Software Requirements Specification

for

LifeCare Portal

Prepared by

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Revision History

Name	Date	Reason For Changes	Version
LifeCare Portal	23-09-22	Alpha Release	1.0

1. Introduction

1.1 Purpose

LifeCare Portal aims at to provide easy access to all the aspects of management and operations of Hospital. We have taken the inspiration of the project from the last years Corona Pandemic. So, in the near future a situation like Corona comes again into human life, at that time LifeCare Portal will help the people a lot in the procedure of finding facilities. The main purpose of LifeCare Portal is to make Hospital related task easy and saves the time of public while searching health care facilities. LifeCare Portal helps to maintains the details of Hospital related queries like Oxygen availability, Bed availability, etc. With the help of LifeCare Portal people can get the information of nearby Hospital location from wherever they are.

1.2 Intended Audience and Reading Suggestions

1. Project Manager
2. Developers
3. Testers

1.3 Project Scope

LifeCare Portal is a web portal which is helpful for the individuals who are in medical emergency, this portal will provide important necessary to the user to access or fulfill their medical emergency needs such as booking beds, booking of blood, oxygen availability into the hospital. In this project there will be three roles admin, user and hospital administration. The user will be directly contacting to the hospital administration for booking (as per requirement of their needs such as to choose hospital and select services accordingly) or get information. The hospital administration will accept the user request if they have the availability of needful services which the user require. There will be hospital role who will accept or reject the request by user and display the hospital availability of beds , oxygen , Doctor’s etc. The admin can only add Hospital and update the hospital information.

1.4 References

IEEE. IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications.
IEEE Computer Society, 1998.
https://www.youtube.com/
https://www.wikipedia.org/
https://www.google.com/
https://www.w3schools.com/
https://getbootstrap.com/docs/5.1/getting-started/introduction/
https://us-east-1.console.aws.amazon.com/console/home?region=us-east-1

2. Overall Description

2.1 Product Perspective

A Stand-Alone website which will provide information to the needed user at critical time and will provide seamless experience to the user with the help of our website.

2.2 Product Features

- **Easy Access to Hospital Data**
  One of the main advantages of hospital management software is easily availability of hospital data to the user. It is only a matter of few clicks and all the required information about a hospital can be available on the screen.

- **Cost Effective**
  Well-Implemented clinic management system reduces a lots of time and money during finding the information and its free to access to the public.

- **Improved Efficiency**
  This app improves efficiency by reducing the time during the emergency. We can make the proper time management during the emergency situation.

- **Data Security**
  All the important data and information will store on the server, data can only be manipulated by admin only.

- **Improved Patient Care**
  By using this application we can know the situation of hospital and give proper treatment to the patient in emergency condition.

2.3 User Classes and Characteristics

2.3.1 **Login for Hospital**

• System allows Hospitals to add bed details, add blood details and add oxygen availability details, add doctors.
• System allows Hospitals to view the request and take action over the request i.e.. Accept or Reject the request for beds.

2.3.2 **Login for User**

• System allows Users to view bed availability at Hospitals and book bed according to their need.
• System allows User to view Blood , Oxygen Availability Details of various hospitals and also can view specialist doctor available and can get ambulance contact details for the hospital.

2.3.3 **Login for Admin**

- System allows admin to register the hospital for the portal.
- System allows admin to check registered hospitals list and update or delete it too.
- System allows admin to check registered users list and update or delete it too.

2.4 Design and Implementation Constraints

This software provides security. The login form prevents the system from being misused by unauthorized users. Only an authorized operator will be granted rights to modify as per requirements. This software is also reliable and fault tolerant. The system developed is designed to handle invalid inputs. Since reliability is major area of concern the system has a backup to avoid data loss. The user should know the programming language very well that is used to develop a software.

Software Required: -

1. Java
2. MySQL
3. Html5
4. CSS
5. React Js
6. Bootstrap
7. Spring Boot

2.5 Assumptions and Dependencies

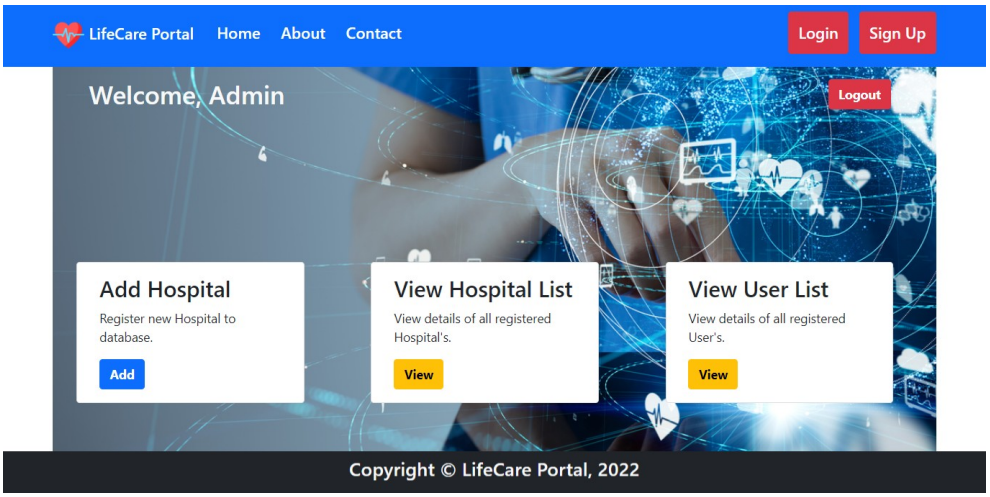
- Each user must have a valid user id and password.
- Server must be running for the system to function.
- User must be logged in to the system to access any record.
- Only the Admin can delete or update the hospital and user details.

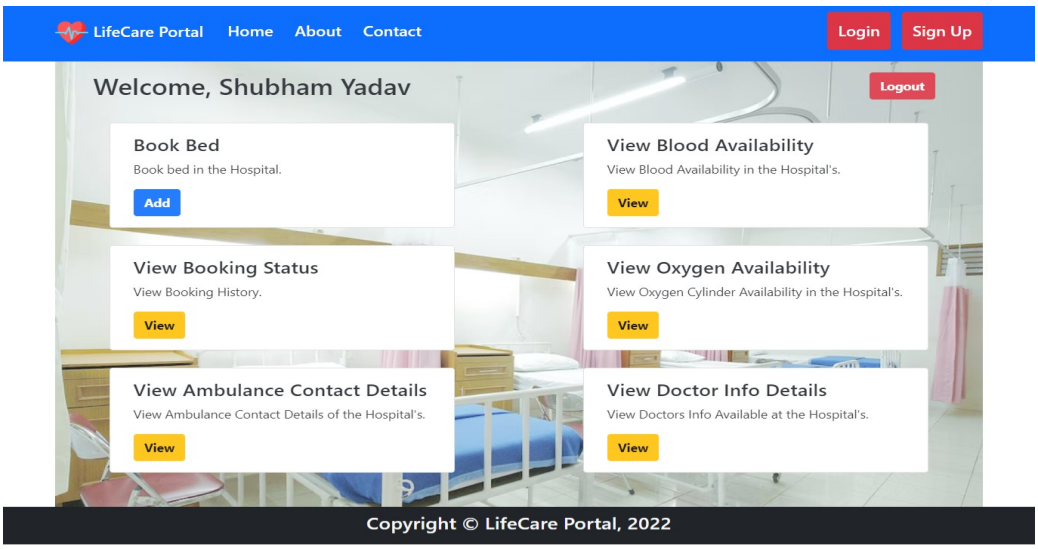
3. External Interface Requirements

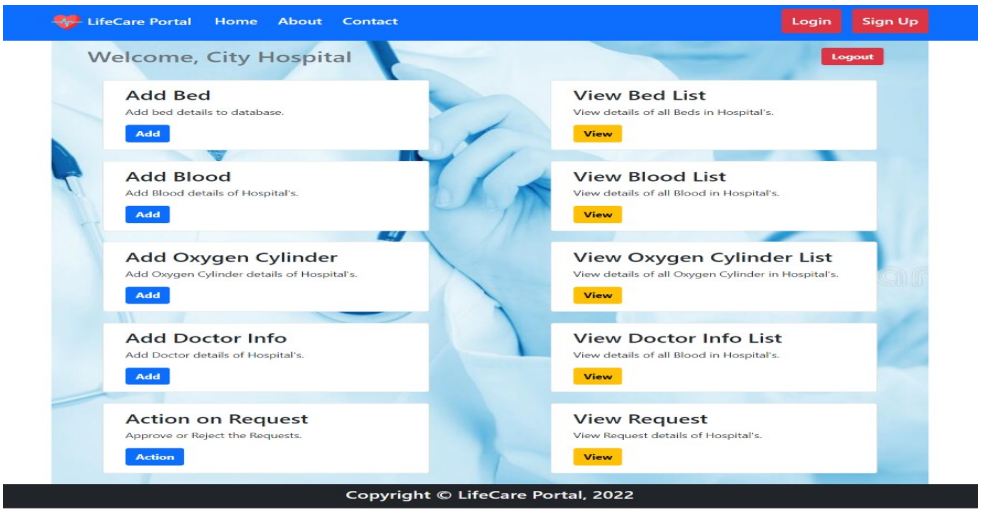
3.1 User Interfaces

- GUI along with meaningful Frames and buttons
- Data available as per the requirement

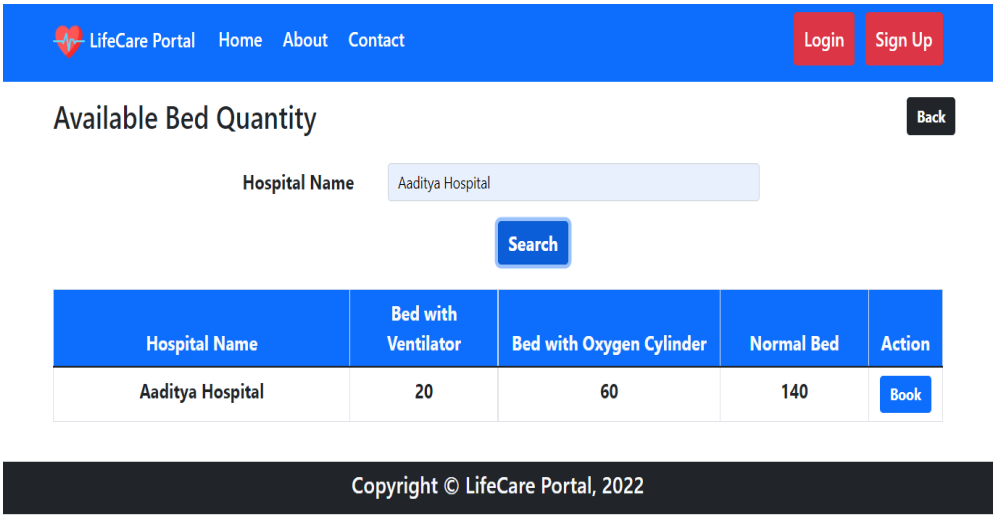
3.1.1 Dashboard of Admin, User and Hospital

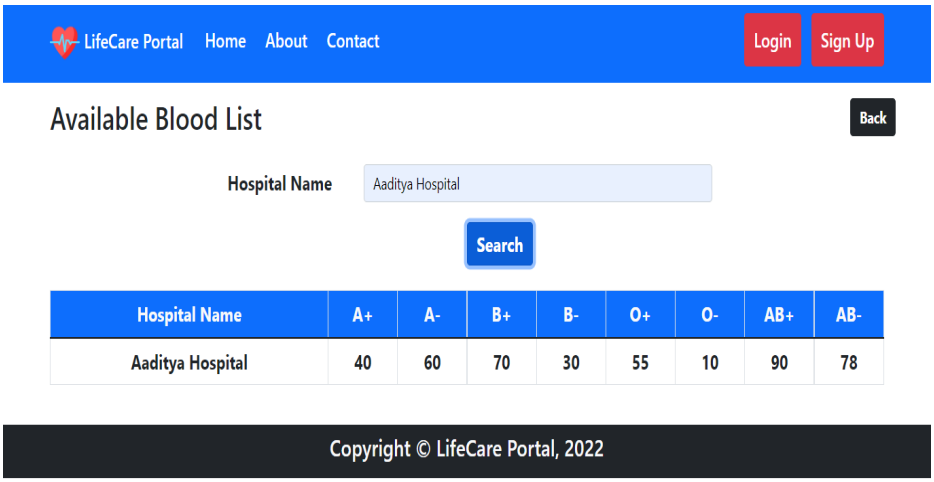






3.1.2 Available Data about Oxygen cylinder, Blood, Doctors, Bed




LifeCare Portal
Home
About
Contact
Login
Sign Up
Available Blood List
Back
Hospital Name
Aaditya Hospital
Search
Hospital Name
A+
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B+
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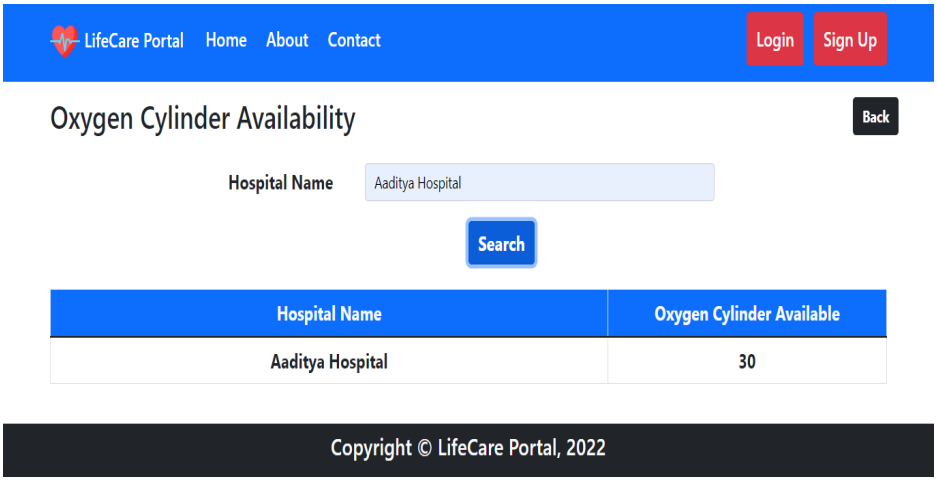
LifeCare Portal
Home
About
Contact
Login
Sign Up
Oxygen Cylinder Availability
Back
Hospital Name
Aaditya Hospital
Search
Hospital Name
Oxygen Cylinder Available
Aaditya Hospital
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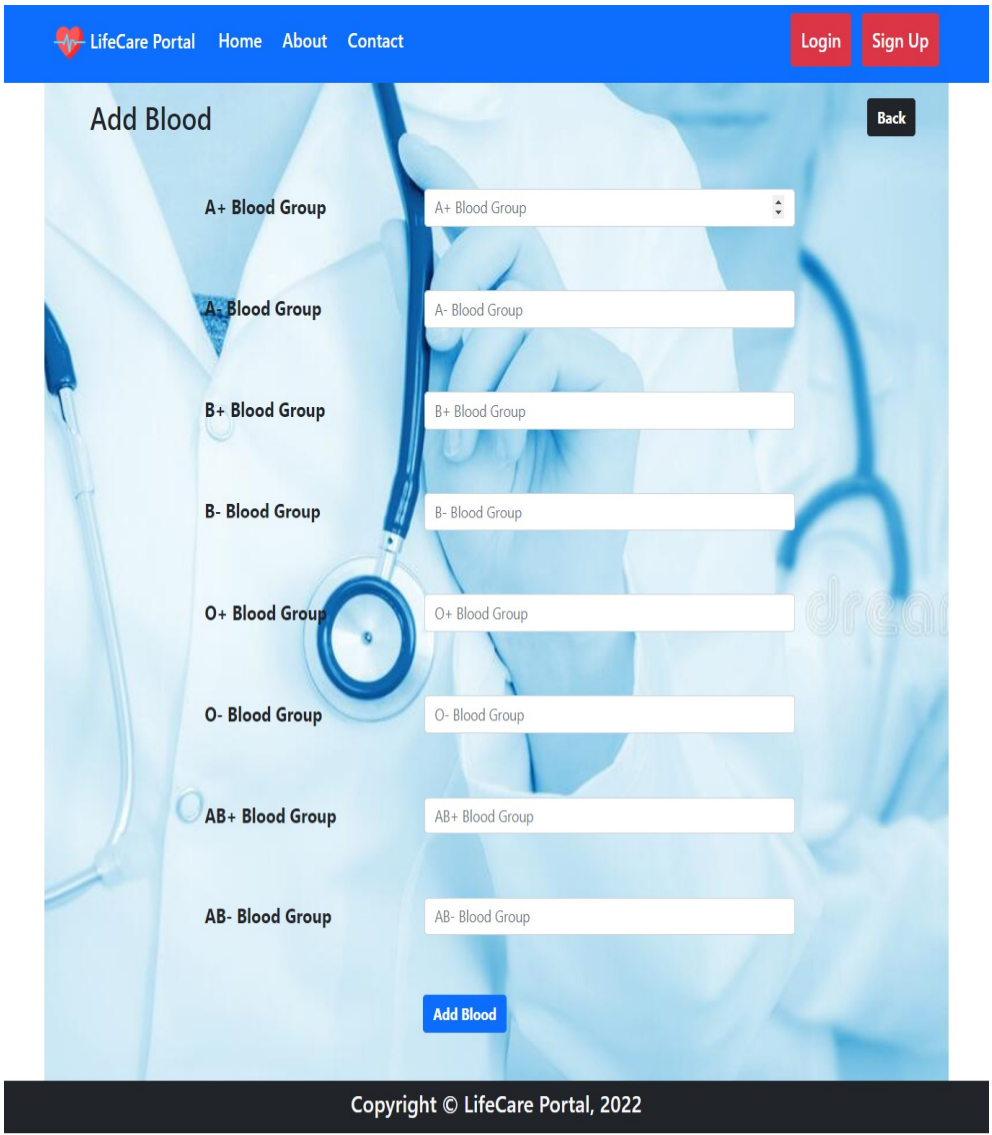
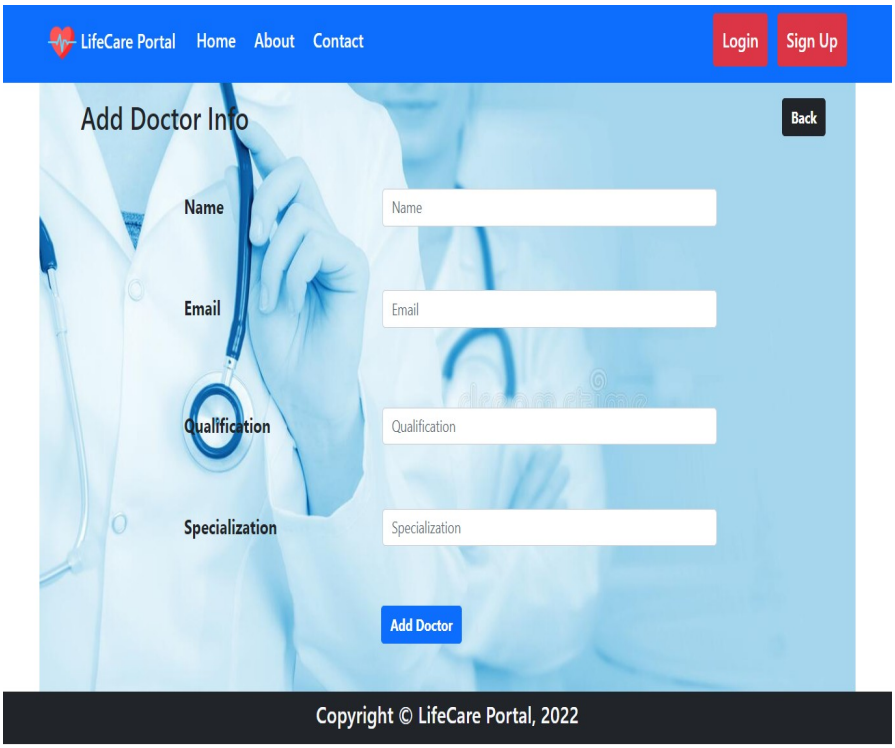
3.1.3 Adding Bed, Blood, Doctors, Hospitals, Oxygen cylinders




LifeCare Portal
Home
About
Contact
Login
Sign Up
Add Doctor Info
Back
Name
Name
Email
Email
Qualification
Qualification
Specialization
Specialization
Add Doctor
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LifeCare Portal
Home
About
Contact
Login
Sign Up
Add Oxygen Cylinder
Back
Oxygen Cylinder Available
Oxygen Available
Add Oxygen Cylinder
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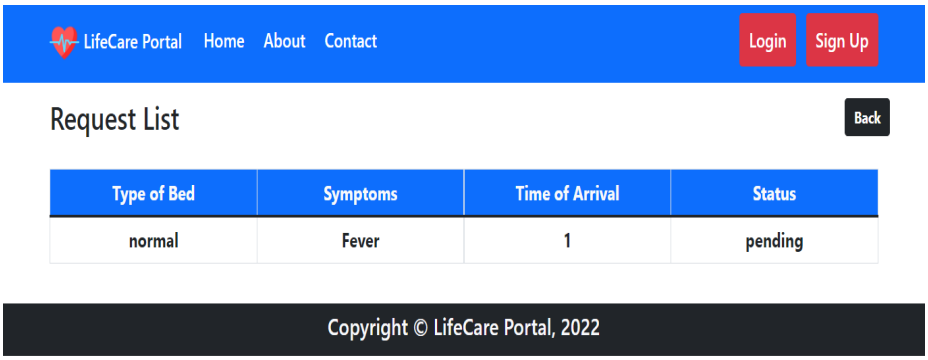
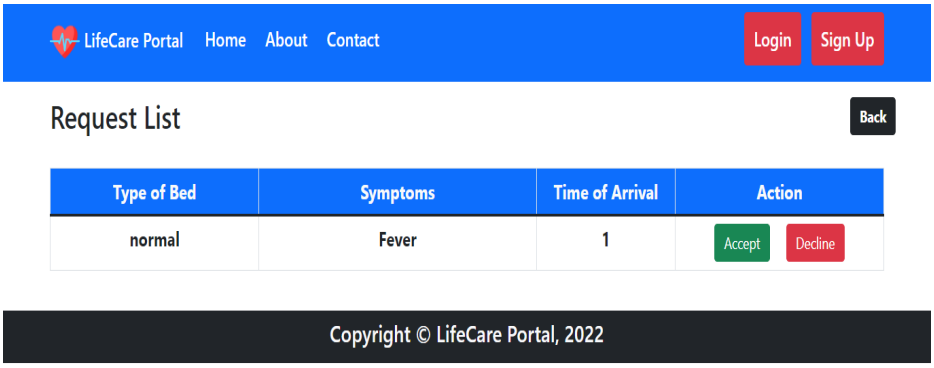
3.1.4 Accepting and Rejecting Requests





3.2 Hardware Interfaces

Hardware Environment	Dual Core 2nd generation
System Configuration	RAM- 4GB HDD-80GB
Operating System	Windows 8/8.1/10/11

3.3 Software Interfaces

Front End	Html, CSS, React, JavaScript, Bootstrap, React.js
Back End	Java, Spring-Boot using JPA, MySQL

4. Non-functional Requirements

4.1 Performance Requirements

The system should store all the database records of each user , hospital and admin staff properly and the application should be available for use 24*7 through the server. Also, the application should be user friendly with a proper user interface which makes it easy for the user to understand. All the options should be present in properly accessible places for user convenience. All login ids and passwords of the Admin, User, Hospital Operator should be protected for privacy using whatever constraints required in the database or the application.

4.2 Safety Requirements

All login ids and passwords of the Admin, Doctor, Hospital and User should be protected for privacy using whatever constraints required in the database or the application. The system requires the individual to acknowledge the person making use of the phone. Any adjustments like insert, erase, update, etc. for the data source can be integrated promptly as well as executed only by Admin. The Admin can alter any kind of information in the Hospital Management System.

4.3 Security Requirements

Passwords of the Admin, Hospital and User should be protected for privacy using whatever constraints required in the database or the application. Transactions regarding User and Hospital records should be carried out properly. The system shall protect the data and service from unauthorized access. The system shall also provide authentication and secure transaction.

4.4 Availability

The system should run on a variety of operating systems that support the JavaScript language. The system should run on a variety of hardware.

4.5 Accessibility

The software will be accessible to Admin, Hospital and User.

4.6 Compatibility

The software will be compatible with multiple platforms.

4.7 Durability

The software will be tested for working with multiple users and records as system has to manage multiple users and records (hospital details).

4.8 Effectiveness

The software will be made to handle operations effectively. The system should provide good quality and be error free.

4.9 Maintainability

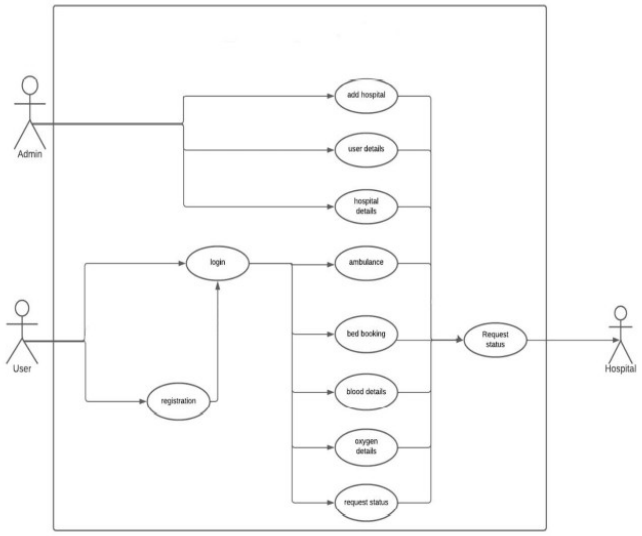
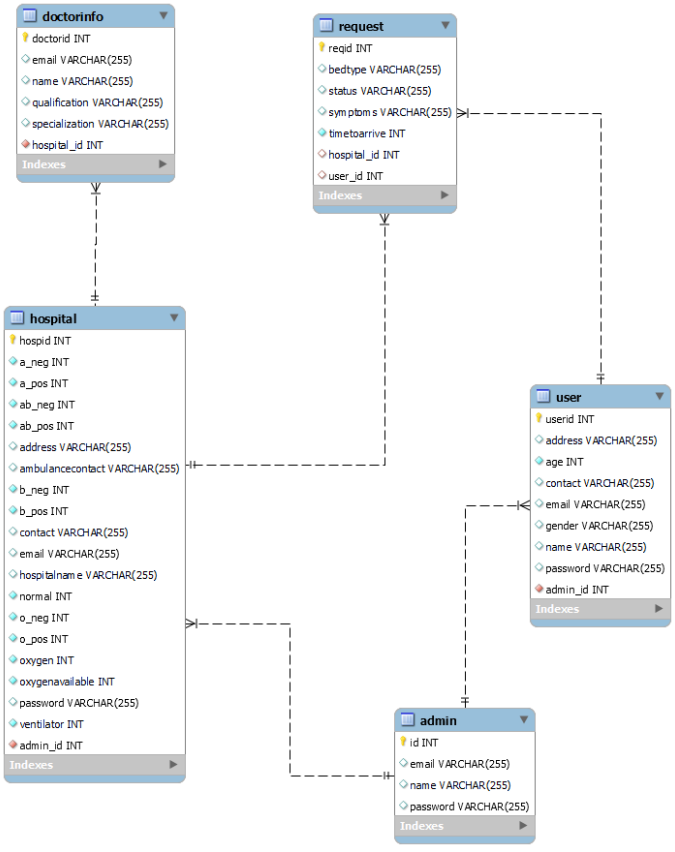
The system should be easy to maintain. There should be a clear separation between the interface and the business logic code. There should be a clear separation between the data access objects that map the database and the business logic code.

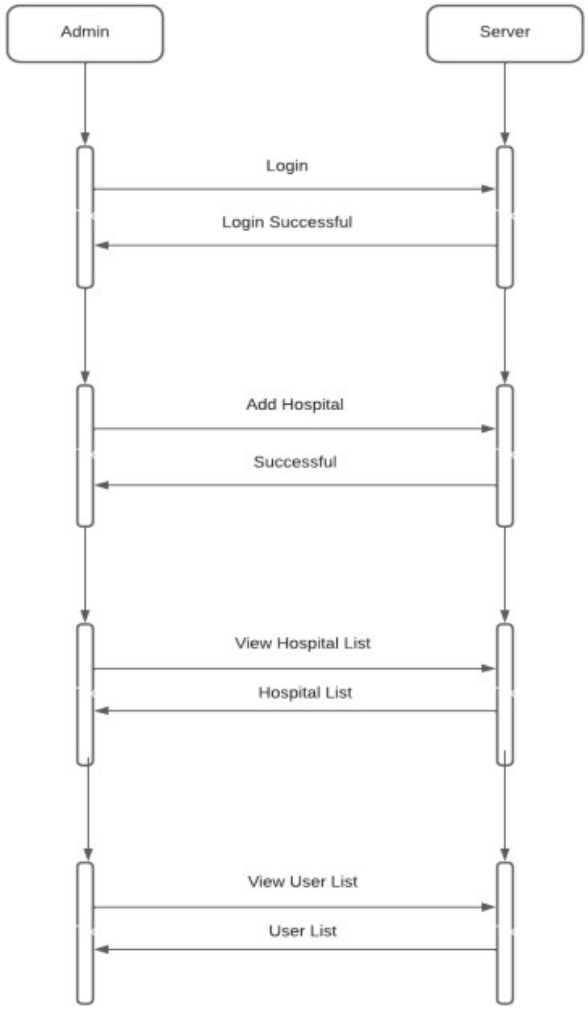
5. Other Requirements

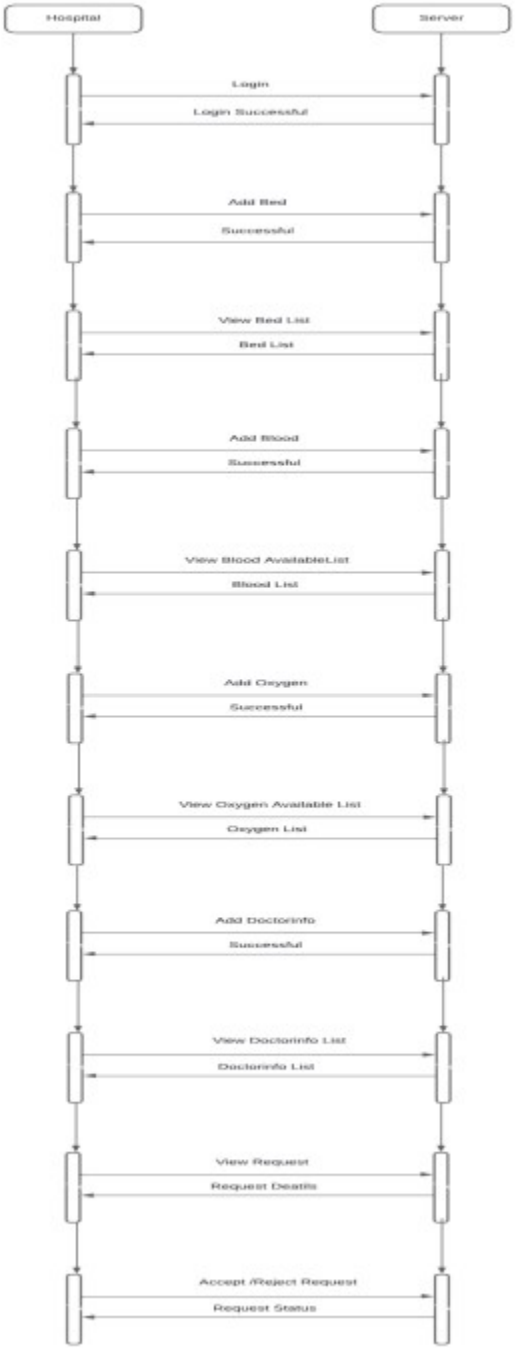
Appendix A: Glossary

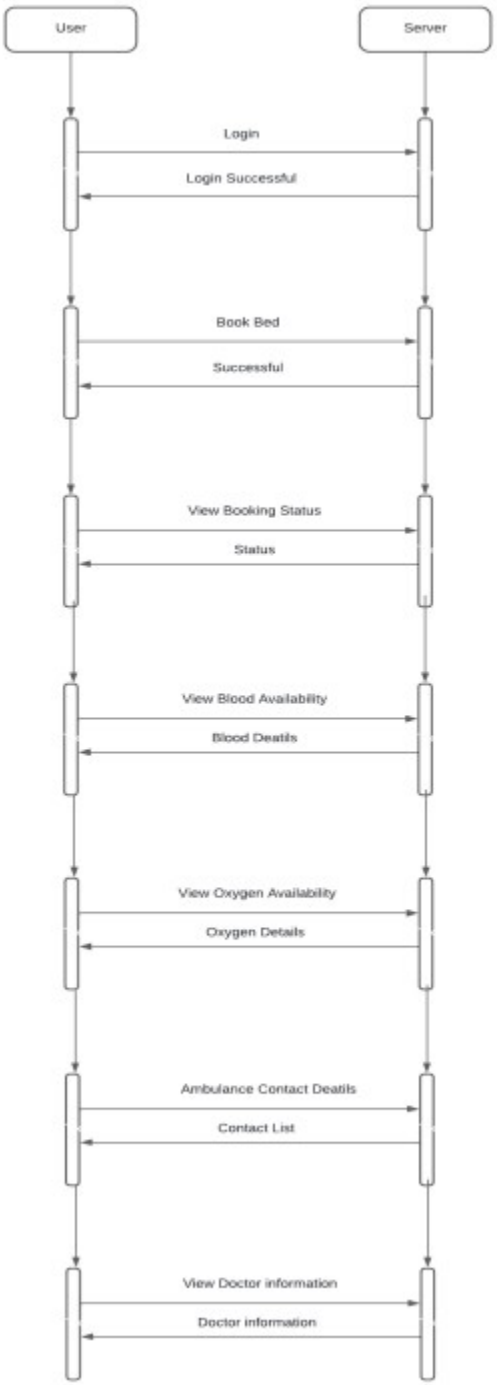
Term	Definition
LifeCare Portal	LifeCare Portal aims at to provide easy access to all the aspects of management and operations of Hospital. We have taken the inspiration of the project from the last years Corona Pandemic. So, in the near future a situation like Corona comes again into human life, at that time LifeCare Portal will help the people a lot in the procedure of finding facilities. The main purpose of LifeCare Portal is to make Hospital related task easy and saves the time of public while searching health care facilities. LifeCare Portal helps to maintains the details of Hospital related queries like Oxygen availability, Bed availability, etc. With the help of LifeCare Portal people can get the information of nearby Hospital location from wherever they are.
SRS (Software Requirement System)	A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document.
Stakeholder	Any person with an interest in the project who is not a developer.

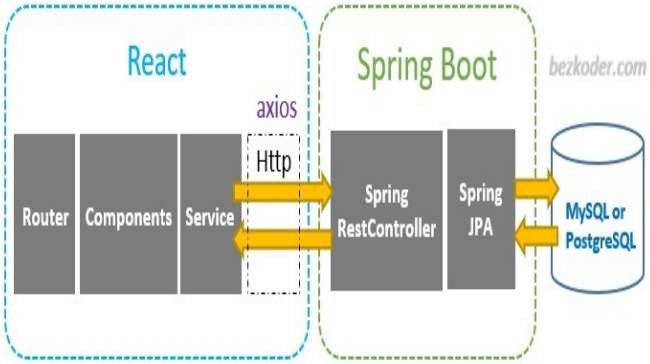
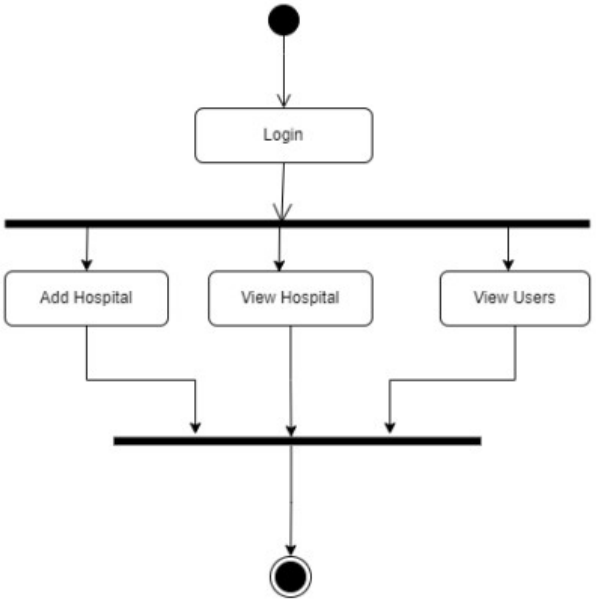
Appendix B: Analysis Models

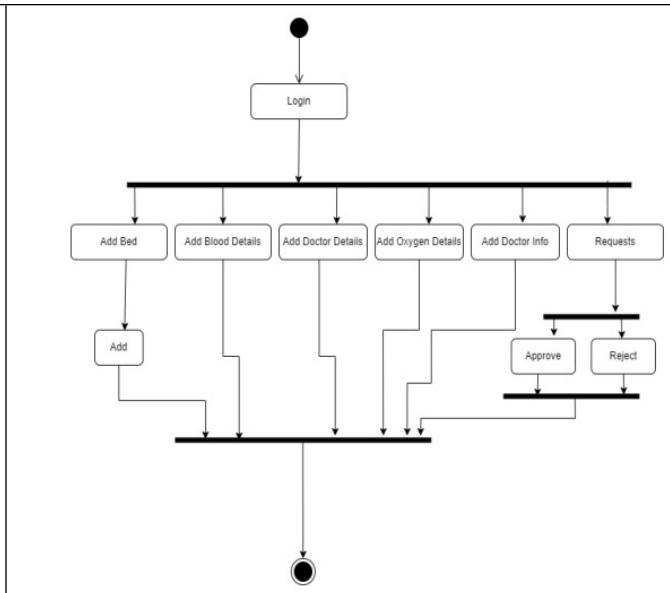
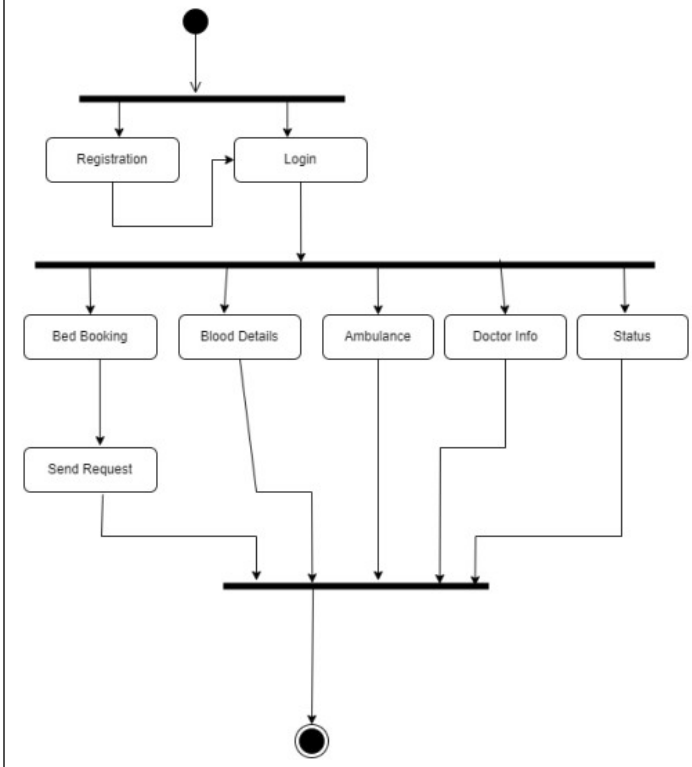
Elements of Analysis Models	Model Construction
Use Case Diagram	
ER Diagram	

Sequence Diagram (Admin)	

Sequence Diagram (Hospital)	

Sequence Diagram (User)	

Data Flow Diagram	
Activity Diagram (Admin)	

Activity Diagram (Hospital)	
Activity Diagram (User)