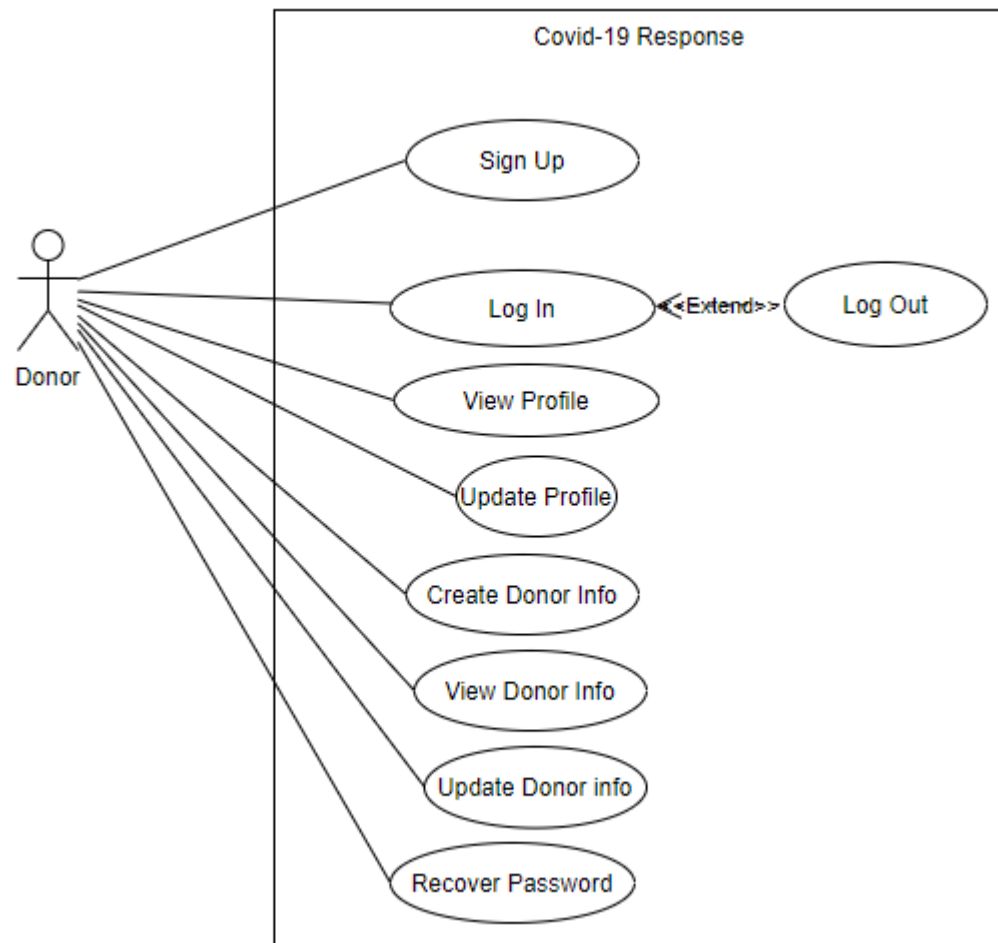


Figure 3.4: Use Case Diagram for Donor

3.2 Use Case Description

Use Case Description for Super Admin

3.2.1 Login for Super Admin

Use Case	Log In	
Goal	Super admin are able to log in and access the site	
Precondition	Super admin account information must exist in the database	
Success End Condition	Super admin will enter their authentic information and can log in. Super admin get access to their dashboard.	
Failed End Condition	Email and password is not valid	
Primary actor	Super Admin	
Secondary actor	N/A	
Trigger	Super Admin click on the “Log In” button	
Description/Main Success scenario	Step	Action
	1	System displays the Log In page
	2	Super Admin enters their email & password
	3	Super Admin clicks on the “Log In” button
	4	Super Admin successfully logged in the site
	5	Super Admin get access to their dashboard
Alternative Flows	Step	Branching Action
	3a	Email and Password is not valid
	4a	Super Admin cannot access the system
Quality Requirements	Super Admin must fill up the log in field with their authentic information	
Quality Requirements	N/A	

3.2.2 View Appointment Request for super admin

Use Case	View patient appointment request	
Goal	Super admin is able to patient appointment request in the system.	
Precondition	Super Admin have to log in the system	
Success End Condition	Super admin successfully can view patient appointment request.	
Failed End Condition	Super admin is unable to view patient appointment request.	
Primary actor	Super Admin	
Secondary actor	N/A	
Trigger	Super admin click on the “view request appointment” button	
Description/Main Success scenario	Step	Action
	1	Super Admin have to log in first
	2	System shows the super admin dashboard
	3	Super Admin clicks “view request appointment” button
	4	System displays View request appointment
	Step	Branching Action
Alternative Flows	4a	There is no post available in the database
Quality Requirements	N/A	

3.2.3 Confirm Appointment Request for super admin

Use Case	Confirm patient appointment request	
Goal	Super admin is confirm patient appointment request in the system.	
Precondition	Super Admin have to view patient appointment request	
Success End Condition	Super admin successfully can confirm patient appointment request.	
Failed End Condition	Super admin is unable to confirm patient appointment request.	
Primary actor	Super Admin	
Secondary actor	N/A	
Trigger	Super admin click on the “confirm request appointment” button	
Description/Main Success scenario	Step	Action
	1	Super Admin have to log in first
	2	System shows the super admin dashboard
	3	Super Admin clicks “appointment” button
	4	System displays view request appointment
	5	Super admin clicks “Update”
	6	Super Admin fills the required input fields and submit then it confirm appointment request.
	Step	Branching Action
Alternative Flows	6a	All the required fields are not filled yet
Quality Requirements	N/A	

3.2.4 Update Appointment Request for super admin

Use Case	Update appointment information	
Goal	Super admin is update appointment information in the system.	
Precondition	Super Admin have to log in the system	
Success End Condition	Super admin successfully can update appointment information	
Failed End Condition	Super admin is unable to update information	
Primary actor	Super Admin	
Secondary actor	N/A	
Trigger	Super admin click on the “appointment” button	
Description/Main Success scenario	Step	Action
	1	Super Admin have to log in first
	2	System shows the super admin dashboard
	3	Super Admin clicks “appointment” button
	4	System displays view appointment list
	5	Super admin clicks “Update”
	6	Super Admin fills the required input fields and submit then it add in the system.
	Step	Branching Action
Alternative Flows	6a	All the required fields are not filled yet
Quality Requirements	N/A	

3.2.5 Add ICU bed seat for super admin

Use Case	Add ICU bed at hospital	
Goal	Super admin is add ICU bed seat in the system.	
Precondition	Super Admin have to log in the system	
Success End Condition	Super admin successfully can add ICU bed seat	
Failed End Condition	Super admin is unable to add ICU bed seat	
Primary actor	Super Admin	
Secondary actor	N/A	
Trigger	Super admin click on the “ICU bed” button	
Description/Main Success scenario	Step	Action
	1	Super Admin have to log in first
	2	System shows the super admin dashboard
	3	Super Admin clicks “ICU bed” button
	4	System displays view Create a ICU bed in hospital
	5	Super admin clicks “Create a ICU bed in hospital”
	6	Super Admin fills the required input fields and submit then it add in the system.
	Step	Branching Action
Alternative Flows	6a	All the required fields are not filled yet
Quality Requirements	N/A	

3.2.6 View ICU bed request for super admin

Use Case	View ICU bed request	
Goal	Super admin is view ICU bed seat request in the system.	
Precondition	Super Admin have to log in the system	
Success End Condition	Super admin successfully can view ICU bed seat request	
Failed End Condition	Super admin is unable to view ICU bed seat request	
Primary actor	Super Admin	
Secondary actor	N/A	
Trigger	Super admin click on the “Booking ICU bed” button	
Description/Main Success scenario	Step	Action
	1	Super Admin have to log in first
	2	System shows the super admin dashboard
	3	Super Admin clicks “booking ICU bed” button
	4	System displays view request ICU bed seat
	Step	Branching Action
Alternative Flows	4a	There is no post available in the database
Quality Requirements	N/A	

3.2.7 Confirm ICU bed Request for super admin

Use Case	Confirm ICU bed request	
Goal	Super admin is confirm ICU bed seat request in the system.	
Precondition	Super Admin have to log in the system	
Success End Condition	Super admin successfully can confirm ICU bed seat request	
Failed End Condition	Super admin is unable to confirm ICU bed seat request	
Primary actor	Super Admin	
Secondary actor	N/A	
Trigger	Super admin click on the “Booking ICU bed” button	
Description/Main Success scenario	Step	Action
	1	Super Admin have to log in first
	2	System shows the super admin dashboard
	3	Super Admin clicks “booking ICU bed” button
	4	System displays view request for ICU bed seat in hospital
	5	Super admin clicks “booking update status”
	6	Super Admin fills the required input fields and submit then it confirm in the system.
Alternative Flows	Step	Branching Action
	6a	All the required fields are not filled yet
Quality Requirements	N/A	

3.2.8 Update ICU bed seat for super admin

Use Case	Update ICU bed seat	
Goal	Super admin is update ICU bed seat in the system.	
Precondition	Super Admin have to log in the system	
Success End Condition	Super admin successfully can update ICU bed seat	
Failed End Condition	Super admin is unable to update ICU bed seat	
Primary actor	Super Admin	
Secondary actor	N/A	
Trigger	Super admin click on the “ICU bed” button	
Description/Main Success scenario	Step	Action
	1	Super Admin have to log in first
	2	System shows the super admin dashboard
	3	Super Admin clicks “ICU bed” button
	4	System displays view ICU bed list
	5	Super admin clicks “Update”
	6	Super Admin fills the required input fields and submit then it add in the system.
	Step	Branching Action
Alternative Flows	6a	All the required fields are not filled yet
Quality Requirements	N/A	

3.2.9 Add oxygen supplier info for super admin

Use Case	Add Oxygen Supplier Info	
Goal	Super admin is add oxygen supplier info in the system.	
Precondition	Super Admin have to log in the system	
Success End Condition	Super admin successfully can add oxygen supplier	
Failed End Condition	Super admin is unable to add oxygen supplier	
Primary actor	Super Admin	
Secondary actor	N/A	
Trigger	Super admin click on the “Oxygen Cylinder” button	
Description/Main Success scenario	Step	Action
	1	Super Admin have to log in first
	2	System shows the super admin dashboard
	3	Super Admin clicks “Oxygen Cylinder” button
	4	System displays view Create a Oxygen Cylinder
	5	Super admin clicks “Create a Oxygen Cylinder”
	6	Super Admin fills the required input fields and submit then it add in the system.
	Step	Branching Action
Alternative Flows	6a	All the required fields are not filled yet
Quality Requirements	N/A	

3.2.10 Update Oxygen supplier info for super admin

Use Case	Update Oxygen Supplier Info	
Goal	Super admin is Update oxygen supplier info in the system.	
Precondition	Super Admin have to log in the system	
Success End Condition	Super admin successfully can Update oxygen supplier	
Failed End Condition	Super admin is unable to Update oxygen supplier	
Primary actor	Super Admin	
Secondary actor	N/A	
Trigger	Super admin click on the “Oxygen Cylinder” button	
Description/Main Success scenario	Step	Action
	1	Super Admin have to log in first
	2	System shows the super admin dashboard
	3	Super Admin clicks “Oxygen Cylinder” button
	4	System displays view Oxygen Cylinder info
	5	Super admin clicks “Update”
	6	Super Admin fills the required input fields and submit then it update in the system.
Alternative Flows	Step	Branching Action
	6a	All the required fields are not filled yet
Quality Requirements	N/A	

3.2.11 Delete Oxygen supplier info for super admin

Use Case	Delete Oxygen Supplier Info	
Goal	Super admin is Update oxygen supplier info in the system.	
Precondition	Super Admin have to log in the system	
Success End Condition	Super admin successfully can Delete oxygen supplier	
Failed End Condition	Super admin is unable to Delete oxygen supplier	
Primary actor	Super Admin	
Secondary actor	N/A	
Trigger	Super admin click on the “Oxygen Cylinder” button	
Description/Main Success scenario	Step	Action
	1	Super Admin have to log in first
	2	System shows the super admin dashboard
	3	Super Admin clicks “Oxygen Cylinder” button
	4	System displays view Oxygen Cylinder info
	5	Super admin clicks “Delete”
	6	Super Admin fills the required input fields and submit then it Delete in the system.
	Step	Branching Action
Alternative Flows	6a	All the required fields are not filled yet
Quality Requirements	N/A	

3.2.12 View Plasma Donor info for super admin

Use Case	View plasma donor information	
Goal	Super admin is view plasma donor information in the system.	
Precondition	Super Admin have to log in the system	
Success End Condition	Super admin successfully can view plasma donor information	
Failed End Condition	Super admin is unable to view plasma donor information	
Primary actor	Super Admin	
Secondary actor	N/A	
Trigger	Super admin click on the “plasma” button	
Description/Main Success scenario	Step	Action
	1	Super Admin have to log in first
	2	System shows the super admin dashboard
	3	Super Admin clicks “plasma” button
	4	System displays view donor information
	Step	Branching Action
Alternative Flows	4a	There is no post available in the database
Quality Requirements	N/A	

3.2.13 Add Doctor for super admin

Use Case	Add doctor	
Goal	Super admin is add doctor in the system.	
Precondition	Super Admin have to log in the system	
Success End Condition	Super admin successfully can add doctor	
Failed End Condition	Super admin is unable to add doctor	
Primary actor	Super Admin	
Secondary actor	N/A	
Trigger	Super admin click on the “Doctor” button	
Description/Main Success scenario	Step	Action
	1	Super Admin have to log in first
	2	System shows the super admin dashboard
	3	Super Admin clicks “Doctor” button
	4	System displays view create a doctor
	5	Super admin clicks “create a doctor”
	6	Super Admin fills the required input fields and submit then it add in the system.
	Step	Branching Action
Alternative Flows	6a	All the required fields are not filled yet
Quality Requirements	N/A	

3.2.14 View Profile for super admin

Use Case	View Profile	
Goal	Super admin is able to see his profile information in the system	
Precondition	Super admin is logged into the system	
Success End Condition	Super admin successfully can view profile information	
Failed End Condition	Super admin is unable to view profile information	
Primary actor	Super Admin	
Secondary actor	N/A	
Trigger	Super admin click on the “Profile” button	
Description/Main Success scenario	Step	Action
	1	Super Admin have to log in first
	2	System shows the super admin dashboard
	3	Super Admin clicks “Profile” button
	4	System displays View profile Information
Alternative Flows	Step	Branching Action
	4a	There is no profile available in the database
Quality Requirements	N/A	

3.2.15 Update Profile for super admin

Use Case	Update Profile	
Goal	Super admin is able to see his profile information in the system	
Precondition	Super admin is logged into the system	
Success End Condition	Super admin successfully can Update profile information	
Failed End Condition	Super admin is unable to Update profile information	
Primary actor	Super Admin	
Secondary actor	N/A	
Trigger	Super admin click on the “Update Profile” button	
Description/Main Success scenario	Step	Action
	1	Super Admin have to log in first
	2	System shows the super admin dashboard
	3	Super Admin clicks “ Update Profile” button
	4	System displays View profile Information and can update info
Alternative Flows	Step	Branching Action
	4a	There is no profile available in the database
Quality Requirements	N/A	

3.2.16 Recovery Password for super admin

Use Case	Recover Password	
Goal	Super admin can recover their password when forgotten	
Precondition	Super Admin account information must be exist in the database	
Success End Condition	Password recovery link is delivered to the super admin	
Failed End Condition	Super admin email doesn't match	
Primary actor	Super Admin	
Secondary actor	N/A	
Trigger	Super admin click on the "Forget Password" button	
Description/Main Success scenario	Step	Action
	1	System displays password recovery page
	2	Super Admin enters their email address
	3	Super Admin clicks on the "Next" button
	4	Super Admin gets password reset link
	5	Super Admin successfully recover pass
Alternative Flows	Step	Branching Action
	3a	Email is not registered
Quality Requirements	N/A	

3.2.17 Registration Patient

Use Case	Registration	
Goal	Patient can create an account successfully	
Precondition	N/A	
Success End Condition	New account is created and access site	
Failed End Condition	Already have an account with the given email address	
Primary actor	Patient	
Secondary actor	N/A	
Trigger	Patient click on the “Registration” button	
Description/Main Success scenario	Step	Action
	1	System displays the registration up page
	2	Patient fills up the required fields
	3	Patient clicks on the “Submit” button
	4	Patient check his phone number to active accounts
	5	Patient get access to their dashboard
	Step	Branching Action
Alternative Flows	3a	Mandatory / required input fields are not filled in
	4a	Patient cannot access the system
Quality Requirements	Patient must fill up the log in field with their authentic information	

3.2.18 Log In for Patient

Use Case	Log In	
Goal	Patient are able to log in and access the site	
Precondition	Patient account information must exist in the database	
Success End Condition	Patient will enter their authentic information and can log in. Super admin get access to their dashboard.	
Failed End Condition	Email and password is not valid	
Primary actor	Patient	
Secondary actor	N/A	
Trigger	Patient click on the “Log In” button	
Description/Main Success scenario	Step	Action
	1	System displays the Log In page
	2	Patient enters their email & password
	3	Patient clicks on the “Log In” button
	4	Patient successfully logged in the site
	5	Patient get access to their dashboard
Alternative Flows	Step	Branching Action
	3a	Email and Password is not valid
	4a	Patient cannot access the system
Quality Requirements	Patient must fill up the log in field with their authentic information	
Quality Requirements	N/A	

3.2.19 Request consultant for Patient

Use Case	Request for consultant appointment	
Goal	Patient is request appointment in the system.	
Precondition	Patient have to log in the system	
Success End Condition	Patient successfully can request	
Failed End Condition	Patient is unable to request	
Primary actor	Patient	
Secondary actor	N/A	
Trigger	Patient click on the “Make an appointment” button	
Description/Main Success scenario	Step	Action
	1	Patient have to log in first
	2	System shows the patient dashboard
	3	Patient clicks “Make an appointment” button
	4	System displays view “What is your problem”
	5	Patient fills the required input fields and submit then it request in the system.
	Step	Branching Action
Alternative Flows	5a	All the required fields are not filled yet
Quality Requirements	N/A	

3.2.20 View patient appointment for Patient

Use Case	View patient appointment	
Goal	Patient is able to view appointment in the system.	
Precondition	Patient have to log in the system	
Success End Condition	Patient successfully can view appointment .	
Failed End Condition	Patient is unable to view appointment.	
Primary actor	Patient	
Secondary actor	N/A	
Trigger	Patient click on the “view appointment” button	
Description/Main Success scenario	Step	Action
	1	Patient have to log in first
	2	System shows the Patient dashboard
	3	Patient clicks “view appointment” button
	4	System displays View appointment
	Step	Branching Action
Alternative Flows	4a	There is no post available in the database
Quality Requirements	N/A	

3.2.21 View ICU bed for Patient

Use Case	View ICU bed Seat	
Goal	Patient is able to view ICU bed seat in the system.	
Precondition	Patient have to browse in the system	
Success End Condition	Patient successfully can view ICU bed seat .	
Failed End Condition	Patient is unable to ICU bed seat.	
Primary actor	Patient	
Secondary actor	N/A	
Trigger	Patient click on the “ICU bed” button	
Description/Main Success scenario	Step	Action
	1	Patient have to browse this site
	2	System shows the home page
	3	Patient clicks “ICU bed” button
	4	System displays View ICU bed seat
	Step	Branching Action
Alternative Flows	4a	There is no post available in the database
Quality Requirements	N/A	

3.2.22 Booking ICU bed for Patient

Use Case	Booking ICU bed	
Goal	Patient is booking ICU bed in the system.	
Precondition	Patient have to log in the system	
Success End Condition	Patient successfully can book	
Failed End Condition	Patient is unable to book	
Primary actor	Patient	
Secondary actor	N/A	
Trigger	Patient click on the “ICU bed book now” button	
Description/Main Success scenario	Step	Action
	1	Patient have to log in first
	2	System shows the patient dashboard
	3	Patient clicks “ICU bed book now” button
	Step	Branching Action
Alternative Flows	5a	“Cannot work ICU bed book now button”
Quality Requirements	N/A	

3.2.23 View book status for Patient

Use Case	View ICU bed book status	
Goal	Patient is able to view book status in the system.	
Precondition	Patient have to log in the system	
Success End Condition	Patient successfully can view status .	
Failed End Condition	Patient is unable to view status.	
Primary actor	Patient	
Secondary actor	N/A	
Trigger	Patient click on the “booking list” button	
Description/Main Success scenario	Step	Action
	1	Patient have to log in first
	2	System shows the Patient dashboard
	3	Patient clicks “booking list” button
	4	System displays View book list status
	Step	Branching Action
Alternative Flows	4a	There is no post available in the database
Quality Requirements	N/A	

3.2.24 View Oxygen Supplier info for Patient

Use Case	View oxygen supplier Information	
Goal	Patient is able to view oxygen supplier info in the system.	
Precondition	Patient have to log in the system	
Success End Condition	Patient successfully can view supplier info.	
Failed End Condition	Patient is unable to view supplier info.	
Primary actor	Patient	
Secondary actor	N/A	
Trigger	Patient click on the “Oxygen Supplier” button	
Description/Main Success scenario	Step	Action
	1	Patient have to log in first
	2	System shows the Patient dashboard
	3	Patient clicks “Oxygen Supplier” button
	4	System displays View supplier info
	Step	Branching Action
Alternative Flows	4a	There is no post available in the database
Quality Requirements	N/A	

3.2.25 View plasma donor info for Patient

Use Case	View plasma donor Information	
Goal	Patient is able to view plasma donor info in the system.	
Precondition	Patient have to log in the system	
Success End Condition	Patient successfully can view donor info.	
Failed End Condition	Patient is unable to view donor info.	
Primary actor	Patient	
Secondary actor	N/A	
Trigger	Patient click on the “Plasma donor” button	
Description/Main Success scenario	Step	Action
	1	Patient have to log in first
	2	System shows the Patient dashboard
	3	Patient clicks “Plasma donor” button
	4	System displays View donor info
	Step	Branching Action
Alternative Flows	4a	There is no post available in the database
Quality Requirements	N/A	

3.2.26 View profile for Patient

Use Case	View Profile	
Goal	Patient is able to see his profile information in the system	
Precondition	Patient is logged into the system	
Success End Condition	Patient successfully can view profile information	
Failed End Condition	Patient is unable to view profile information	
Primary actor	Patient	
Secondary actor	N/A	
Trigger	Super admin click on the “Profile” button	
Description/Main Success scenario	Step	Action
	1	Patient have to log in first
	2	System shows the patient dashboard
	3	Patient clicks “Profile” button
	4	System displays View profile Information
	Step	Branching Action
Alternative Flows	4a	There is no profile available in the database
Quality Requirements	N/A	

3.2.27 Update Profile for Patient

Use Case	Update Profile	
Goal	Patient is able to see his profile information in the system	
Precondition	Patient is logged into the system	
Success End Condition	Patient successfully can Update profile information	
Failed End Condition	Patient is unable to Update profile information	
Primary actor	Patient	
Secondary actor	N/A	
Trigger	Patient click on the “Update Profile” button	
Description/Main Success scenario	Step	Action
	1	Patient have to log in first
	2	System shows the patient dashboard
	3	Patient clicks “ Update Profile” button
	4	System displays View profile Information and can update info
	Step	Branching Action
Alternative Flows	4a	There is no profile available in the database
Quality Requirements	N/A	

3.2.28 Recover password for Patient

Use Case	Recover Password	
Goal	Patient can recover their password when forgotten	
Precondition	Patient account information must be exist in the database	
Success End Condition	Password recovery link is delivered to the Patient	
Failed End Condition	Patient email doesn't match	
Primary actor	Patient	
Secondary actor	N/A	
Trigger	Patient click on the "Forget Password" button	
Description/Main Success scenario	Step	Action
	1	System displays password recovery page
	2	Patient enters their email address
	3	Patient clicks on the "Next" button
	4	Patient gets password reset link
	5	Patient successfully recover pass
Alternative Flows	Step	Branching Action
	3a	Email is not registered
Quality Requirements	N/A	

3.2.29 Log In for Doctor

Use Case	Log In	
Goal	Doctor are able to log in and access the site	
Precondition	Doctor account information must exist in the database	
Success End Condition	Doctor will enter their authentic information and can log in. Super admin get access to their dashboard.	
Failed End Condition	Email and password is not valid	
Primary actor	Doctor	
Secondary actor	N/A	
Trigger	Doctor click on the “Log In” button	
Description/Main Success scenario	Step	Action
	1	System displays the Log In page
	2	Doctor enters their email & password
	3	Doctor clicks on the “Log In” button
	4	Doctor successfully logged in the site
	5	Doctor get access to their dashboard
Alternative Flows	Step	Branching Action
	3a	Email and Password is not valid
	4a	Doctor cannot access the system
Quality Requirements	Super Admin must fill up the log in field with their authentic information	
Quality Requirements	N/A	

3.2.30 View patient for Doctor

Use Case	View patient	
Goal	Doctor is able to view patient in the system.	
Precondition	Doctor have to log in the system	
Success End Condition	Doctor successfully can view patient info.	
Failed End Condition	Doctor is unable to view patient info.	
Primary actor	Doctor	
Secondary actor	N/A	
Trigger	Doctor click on the “View Appointment” button	
Description/Main Success scenario	Step	Action
	1	Doctor have to log in first
	2	System shows the Doctor dashboard
	3	Doctor clicks “View Appointment” button
	4	System displays View patient info
	Step	Branching Action
Alternative Flows	4a	There is no post available in the database
Quality Requirements	N/A	

3.2.31 Consultant for Doctor

Use Case	Consultant Patient	
Goal	Doctor is able to Consultant patient by meet link.	
Precondition	Doctor have to log in the system	
Success End Condition	Doctor successfully can consultant patient.	
Failed End Condition	Doctor is unable to consultant patient.	
Primary actor	Doctor	
Secondary actor	N/A	
Trigger	Doctor click on the “Meet Link”	
Description/Main Success scenario	Step	Action
	1	Doctor have to log in first
	2	System shows the Doctor dashboard
	3	Doctor clicks “View Appointment” button
	4	System displays view meet link
	Step	Branching Action
Alternative Flows	4a	There is no post available in the database
Quality Requirements	N/A	

3.2.32 Registration for Donor

Use Case	Registration	
Goal	Donor can create an account successfully	
Precondition	N/A	
Success End Condition	New account is created and access site	
Failed End Condition	Already have an account with the given email address	
Primary actor	Donor	
Secondary actor	N/A	
Trigger	Donor click on the “Registration” button	
Description/Main Success scenario	Step	Action
	1	System displays the registration up page
	2	Donor fills up the required fields
	3	Donor clicks on the “Submit” button
	4	Donor check his phone number to active accounts
	5	Donor get access to their dashboard
Alternative Flows	Step	Branching Action
	3a	Mandatory / required input fields are not filled in
	4a	Donor cannot access the system
Quality Requirements	Donor must fill up the log in field with their authentic information	

3.2.33 Create donor for Donor

Use Case	Create Donor info	
Goal	Donor can create donate info in the system.	
Precondition	Donor have to log in the system	
Success End Condition	Donor successfully can create info	
Failed End Condition	Donor is unable to create info	
Primary actor	Donor	
Secondary actor	N/A	
Trigger	Donor click on the “Create Donor info” button	
Description/Main Success scenario	Step	Action
	1	Donor have to log in first
	2	System shows the donor dashboard
	3	Donor clicks “Create Donor info” button
	Step	Branching Action
Alternative Flows	5a	“Cannot work Create Donor button”
Quality Requirements	N/A	

3.2.34 Update Donor info for Donor

Use Case	Update Donor info	
Goal	Donor can Update donate info in the system.	
Precondition	Donor have to log in the system	
Success End Condition	Donor successfully can create info	
Failed End Condition	Donor is unable to Update info	
Primary actor	Donor	
Secondary actor	N/A	
Trigger	Donor click on the “Update” button	
Description/Main Success scenario	Step	Action
	1	Donor have to log in first
	2	System shows the donor dashboard
	3	Donor clicks “Update” button
	Step	Branching Action
Alternative Flows	5a	“Cannot Update button”
Quality Requirements	N/A	

3.2.35 View Profile for Donor

Use Case	View Profile	
Goal	Donor is able to see his profile information in the system	
Precondition	Donor is logged into the system	
Success End Condition	Donor successfully can view profile information	
Failed End Condition	Donor is unable to view profile information	
Primary actor	Donor	
Secondary actor	N/A	
Trigger	Super admin click on the “Donor” button	
Description/Main Success scenario	Step	Action
	1	Donor have to log in first
	2	System shows the Donor dashboard
	3	Donor clicks “Profile” button
	4	System displays View profile Information
	Step	Branching Action
Alternative Flows	4a	There is no profile available in the database
Quality Requirements	N/A	

3.2.36 Update Profile for Donor

Use Case	Update Profile	
Goal	Donor is able to see his profile information in the system	
Precondition	Donor is logged into the system	
Success End Condition	Donor successfully can Update profile information	
Failed End Condition	Donor is unable to Update profile information	
Primary actor	Donor	
Secondary actor	N/A	
Trigger	Donor click on the “Update Profile” button	
Description/Main Success scenario	Step	Action
	1	Donor have to log in first
	2	System shows the Donor dashboard
	3	Donor clicks “ Update Profile” button
	4	System displays View profile Information and can update info
	Step	Branching Action
Alternative Flows	4a	There is no profile available in the database
Quality Requirements	N/A	

3.2.37 Recovery password for Donor

Use Case	Recover Password	
Goal	Donor can recover their password when forgotten	
Precondition	Donor account information must be exist in the database	
Success End Condition	Password recovery link is delivered to the Donor	
Failed End Condition	Donor email doesn't match	
Primary actor	Donor	
Secondary actor	N/A	
Trigger	Donor click on the "Forget Password" button	
Description/Main Success scenario	Step	Action
	1	System displays password recovery page
	2	Donor enters their email address
	3	Donor clicks on the "Next" button
	4	Donor gets password reset link
	5	Donor successfully recover pass
Alternative Flows	Step	Branching Action
	3a	Email is not registered
Quality Requirements	N/A	

3.3 Activity Diagram

3.3.1 Registration

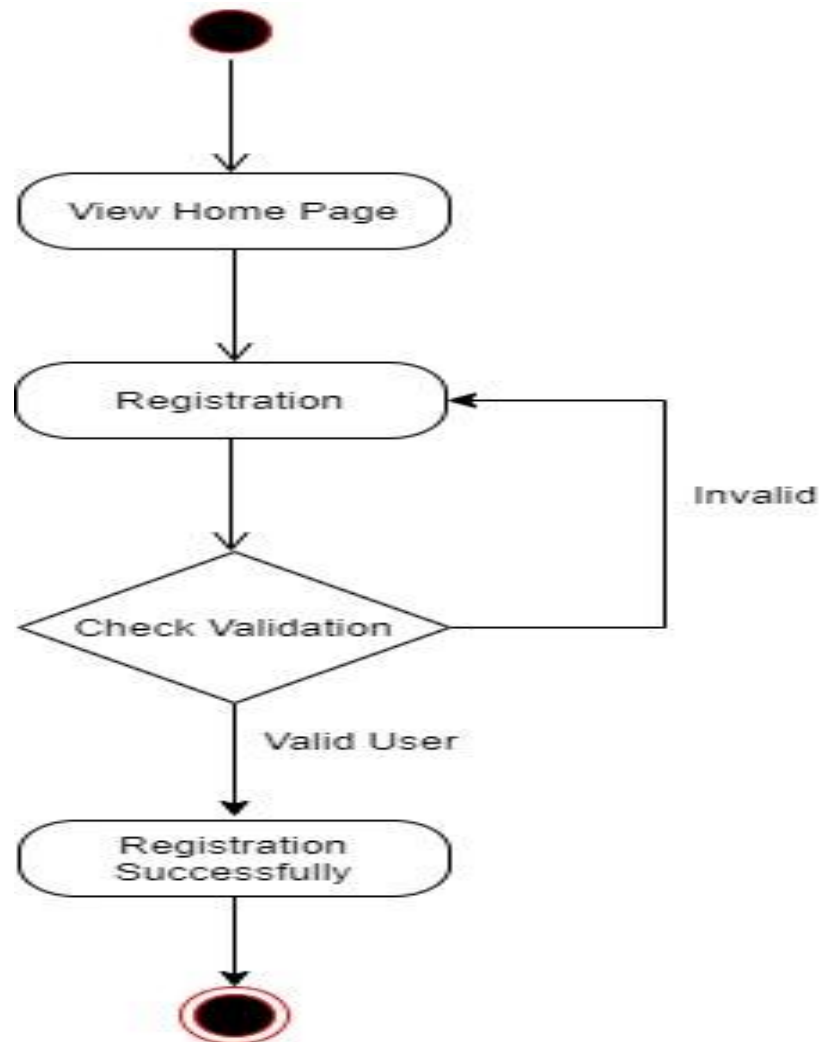


Figure 3.5: Activity diagram for Registration

3.3.2 Log In

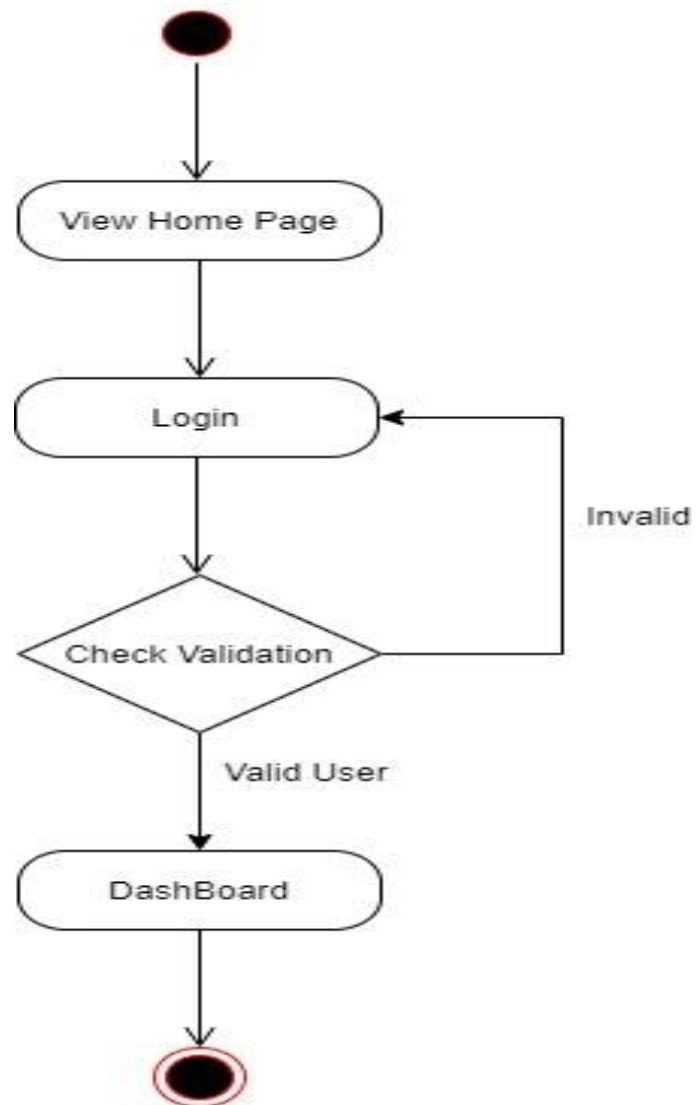


Figure 3.6: Activity diagram for Log In

3.3.3 View Appointment

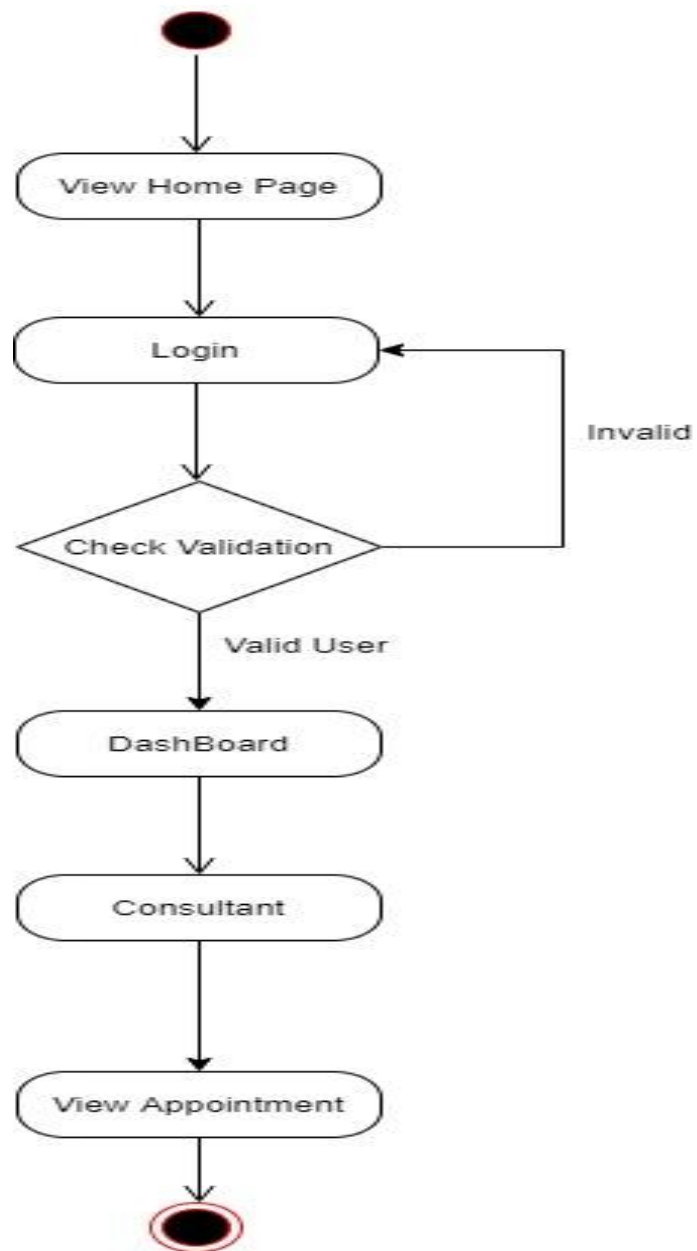


Figure 3.7: Activity diagram View Appointment for Super Admin

3.3.4 Confirm Appointment request

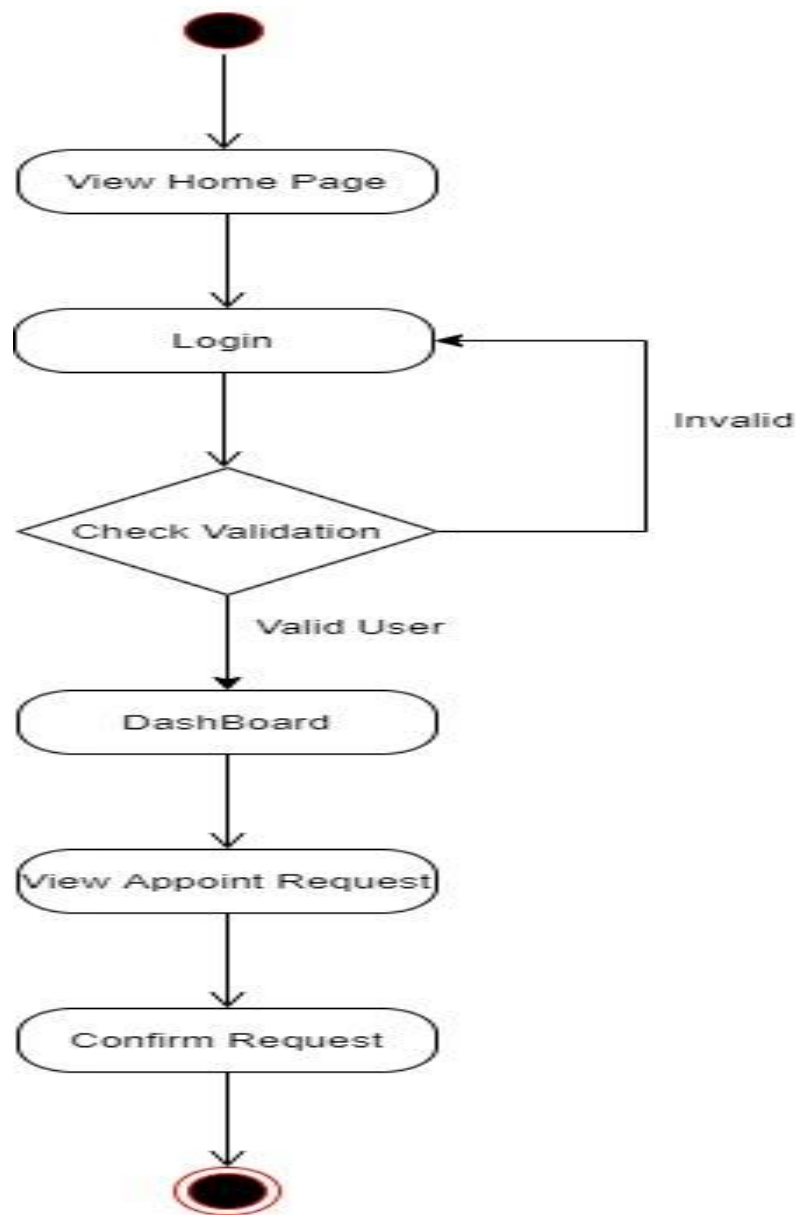


Figure 3.8: Activity diagram Confirm Request for super admin

3.3.5 Update Appointment Request

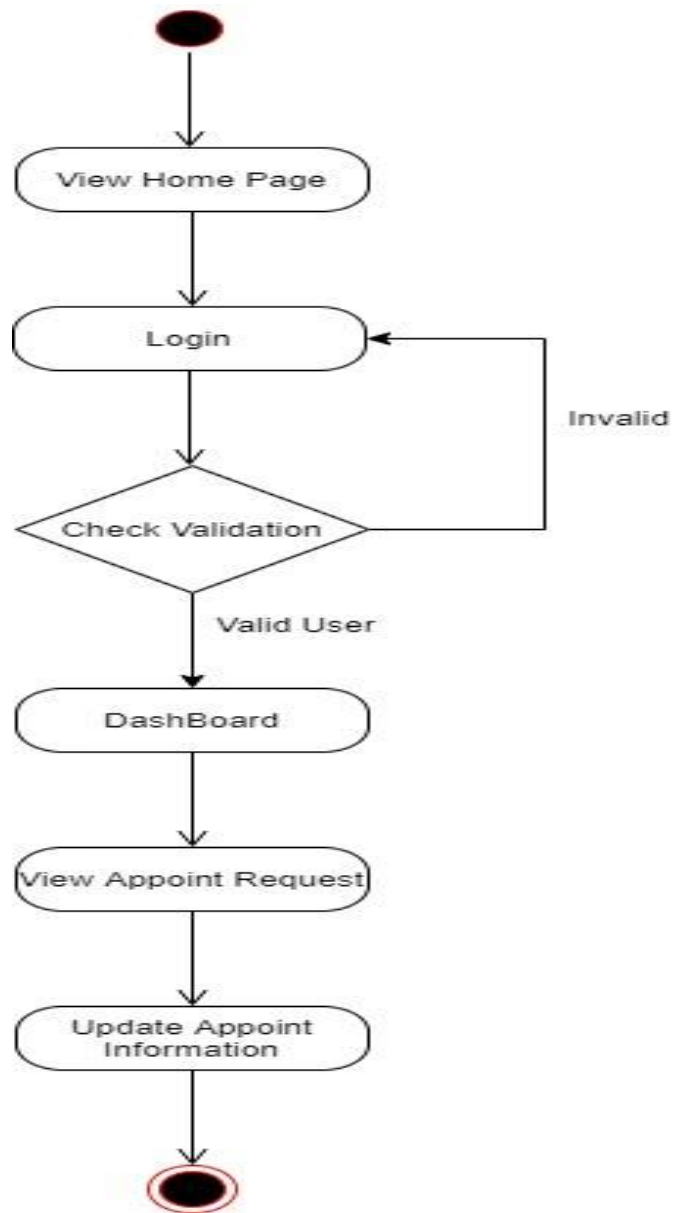


Figure 3.9: Activity Update Appointment for Super Admin

3.3.6 Add ICU bed

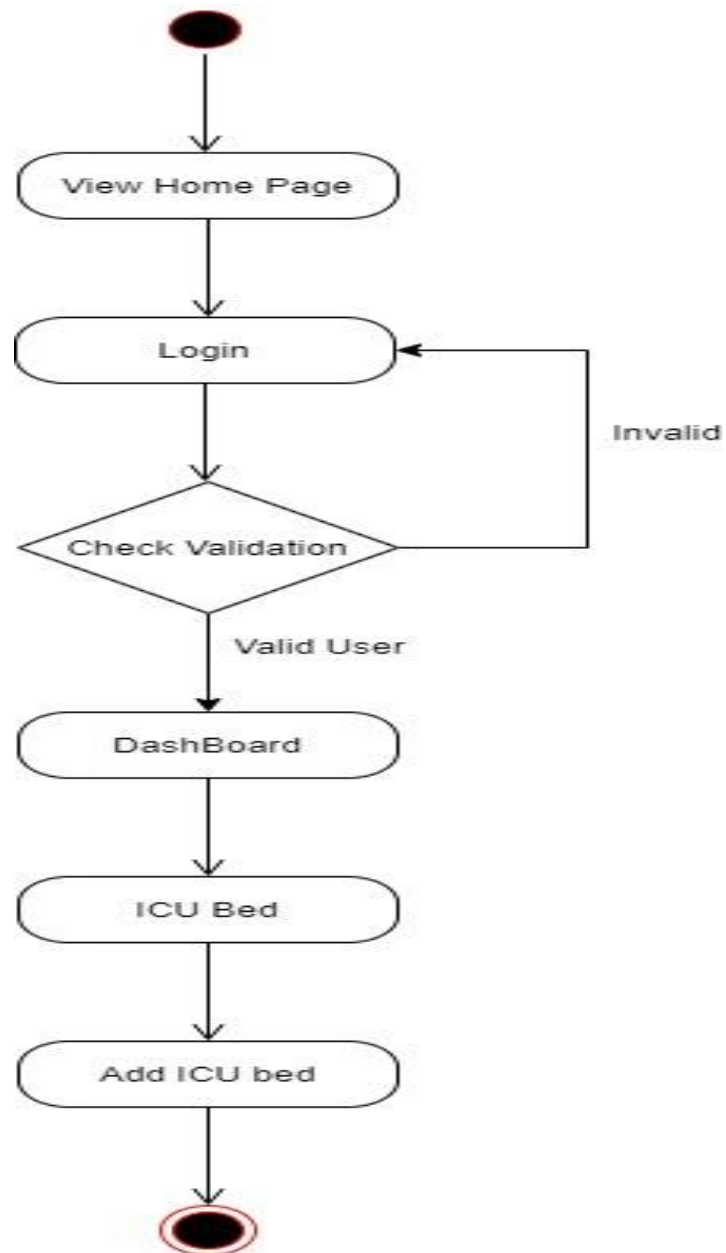


Figure 3.10: Activity diagram Add ICU bed Super Admin

3.3.7 View ICU bed request

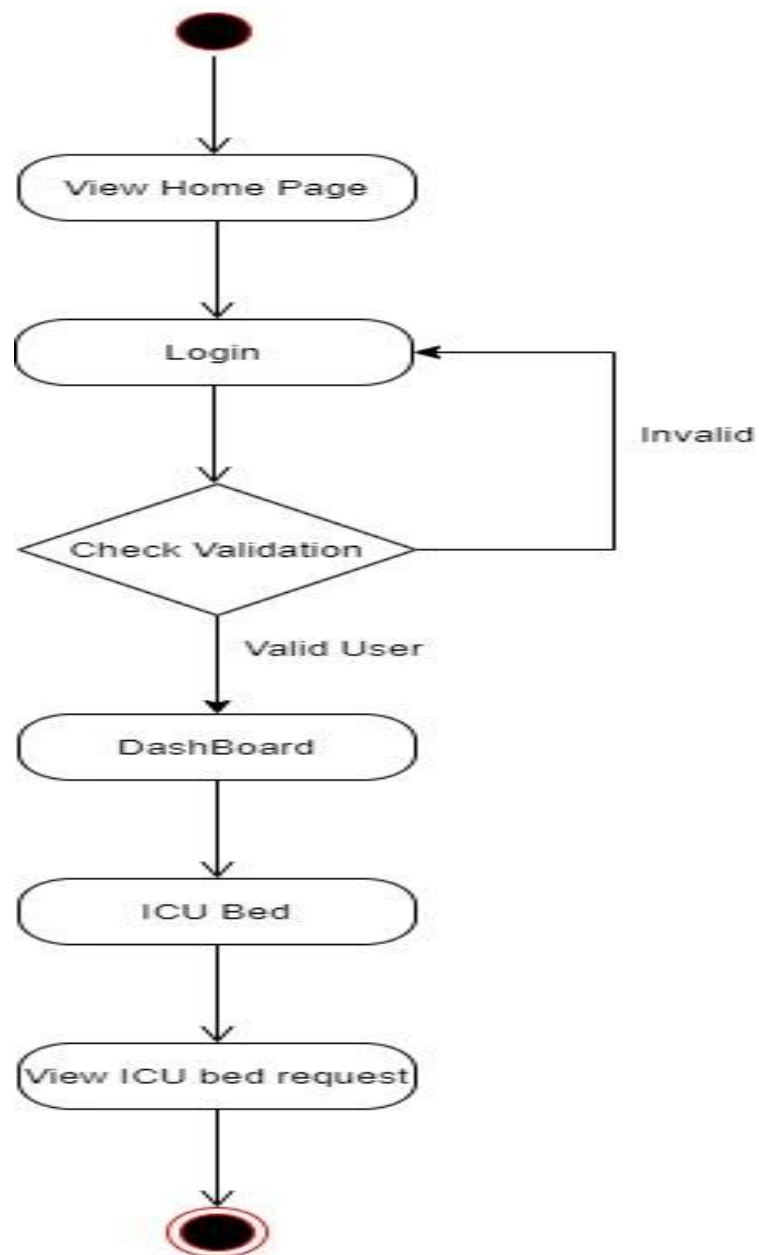


Figure 3.11: Activity diagram View ICU bed request for Super Admin

3.3.8 Confirm ICU bed request

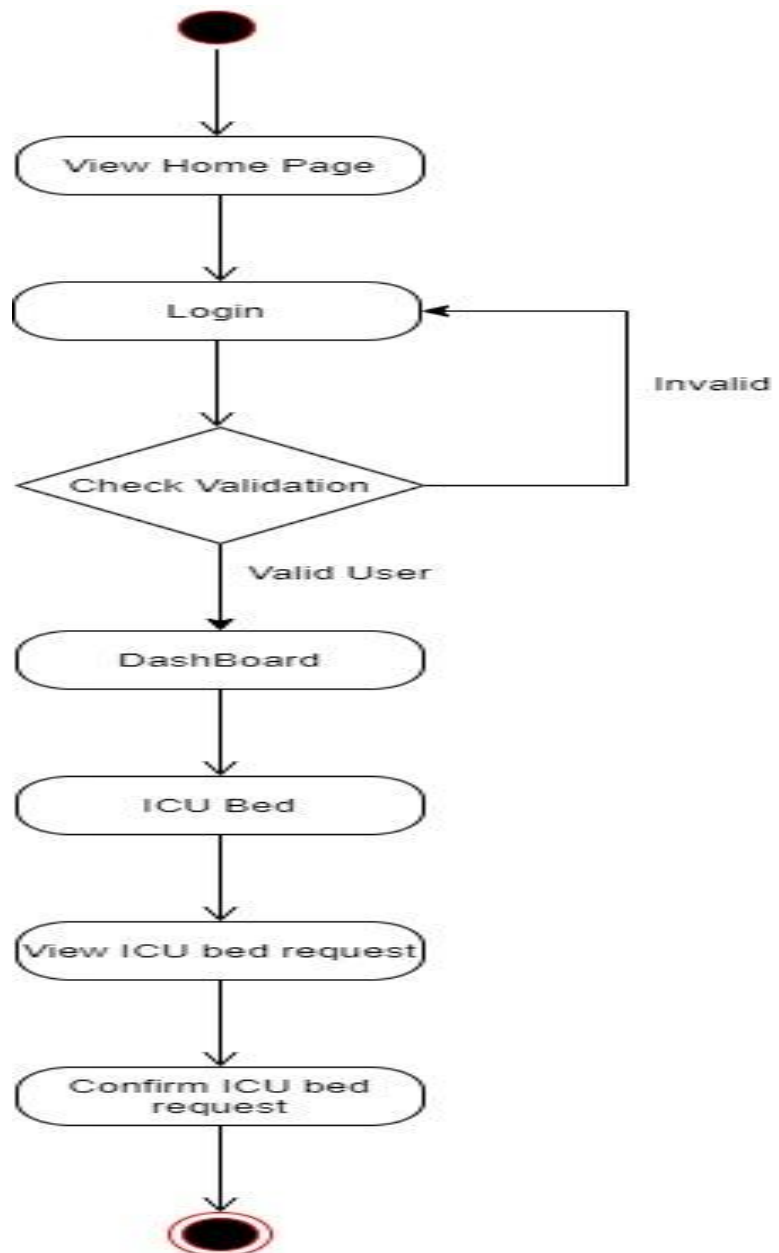


Figure 3.12: Activity diagram Confirm ICU bed request for Super Admin

3.3.9 Update ICU bed

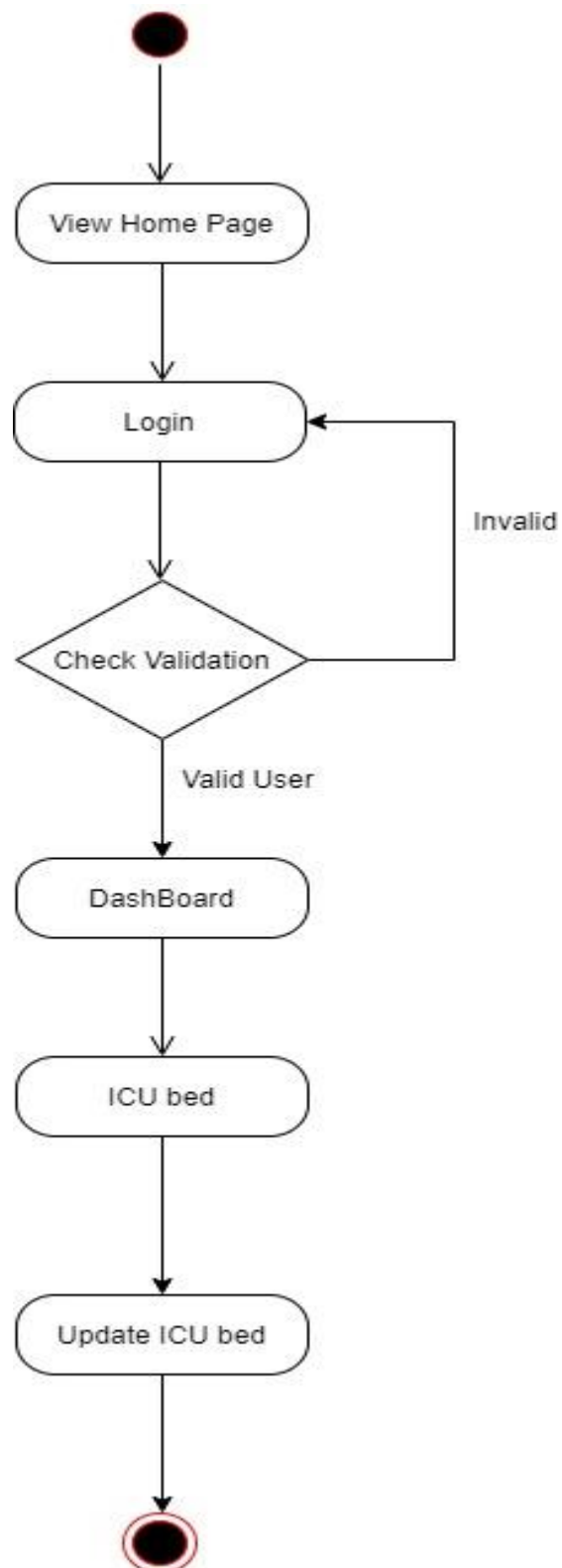


Figure 3.13: Activity diagram Update ICU bed for Super Admin

3.3.10 Add Oxygen Supplier

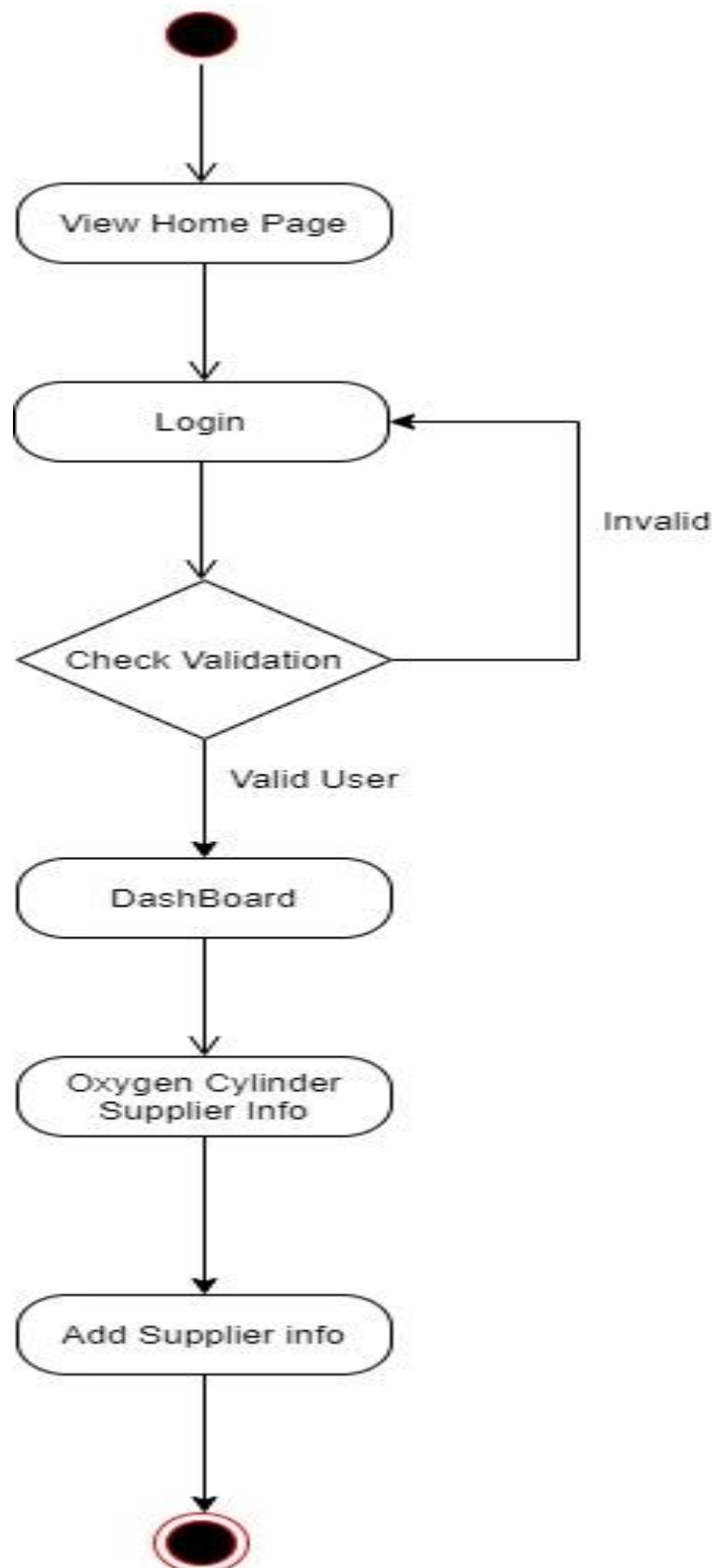


Figure 3.14: Activity diagram Add Oxygen Supplier Info for Super Admin

3.3.11 Update Supplier Info

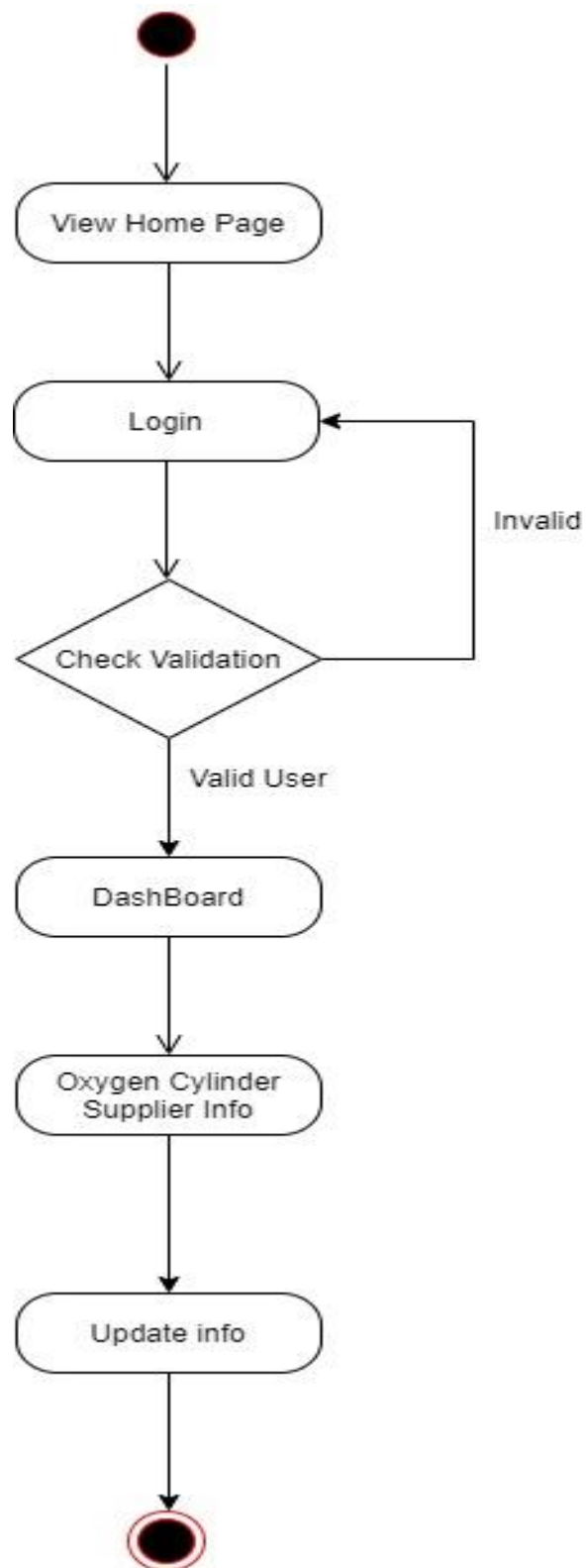


Figure 3.15: Activity diagram Update Supplier info for Super Admin

3.3.12 Delete Supplier Info

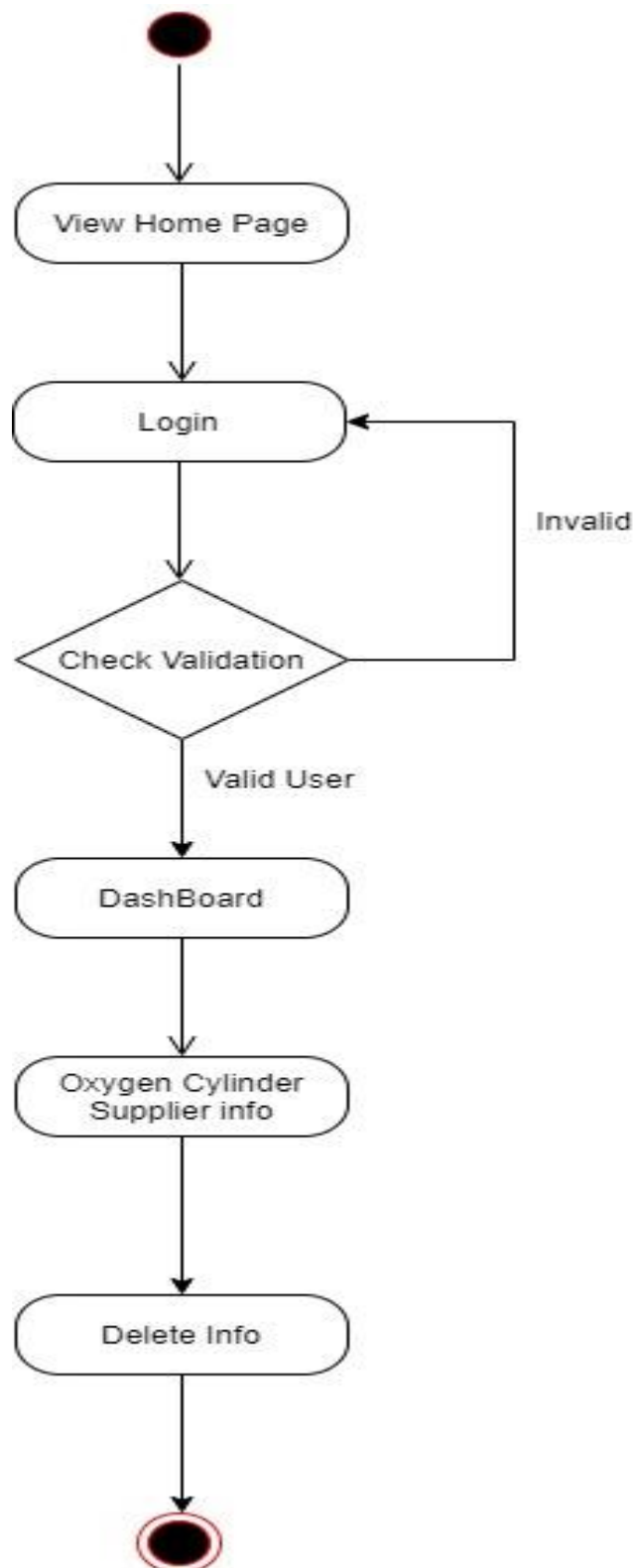


Figure 3.16: Activity diagram Delete supplier info for super Admin

3.3.13 View Plasma Donor

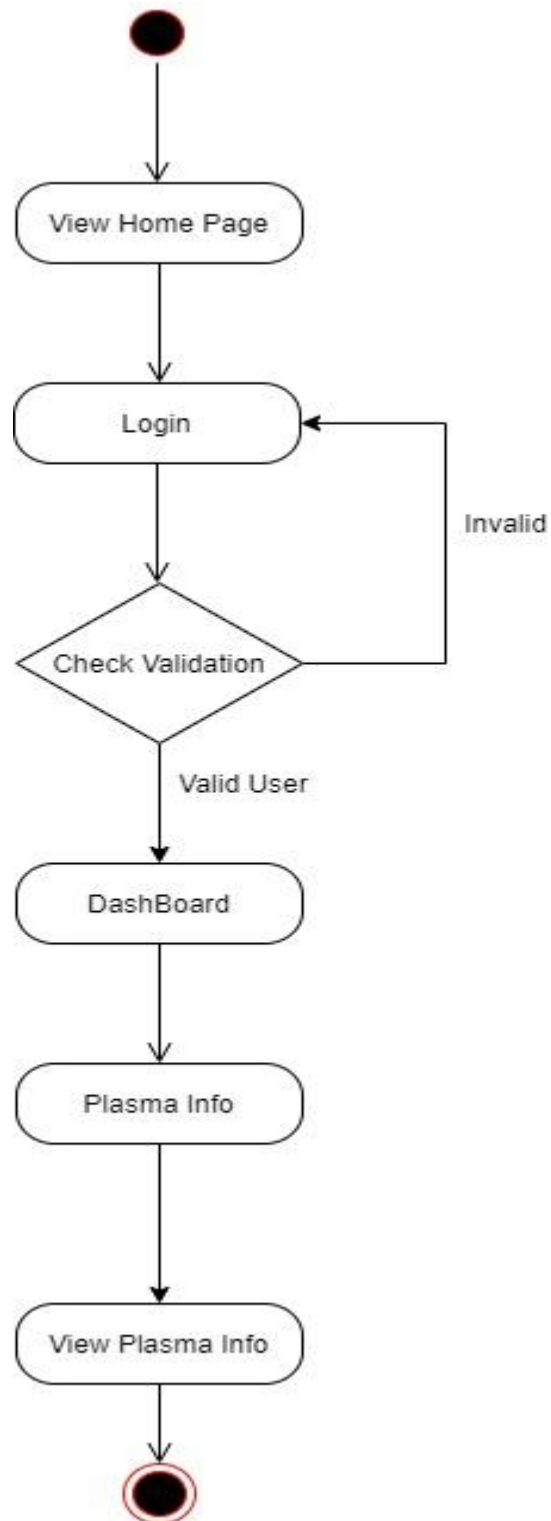


Figure 3.17: Activity diagram View Plasma Donor

3.3.14 Update Profile

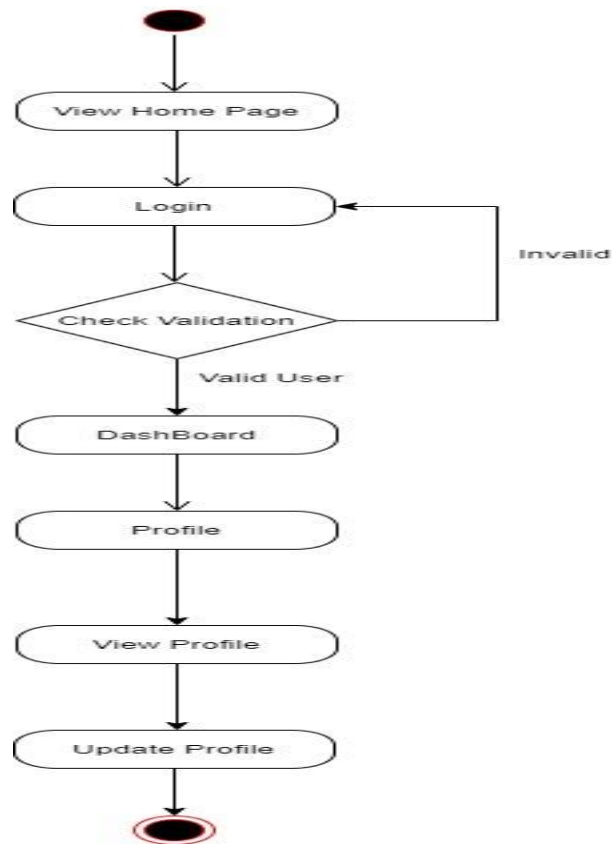


Figure 3.18: Activity diagram Update Profile

3.3.15 Request Appointment Consultant

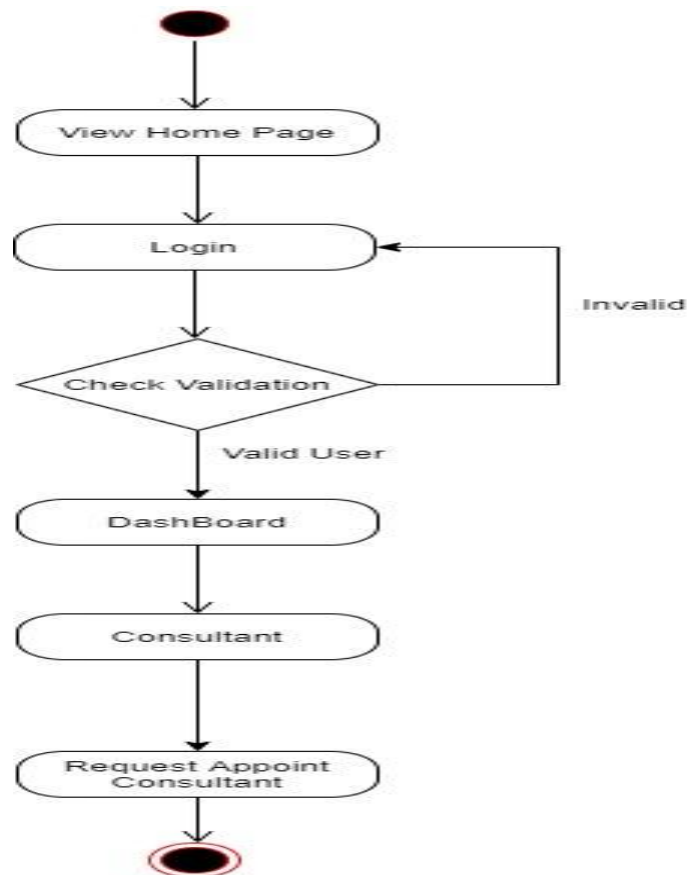


Figure 3.19: Activity diagram request appointment for patient

3.3.16 View Appointment

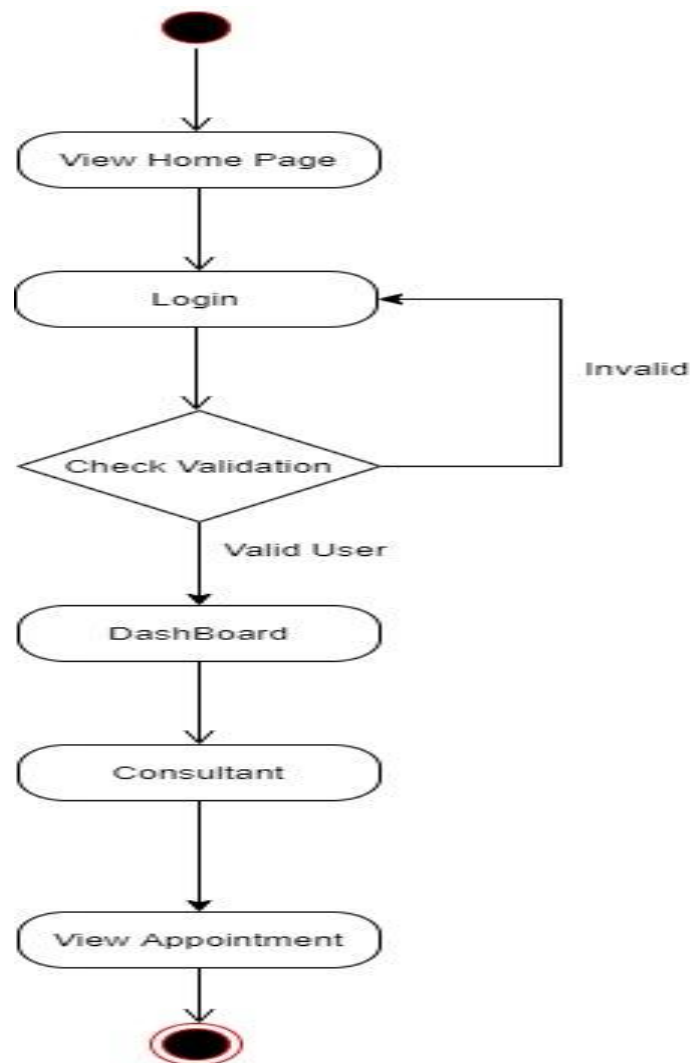


Figure 3.20: Activity diagram View Appointment

3.3.17 View ICU bed seat

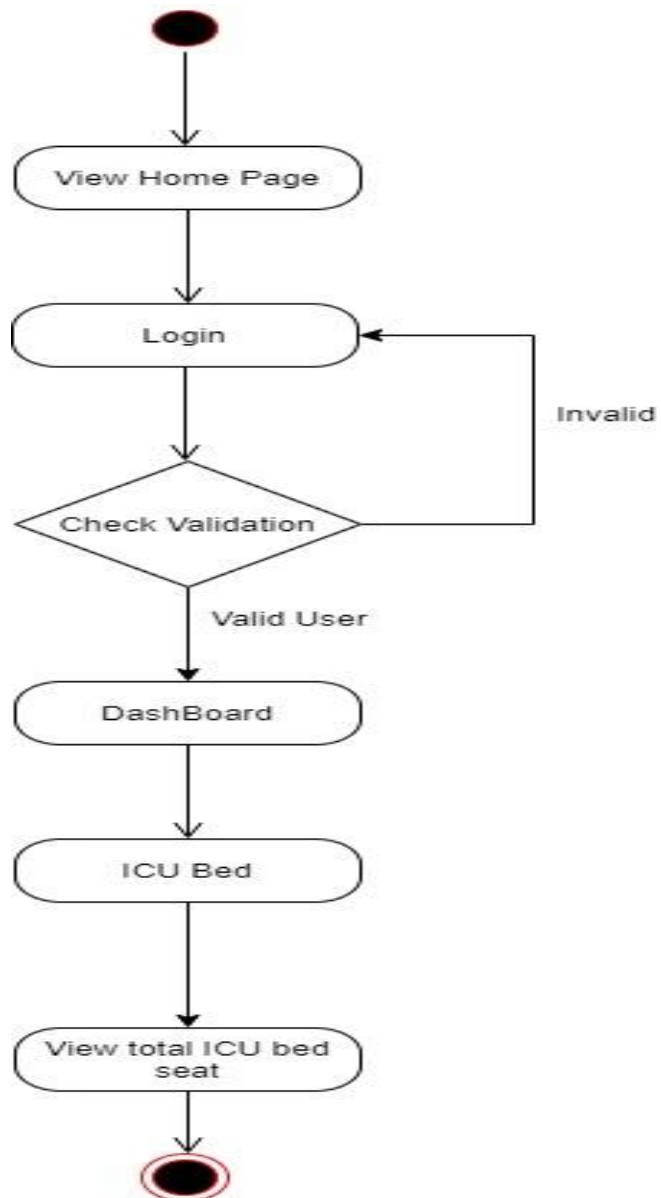


Figure 3.21: Activity diagram View ICU bed seat for Patient

3.3.18 Book ICU bed seat

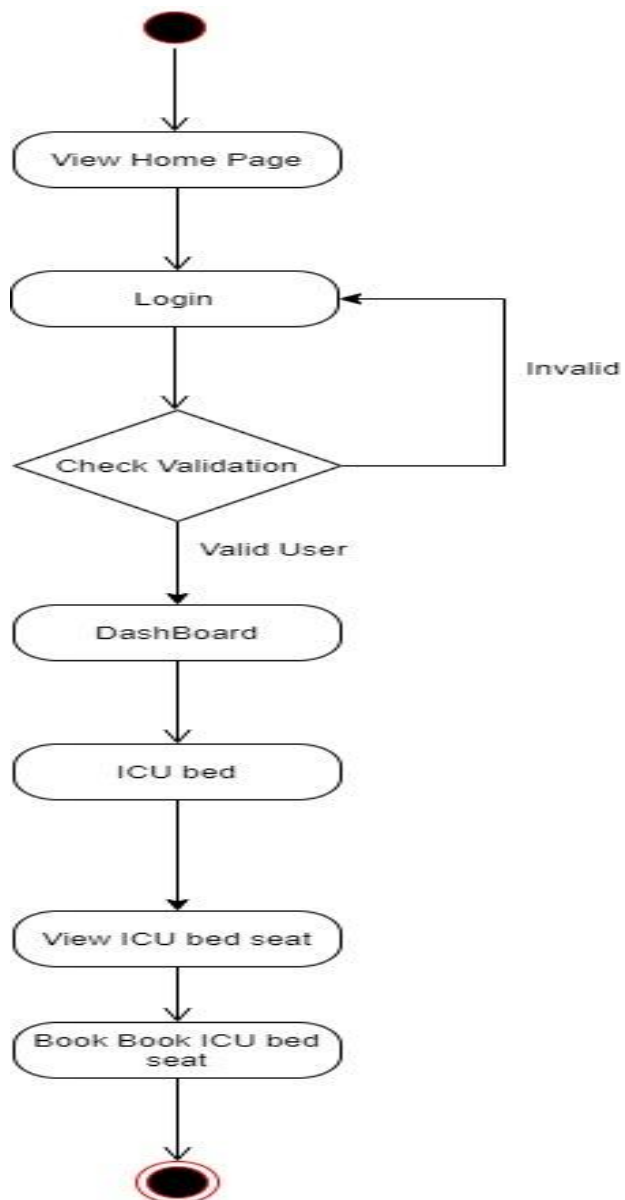


Figure 3.22: Activity diagram Book ICU bed for Patient

3.3.19 View Book List

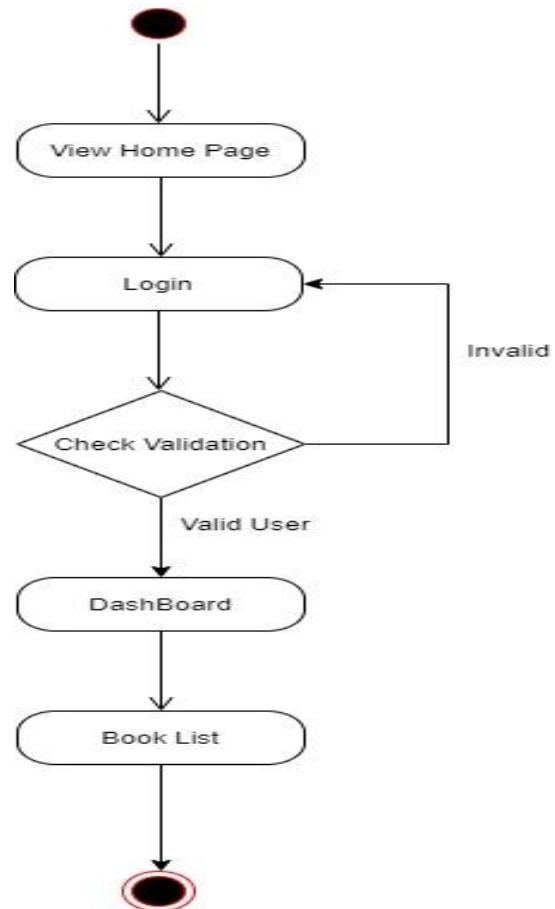


Figure 3.23: Activity diagram Book List for Patient

3.3.20 View Oxygen Supplier Info

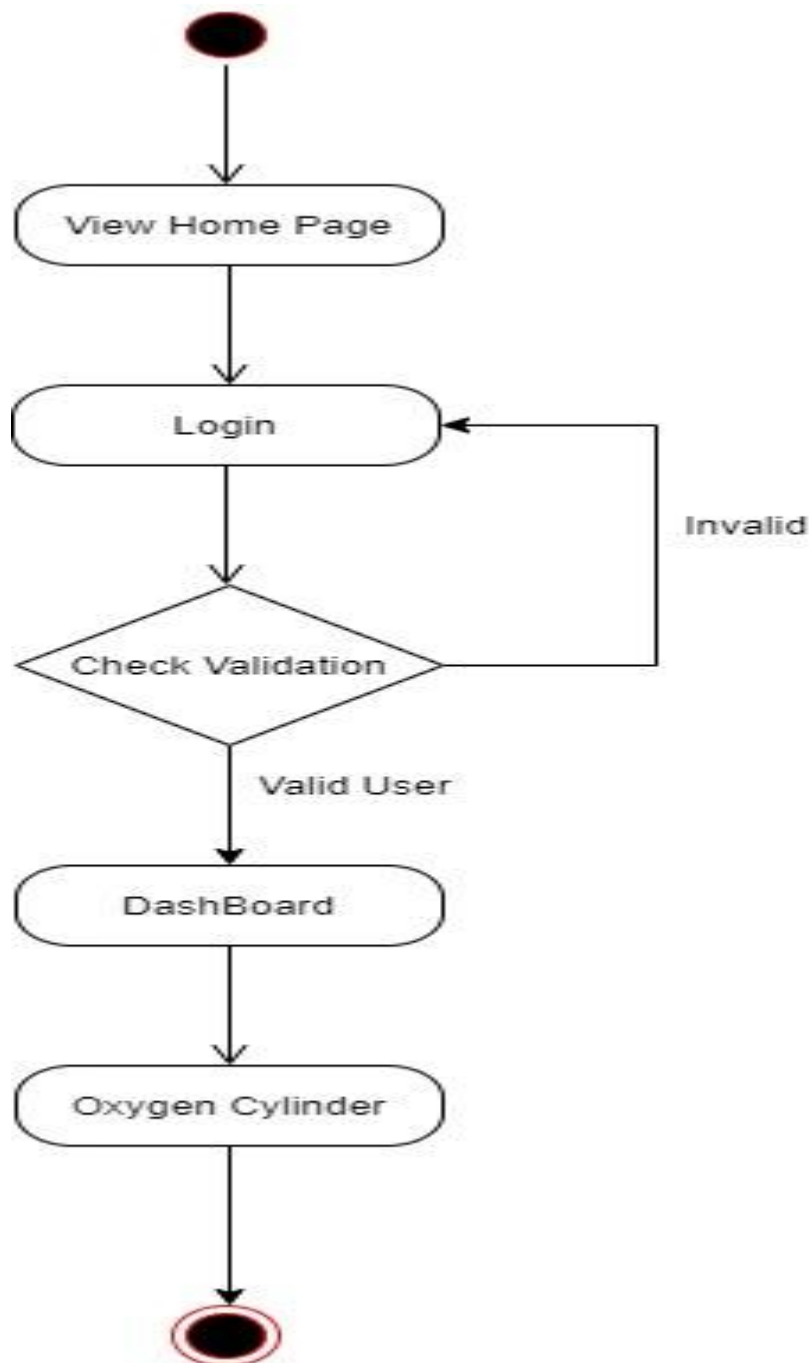


Figure 3.24: Activity diagram Oxygen Supplier Info for Patient

3.3.21 Add Donor info

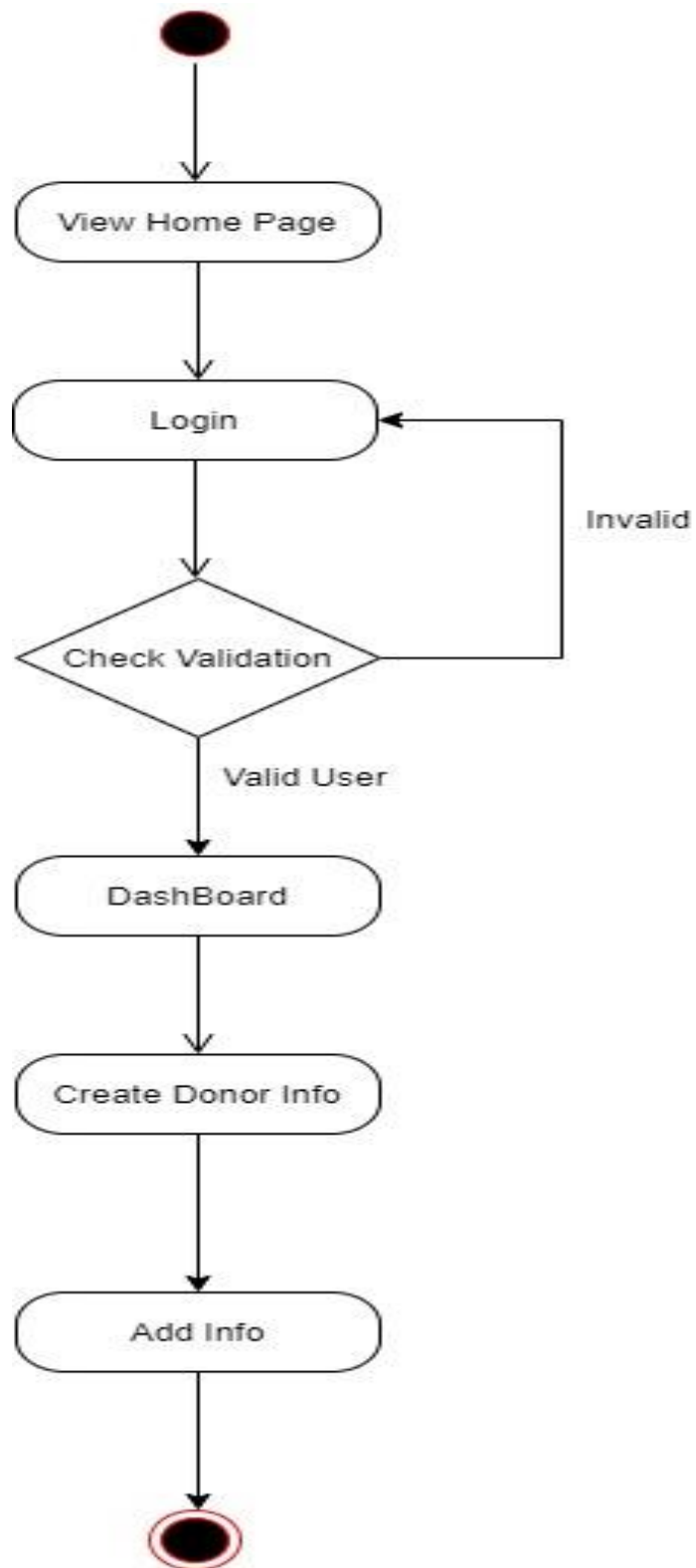


Figure 3.25: Activity diagram Add Info Donor for Donor

3.3.22 Update Donor Info

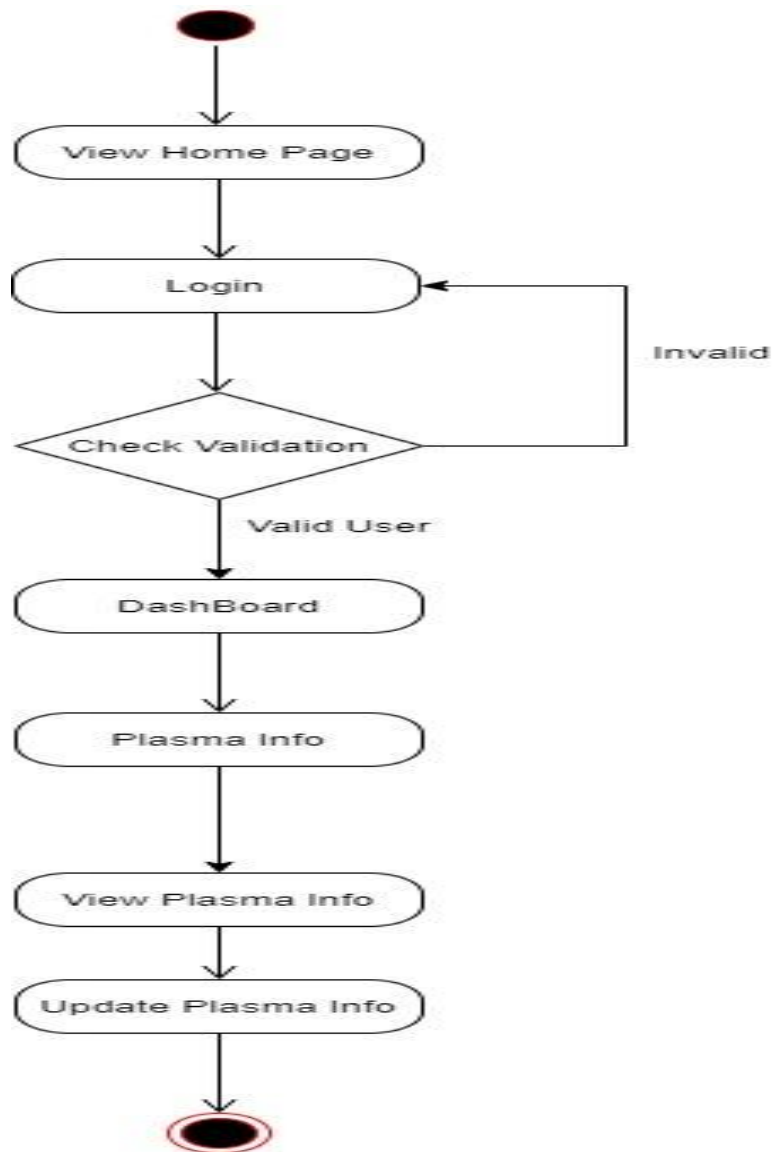


Figure 3.26: Activity diagram Update info for donor

3.4 Sequence Diagram

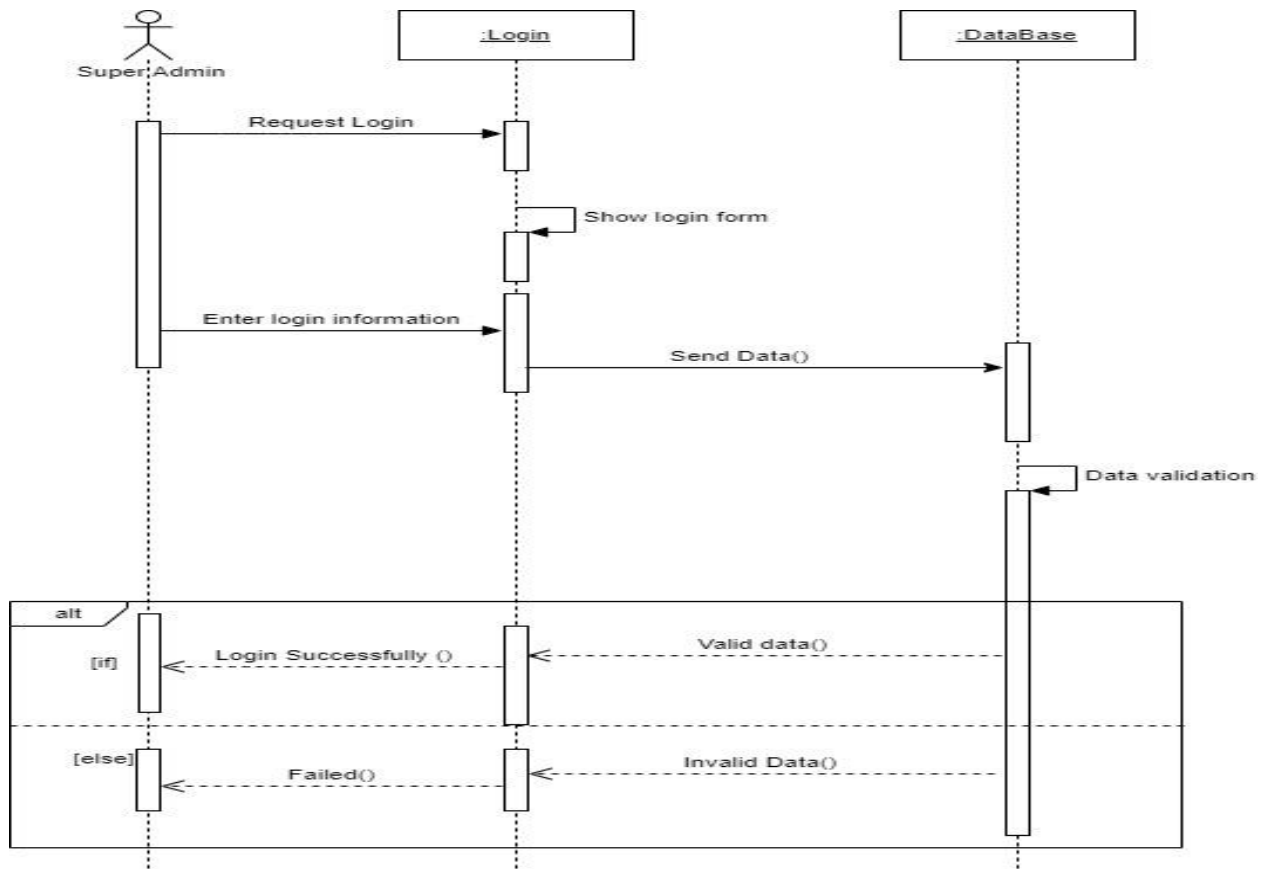


Figure 3.27: Log In For Super Admin

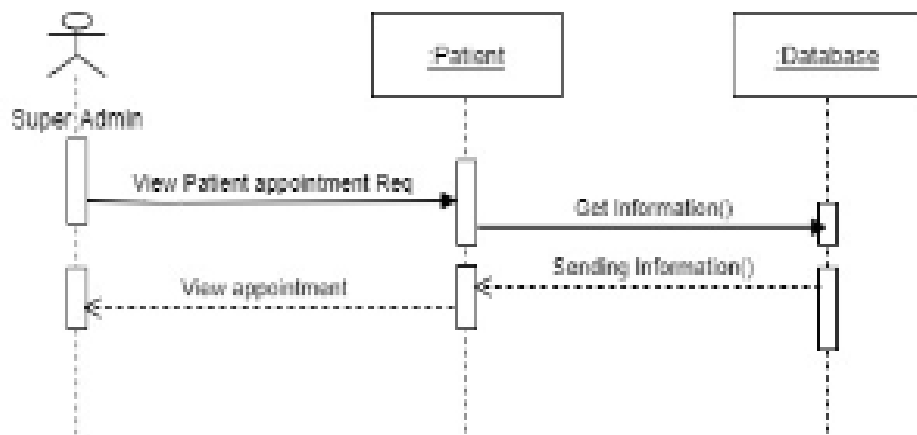


Figure 3.28:View Appointment request

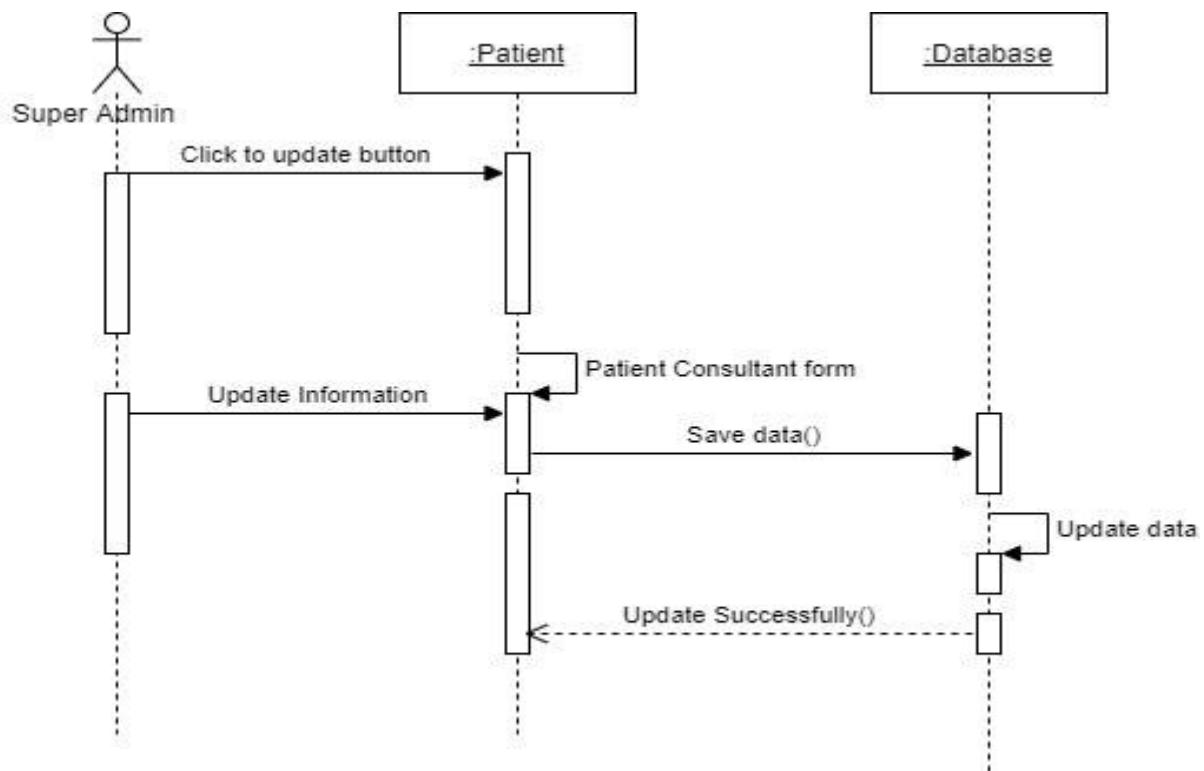


Figure 3.29:Update Appointment

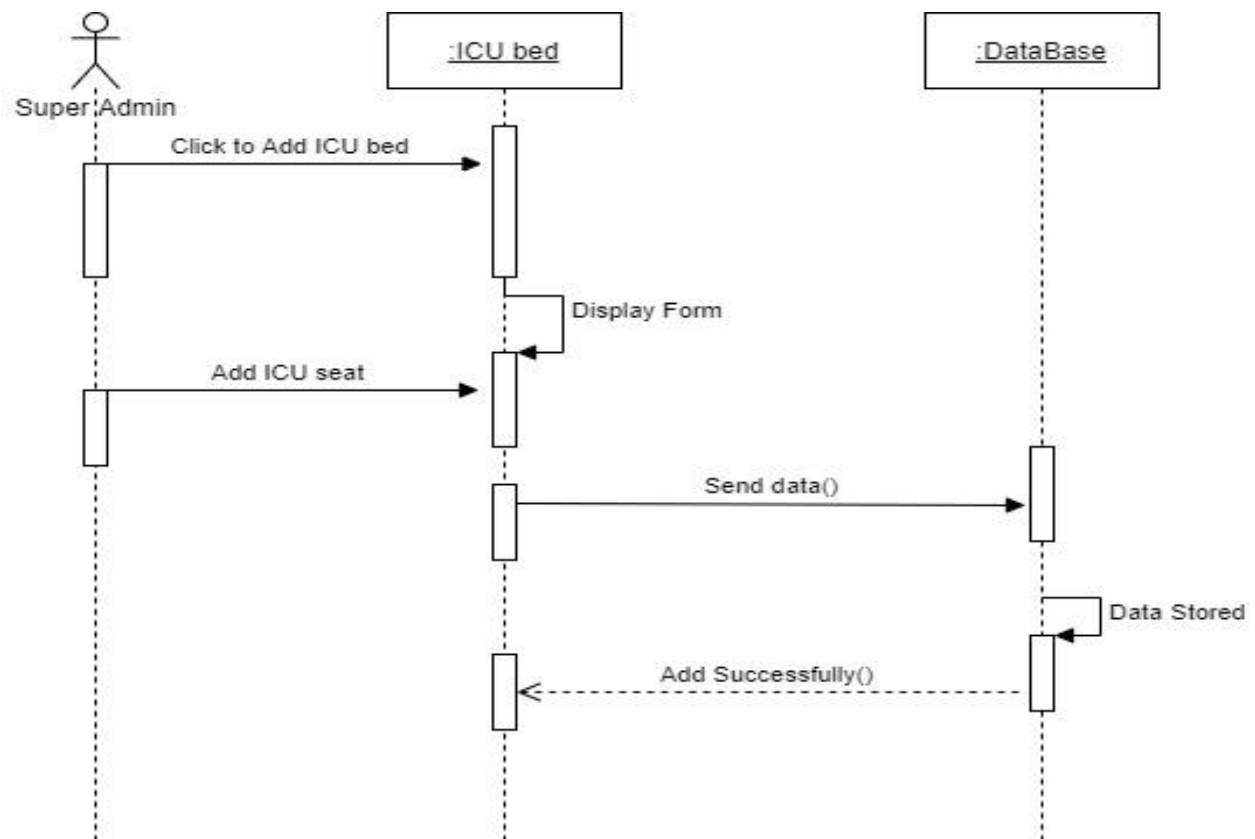


Figure 3.30: Add ICU bed

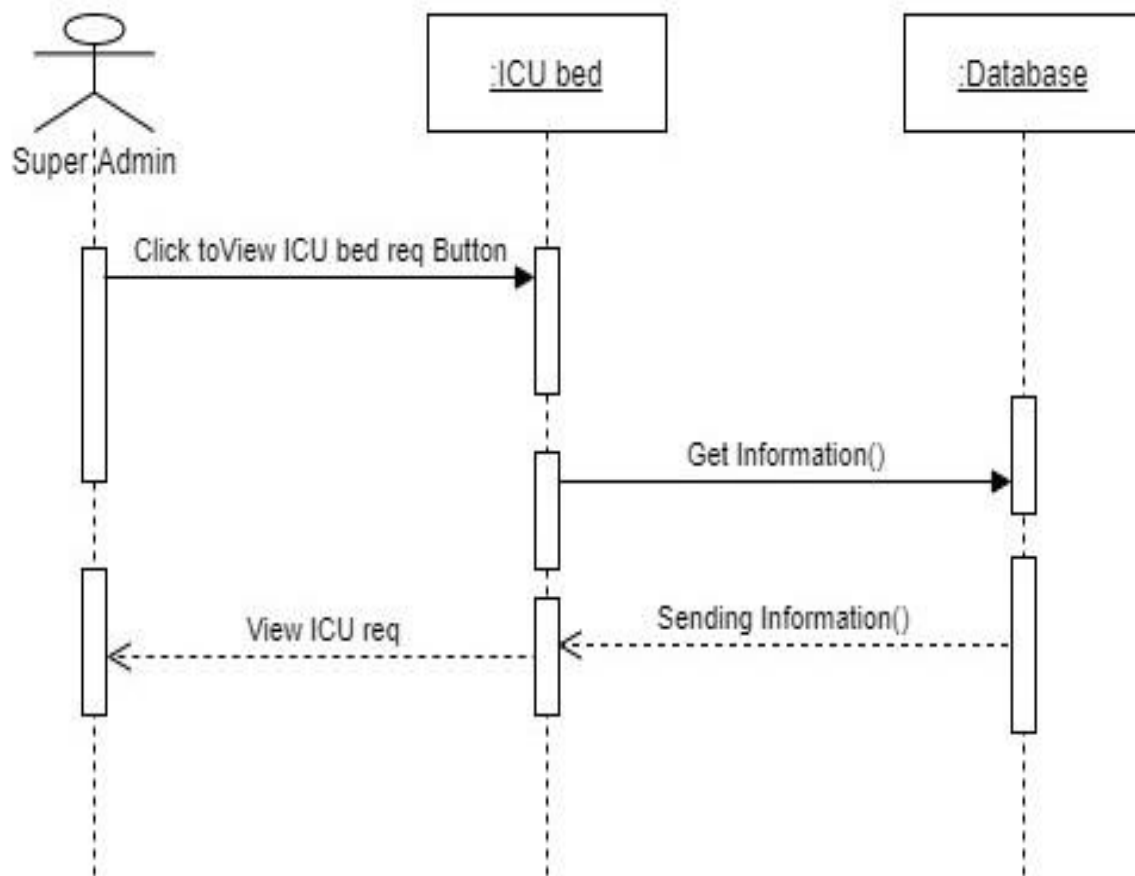


Figure 3.31:Booking ICU bed

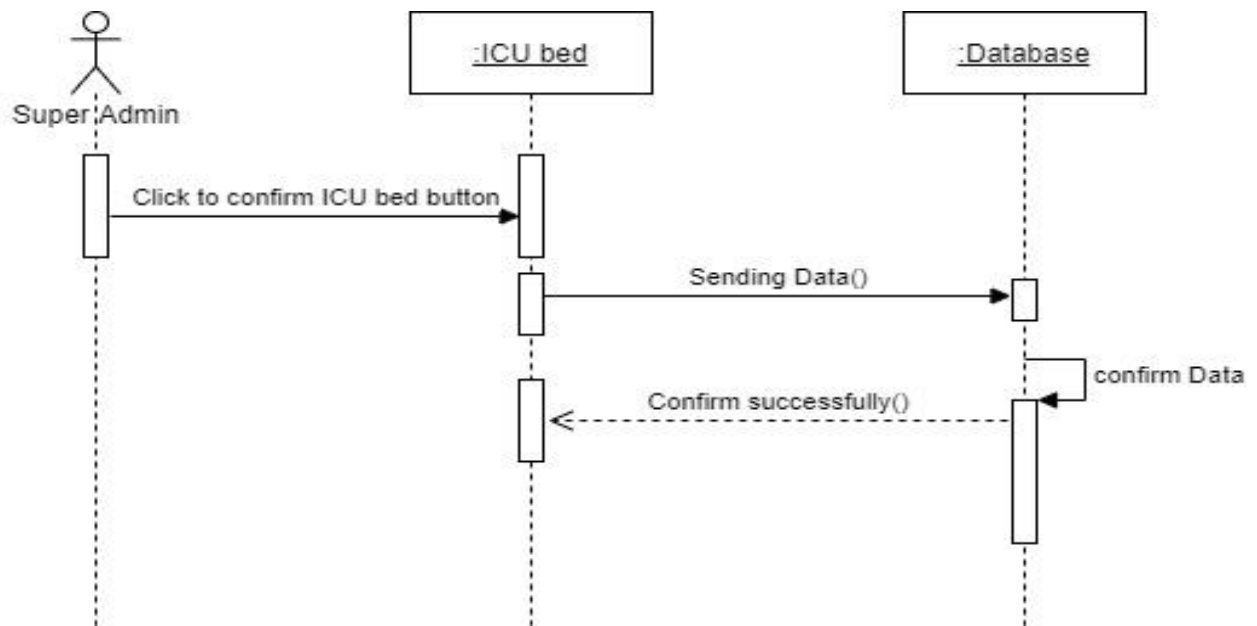


Figure 3.32:Confirm ICU bed request

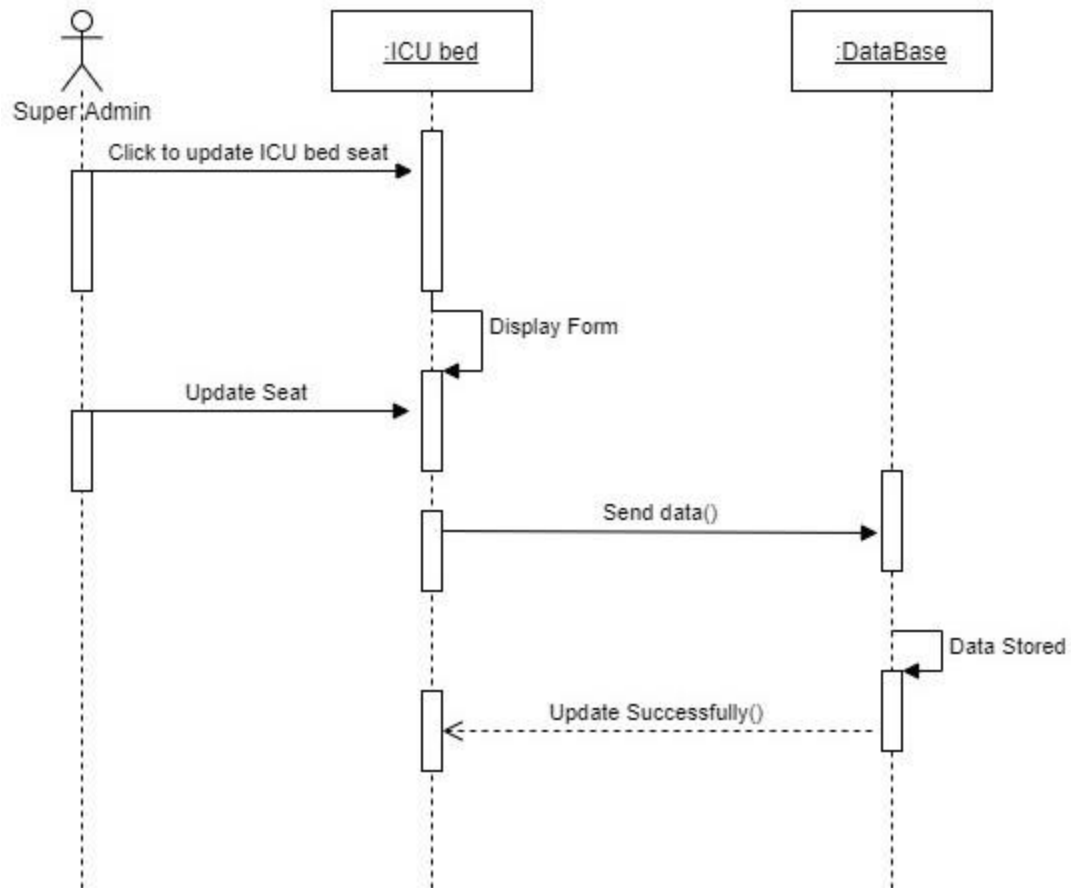


Figure 3.33:Update ICU bed

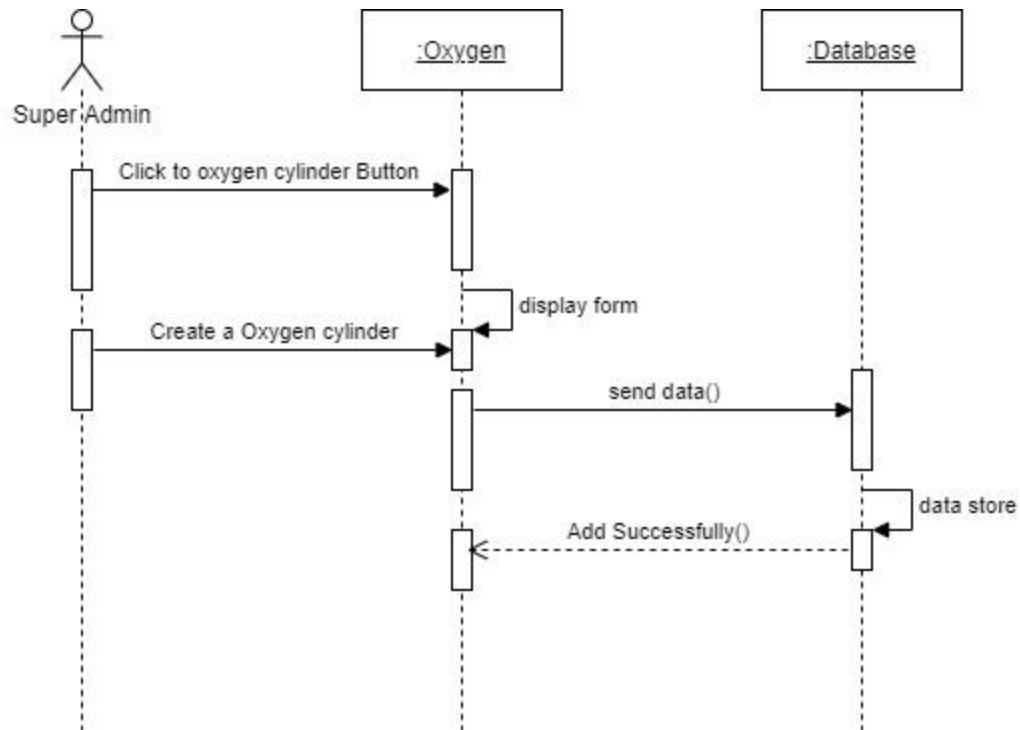


Figure 3.33:Create Oxygen Cylinder Info

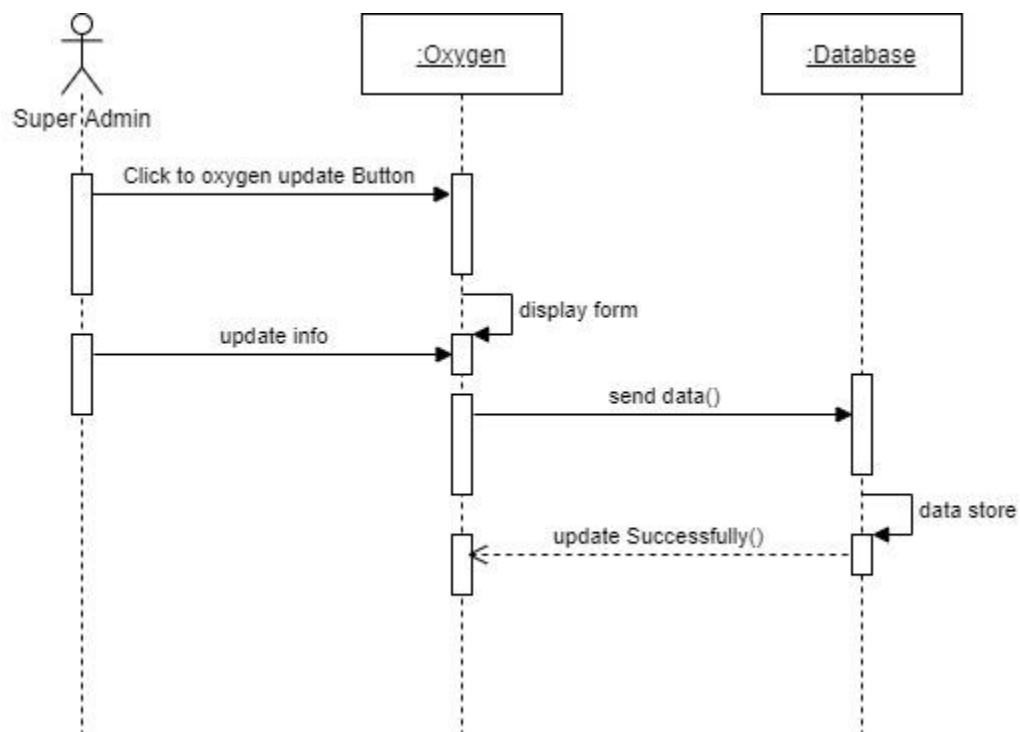


Figure 3.34:Update Oxygen

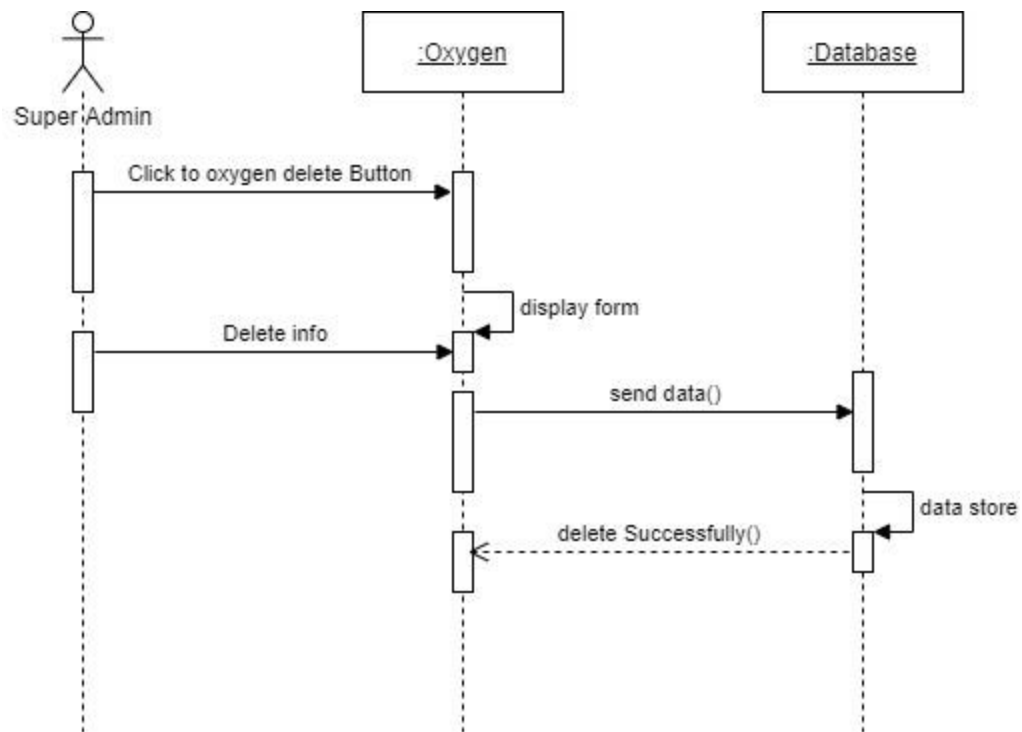


Figure 3.35:Delete Oxygen info

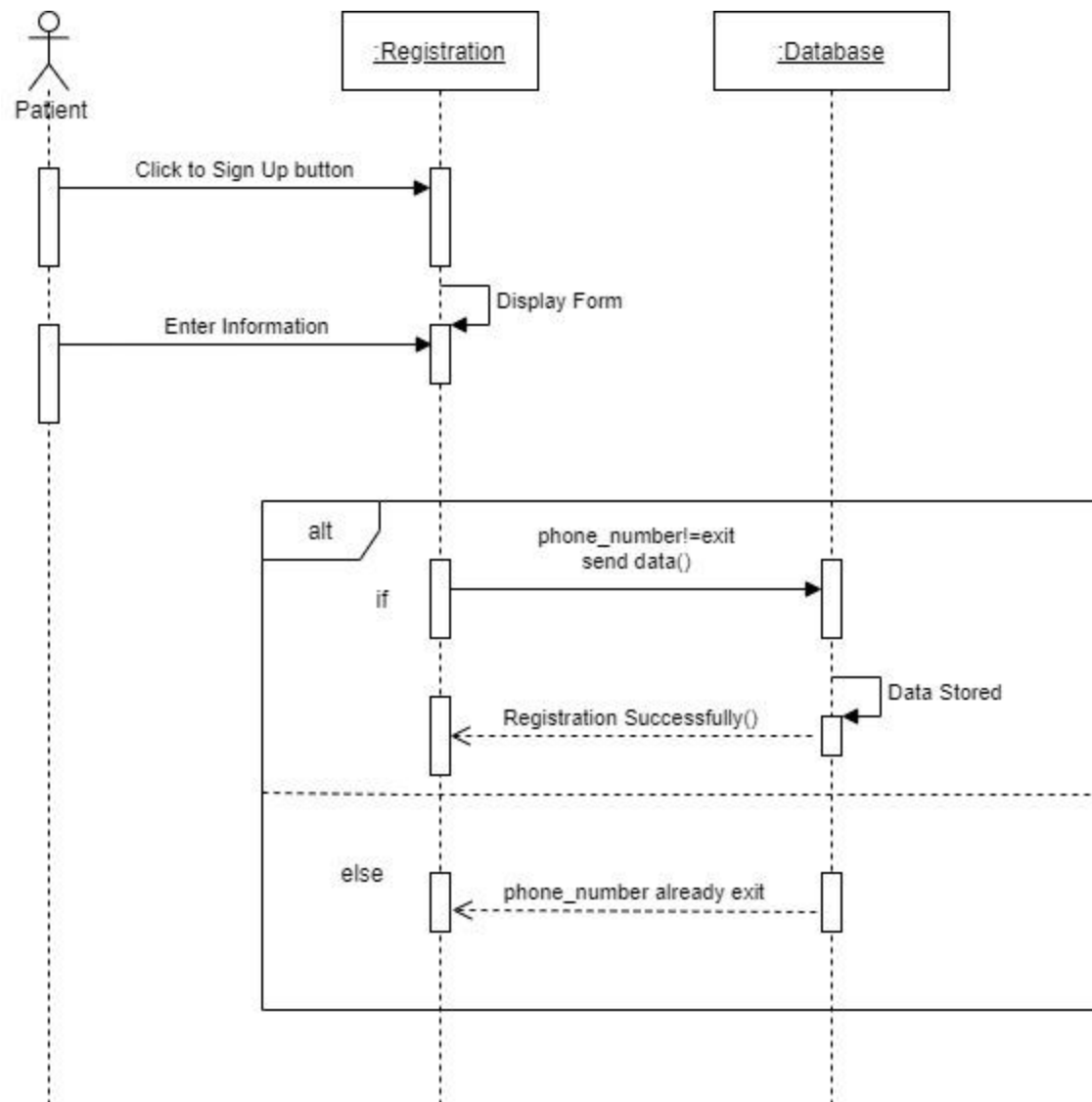


Figure 3.36:Patient Registration

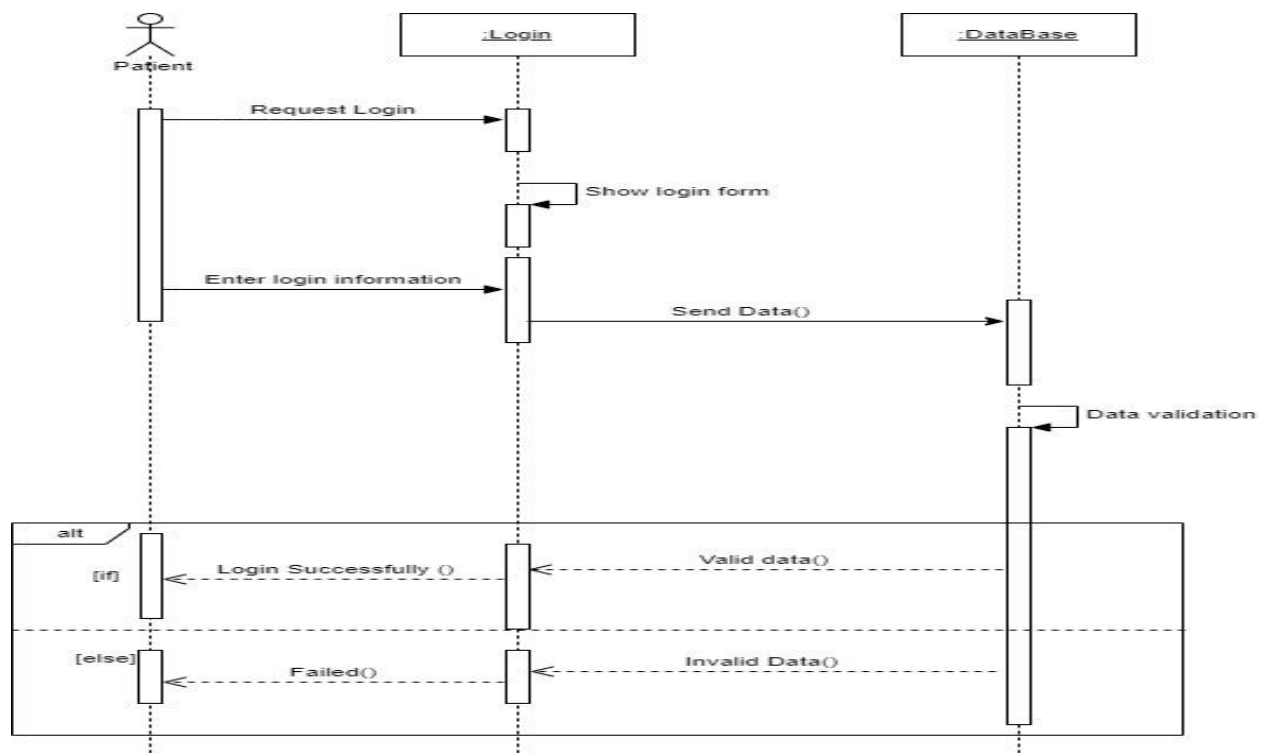


Figure 3.37:Log In

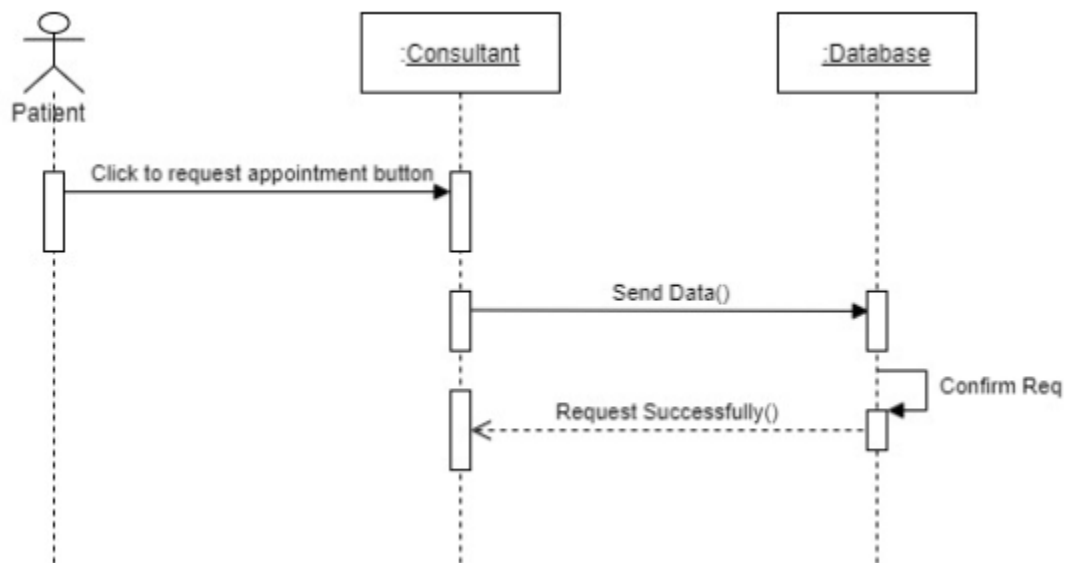


Figure 3.38:Request Appointment

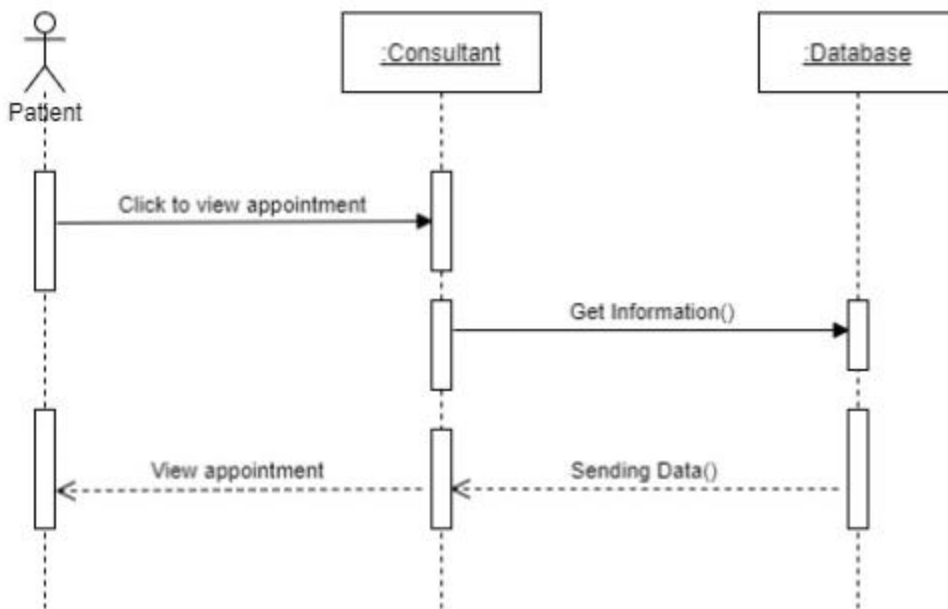


Figure 3.39:View Appointment

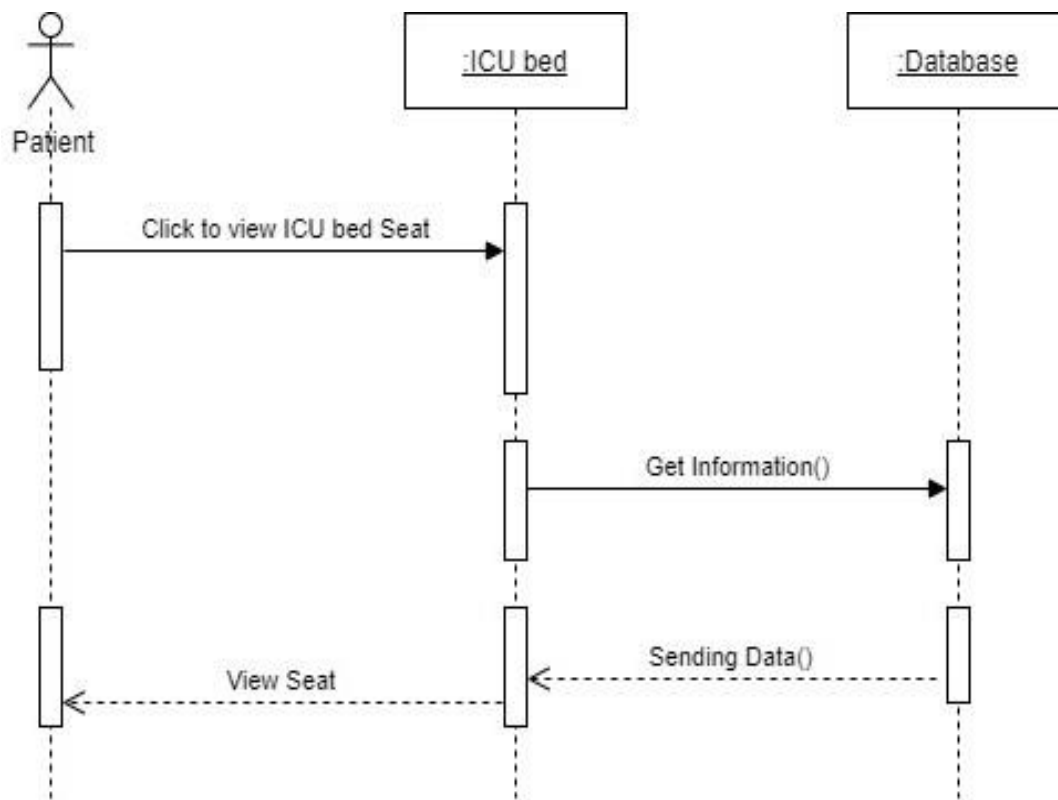


Figure 3.40:View ICU bed seat

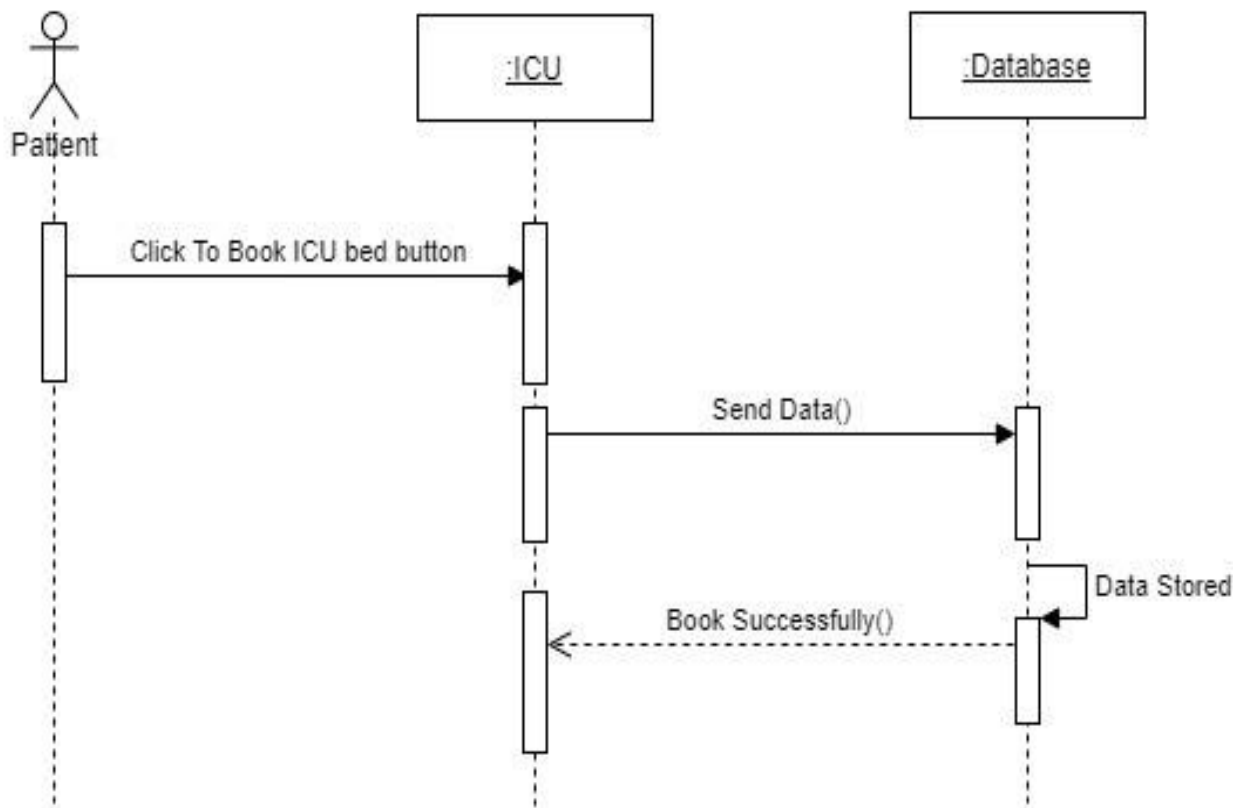


Figure 3.41:Book ICU

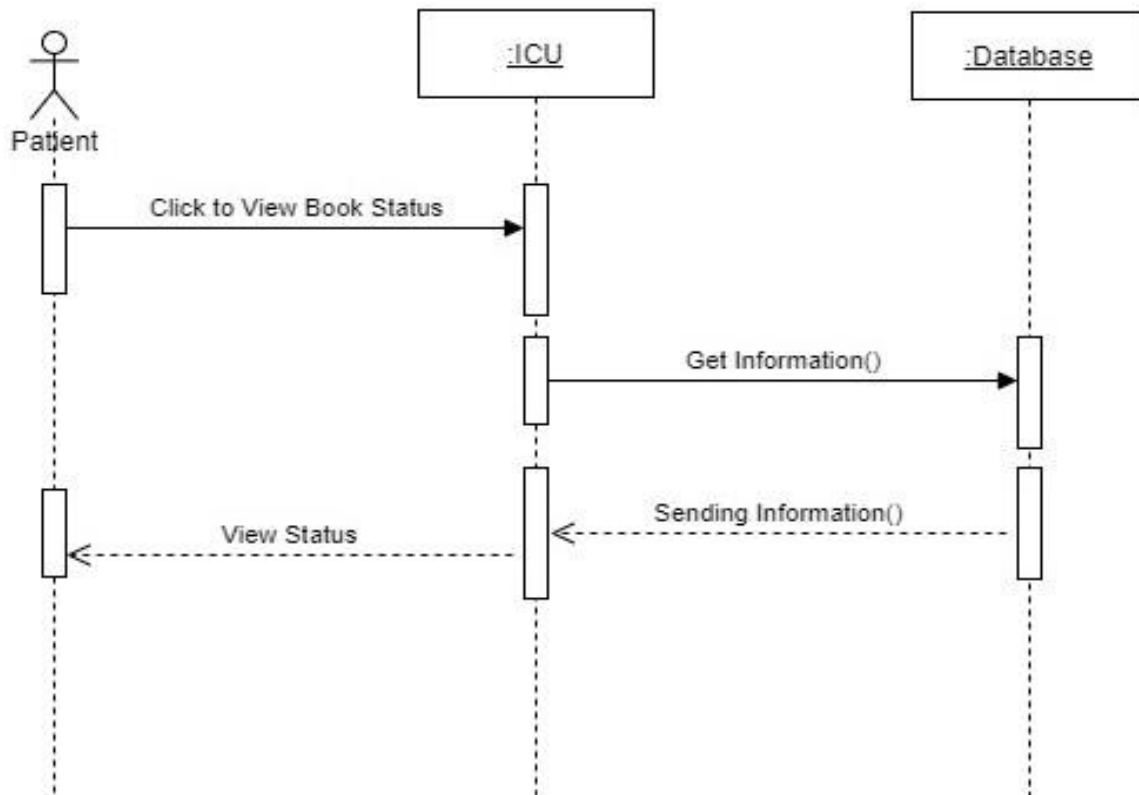


Figure 3.42:Book Status

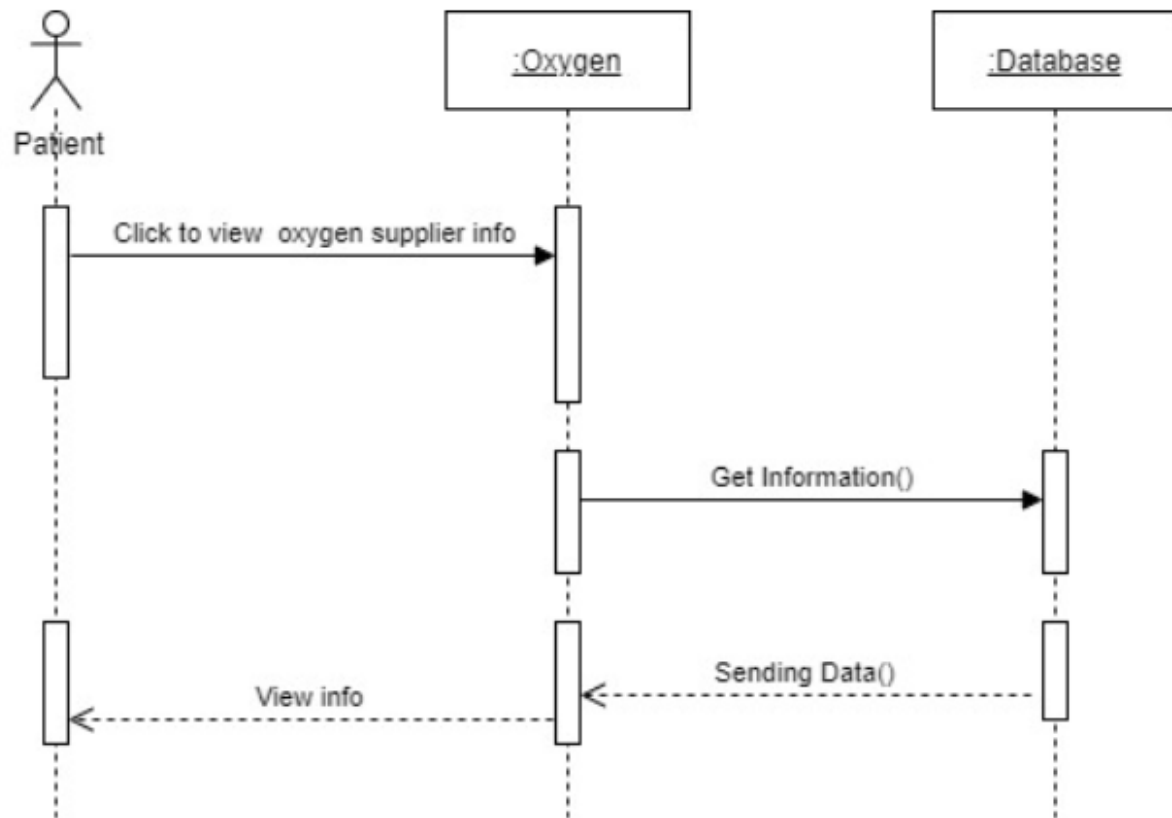


Figure 3.43:View Oxygen Supplier Info

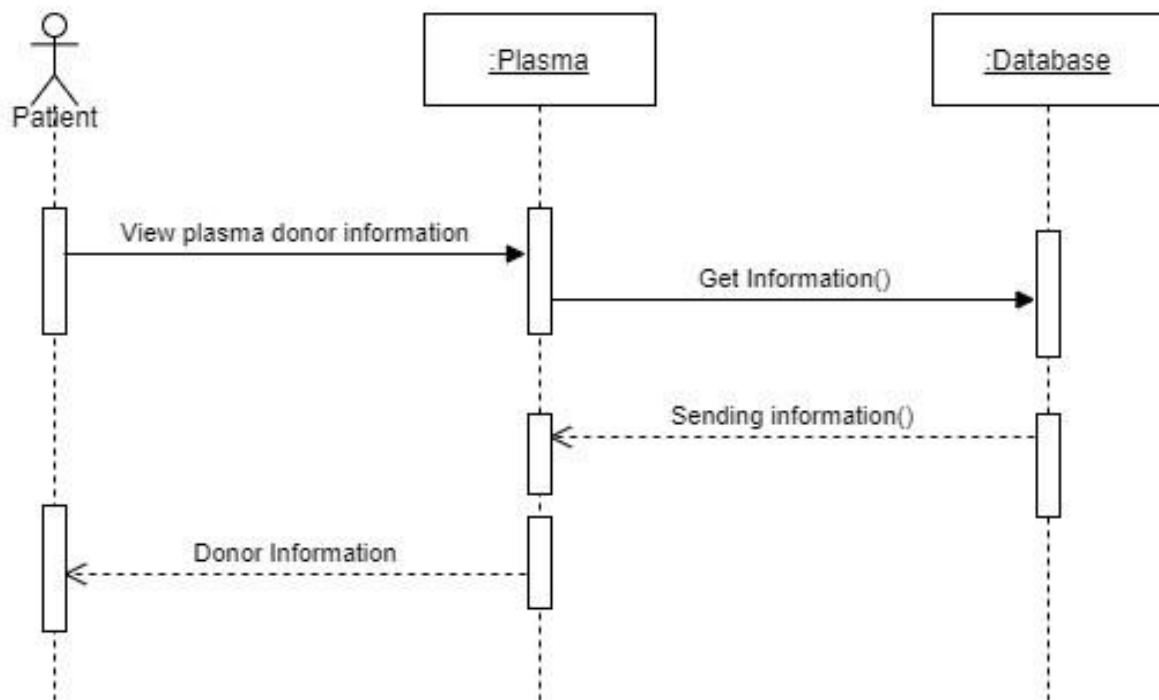


Figure 3.44:Contact Plasma Donor

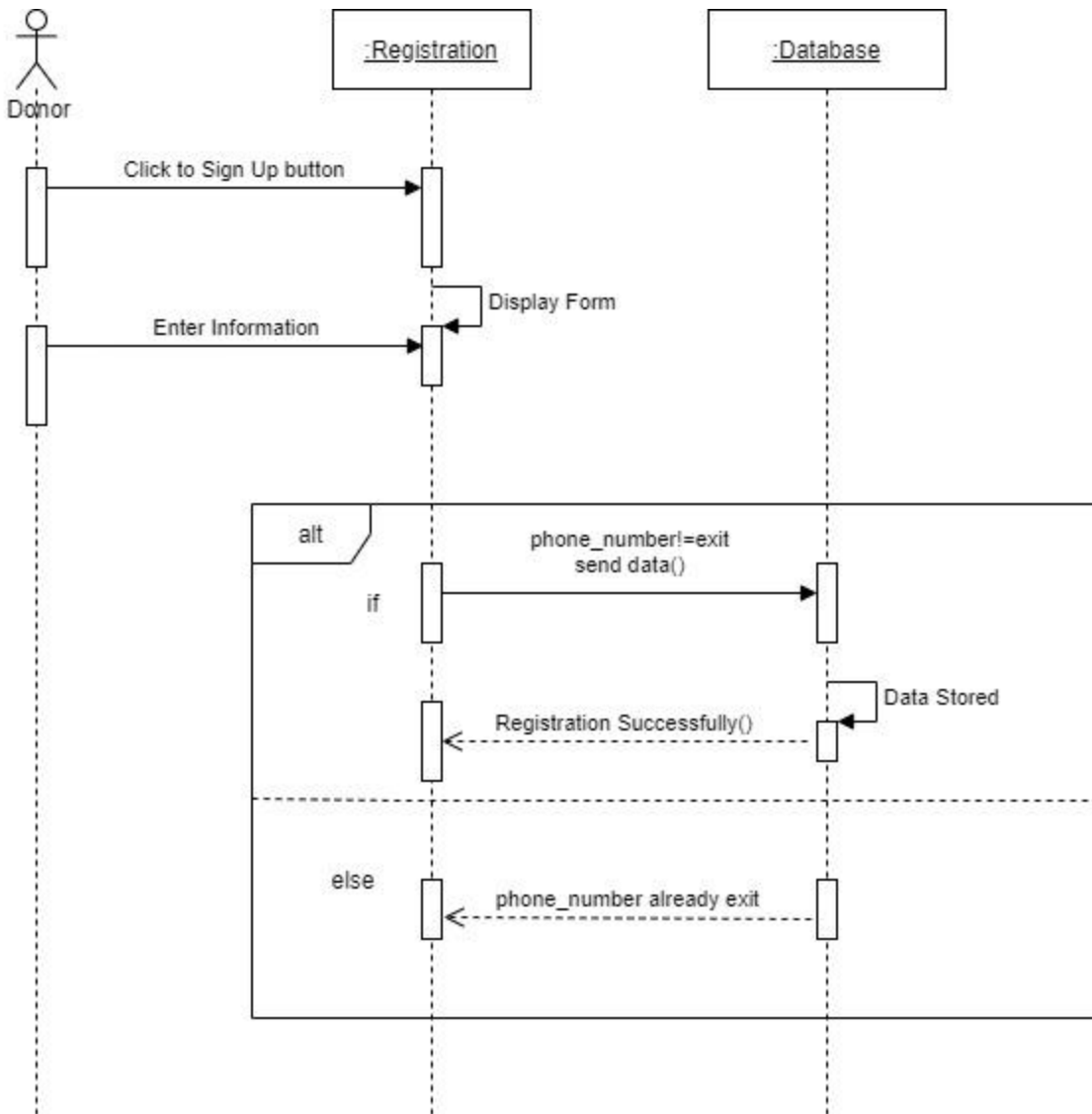


Figure 3.45: Donor Registration

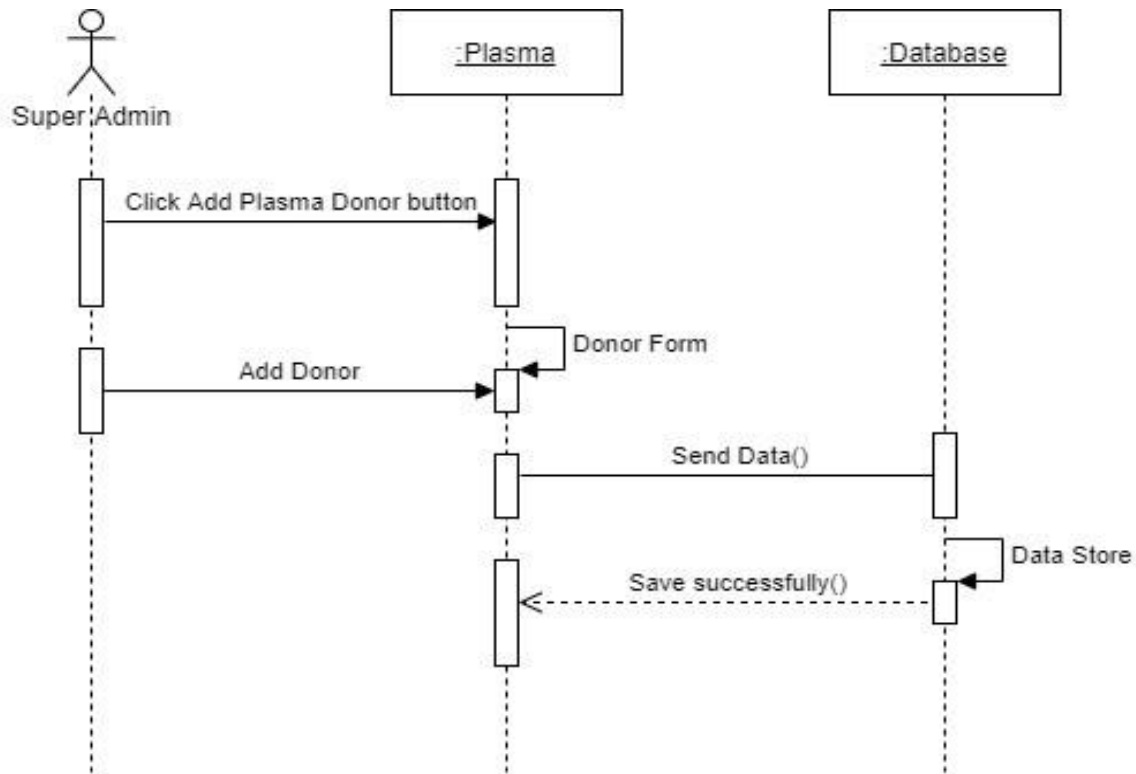


Figure 3.46:Add Donor

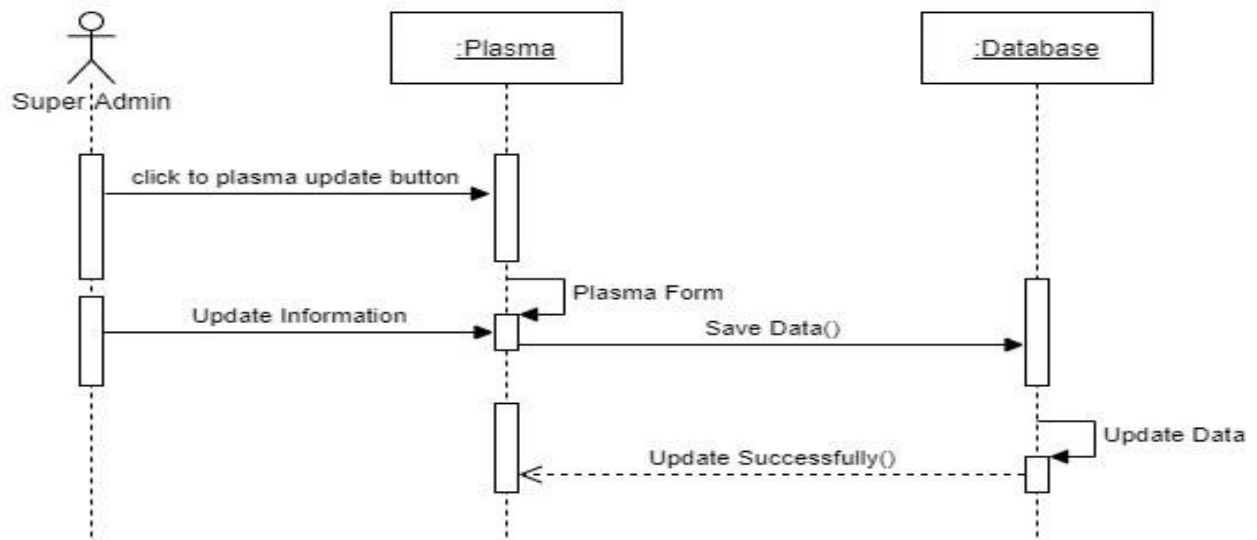
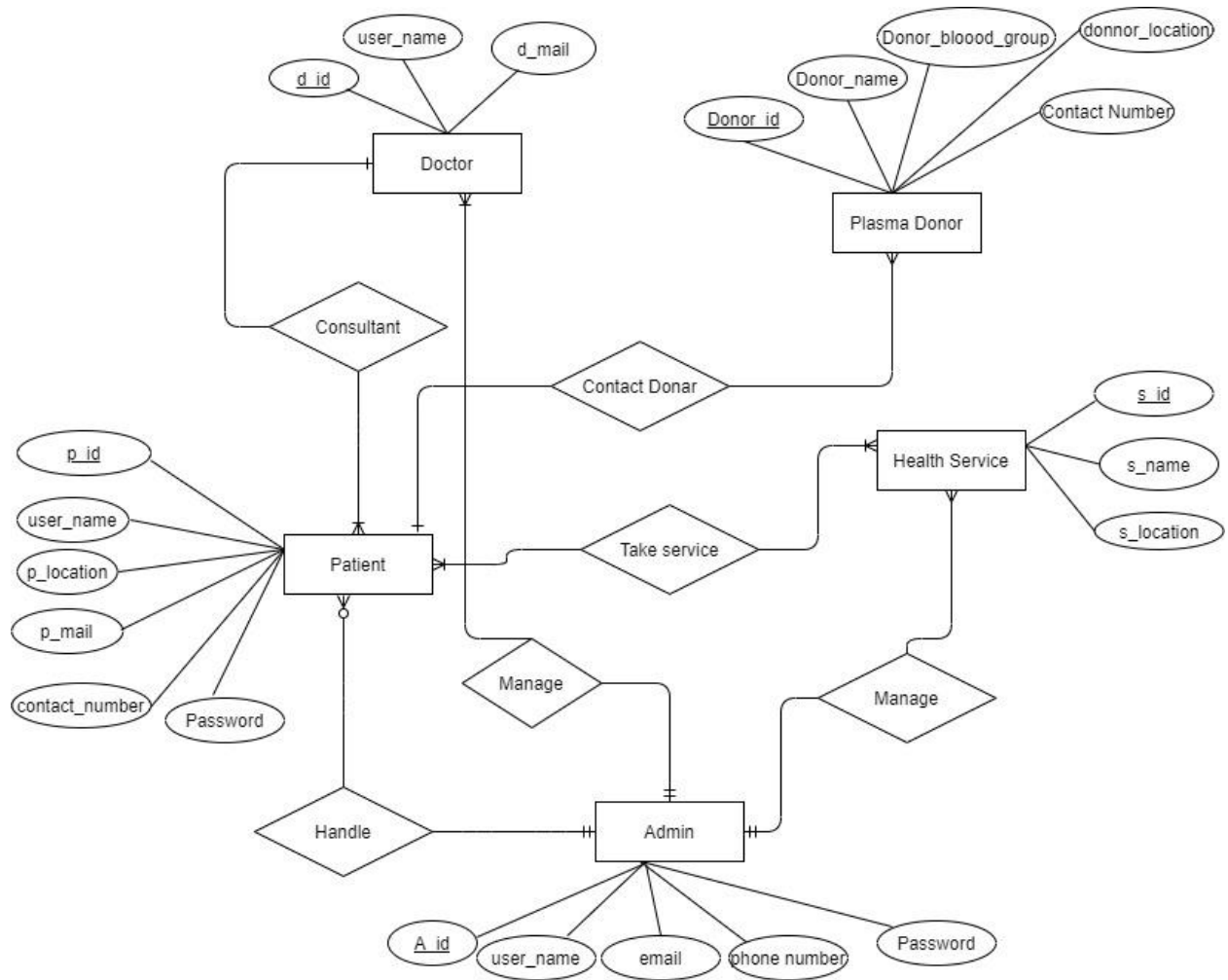


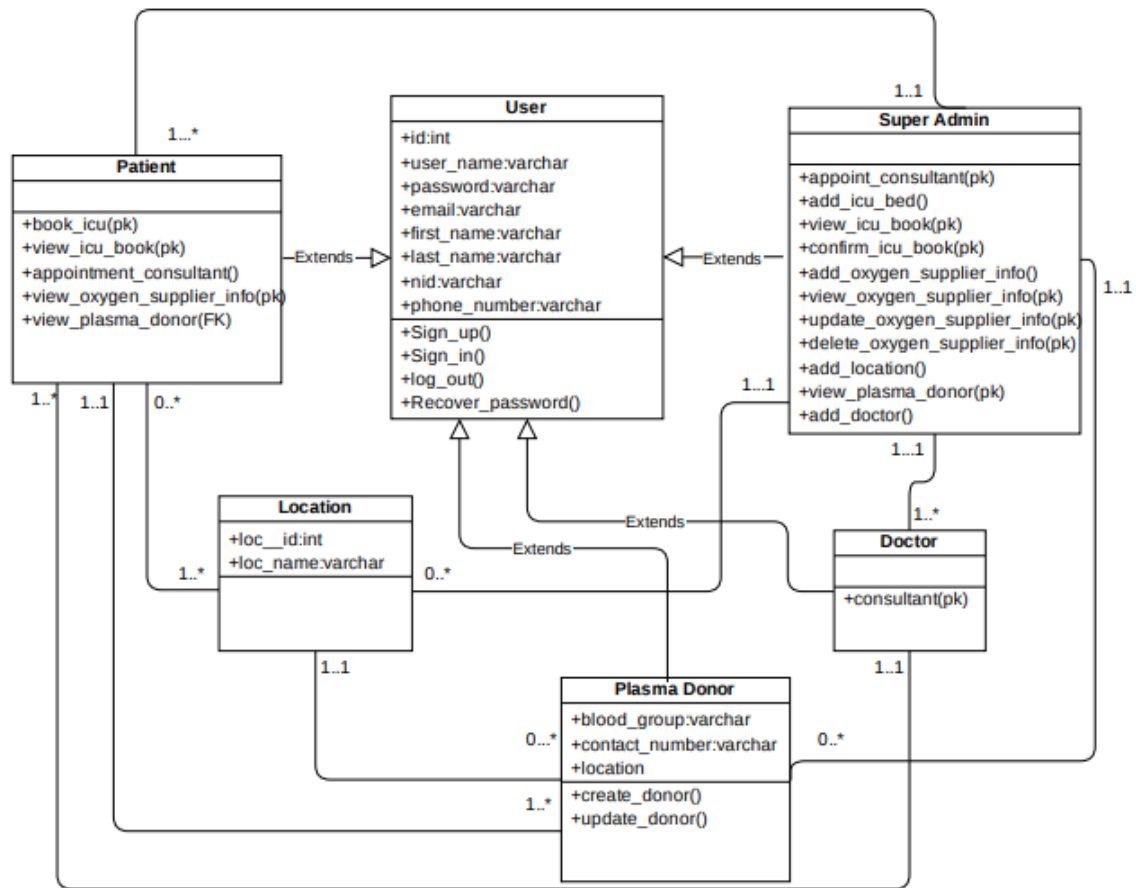
Figure 3.47:Update Donor Info

Chapter 4: System Design Specification

4.1 ER Diagram



4.2 Class Diagram



4.3 Development Tools & Technology

4.3.1 User Interface Technology

User Interface is that the process to create interfaces in software or computerized devices, web developments, that specialize in looks or style. The technologies that won't to build that style is understood as interface Technology. In my project which technologies I even have want to design interface are given below-

4.3.1.1 : HTML, HTML5

4.3.1.2 : CSS3, CSS

4.3.1.3 : Bootstraps-4

4.3.2 Implementation Tools and Platform

4.3.2.1 : Django

4.3.2.2 : PostgreSQL

4.3.2.3 : Django

4.3.2.3: Windows PowerShell

CHAPTER-05

System Testing

5.1 Testing Features

5.1.1 Feature to be tested

1. Registration
2. Login
3. Book ICU
4. Confirm ICU Book
5. Donor add his/her info
6. Patient Contact Donor
7. Find out near location
8. Manage Oxygen Supplier
9. Donor donated date

5.2 Testing Strategies

5.2.1 Test Approach

1. The Complete system was tested manually.
2. System testing based on “Covid-19 Response”.
3. This system test on Patient and Donor activities.

5.2.2 Pass or Fail Criteria

5.2.2.1 Component Pass/Fail Criteria: - The test is going to be passing the cases meet the thing design requirements.

5.2.2.2 Integration Pass/Fail Criteria: - The test are going to be passing cases meets the thing architecture requirement or failed if not.

5.2.3 Suspension and Resumption

5.2.3.1 Regression Testing: - The system will be work properly after each modification of the system.

5.2.3.2 Database Change: - This system doesn't work properly if you modify database name.

5.2.3.3 System Design Changes: - The system must work properly after each change in the designing.

CHAPTER-06

Project Summary

6.1 GitHub Link: <https://github.com/sprashanta/covid-19-response-final-project>

6.2 Limitations: Admin cannot send email confirmation code to the user

6.3 Obstacles and Achievements:

Everyday technologies are updated so the Django framework is updated every day. So, I feature there are some technologic are often eliminating and therefore the project is often implemented with new technology. There are too more errors while i'm developed this technique.

6..4 Future Work:

Every Project have some future scope so that in features the application adds some new feature.

******Send confirmation code to the user through phone number.

Reference

Software Requirements & Specifications(Jackson)

Requirement Analysis (Grady)

System Design Specification (Shelly)

Django (Schafer)