Final Year Project Report

Project Title

LIFE SAVER BLOOD WEB-BASED APPLICATION

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Description

SECTION-1

OVERVIEW OF THE PROJECT:

PROBLEM:

In emergency cases when people are in need of blood, they circulate messages on social media platform like whatsapp but they don't have any information about the availability of blood.

PROJECT OBJECTIVE:

Our project will provide a complete platform to all these users who are in need of blood just by few clicks and they will be well informed about the information related to availability of blood including blood types, quantities, and locations which will help in saving the life of individual in emergency as well as escaping from the hassle of checking multiple social media platforms.

PROJECT SCOPE:

Our web-app includes features such as:
   • Blood availability
   • Blood types
   • Blood quantity
   • Locate nearby blood banks
   • Can request to donor for blood in emergency.
   • The app will provide intuitive user experience.
   • Donor registration and login portal, availability, blood type.

Our project enables users to see the blood availability including blood types and quantity. It also allows user to search the nearest location of blood bank, user can also make blood request to donor in case of emergency if the blood is not available. Donor can also register themselves as well as edit profile and accept the request or decline the request of the patient.

TARGET AUDIENCE:

The target audience or potential customers for this project are the users in need of blood and blood donors.

KEY TECHNOLOGIES:

The IDE for developing web- based application is React. The source code for web app is written in JavaScript as well as the source code for backend is written in node.js.
Mongo DB database management is used to store the web app data.

SECTION-2

LIST OF REQUIREMENTS:

FUNCTIONAL REQUIREMENTS:

These requirements define the capabilities and functions that the implemented system must have in order to achieve its intended purpose. It includes a set of inputs, behavior and outputs in line with the objectives of the study. They include:

- Login and Logout: to gain access to the web application users must login using username and password. Users need to logout in order to exit the system.
- Add profile: the system should allow a donor who is logged into the system to create a personal profile.
- Intuitive Interface: Provide a user-friendly interface.
- Blood Collection: Record details of each blood including blood type, volume and Availability.
- Blood Request: Allow end users provide to request specific blood types to donors.
- Location: Allowing user to search nearest location.
- Notification System: Implement a notification system.

NON-FUNCTIONAL REQUIREMENTS:

Following are the Non Functional Requirement:

- Usability: the system interface should be easy to use.
- Scalability: the system should be able to adopt additional functionalities. Additional data should be easy to incorporate.
- Integrity: the system being data oriented, it should ensure that the data analyzed and stored is not altered or corrupted.
- Performance: the system should have an acceptable response time while performing its functions.
- Security: The system should allow only authorized users to use its functionalities
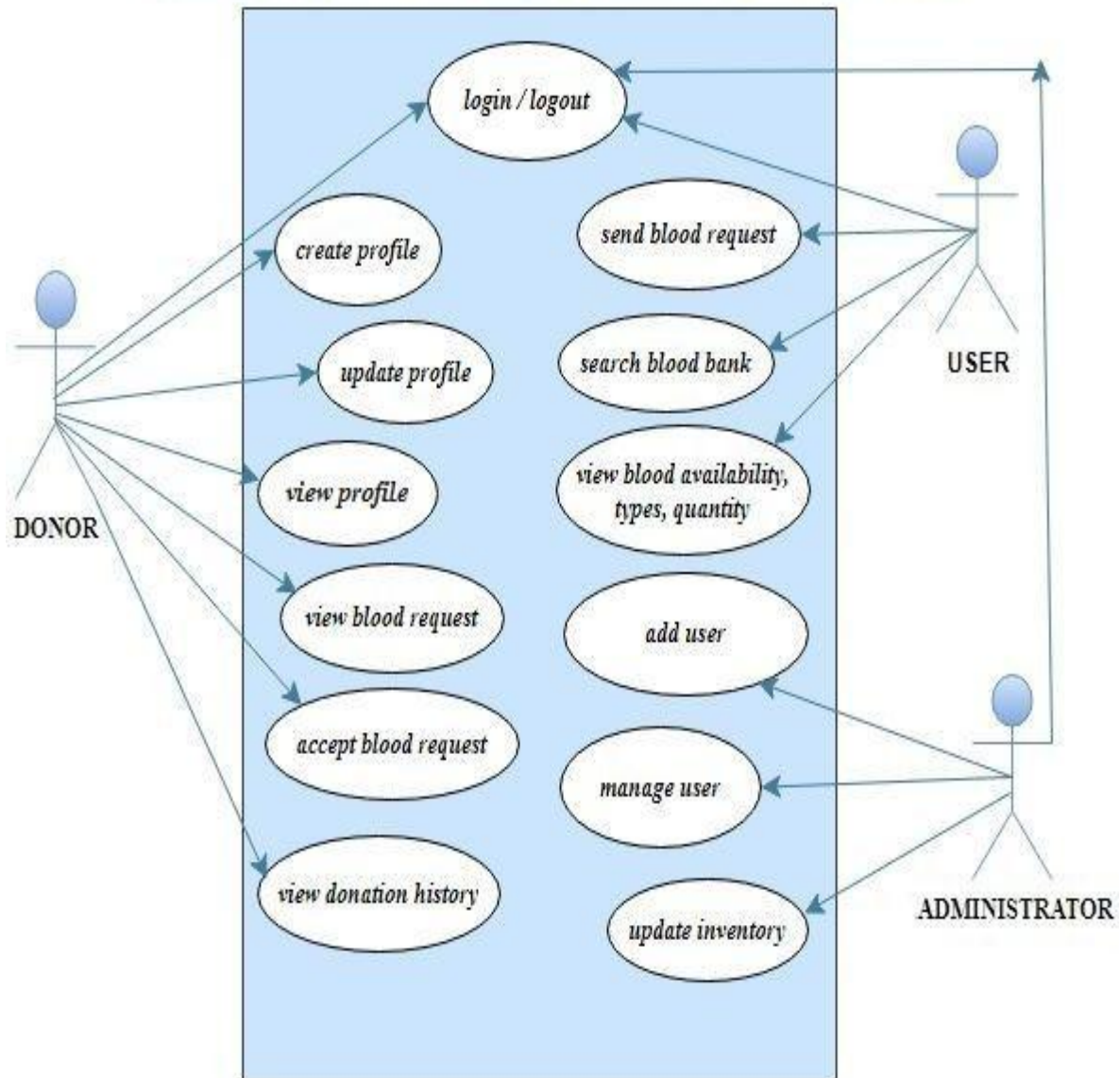
SECTION-3

ERD:

ER-DIAGRAM

Recipient
+ Recipient_id : int

+ Recipient_name: String
+ Recipient_emai: String
+ Recipient_contact: int
+ Recipient_password: String

Donation history
+ Donation_id

+ Donor_id : int
+ Blood_id : int
+ Donation_date : string

Donor
+ Donor_id : int

+ Donor_name: String
+ Donor_emai: String
+ Donor_bloodgroup: String
+ Donor_contact: int
+ Donor_password: String

Blood
+ Blood_id: int

+ Blood_group: string
+ Blood_types: string
+ Blood_volume: int

Blood Bank
+ Bloodbank_id : int

+ Bloodbank_name : string
+ Bloodbank_contact: int
+ Bloodbank_location: string

Blood Request
+ Bloodrequest_id : int
+ Recipient_id : int

Administrator
+ Admin_id: int

+ Admin_name: String
+ Admin_email: String
+ Admin_password: String

View · Send · View · Has · updates · Manages

USED CASE DIAGRAM:

UML DIAGRAM OF LIFE SAVER BLOOD BANK WEB - APP

SECTION-4

INSTALL AND USE OF SOFTWARE / SCREENSHOT:

By using the URL you can use the website. Open your web browser and enter the website's URL. (After deployment)

HOW TO USE THE SOFTWARE:

To explain the use of software we are using the screenshot of the project and detail of it step by step.

HOME SCREEN:
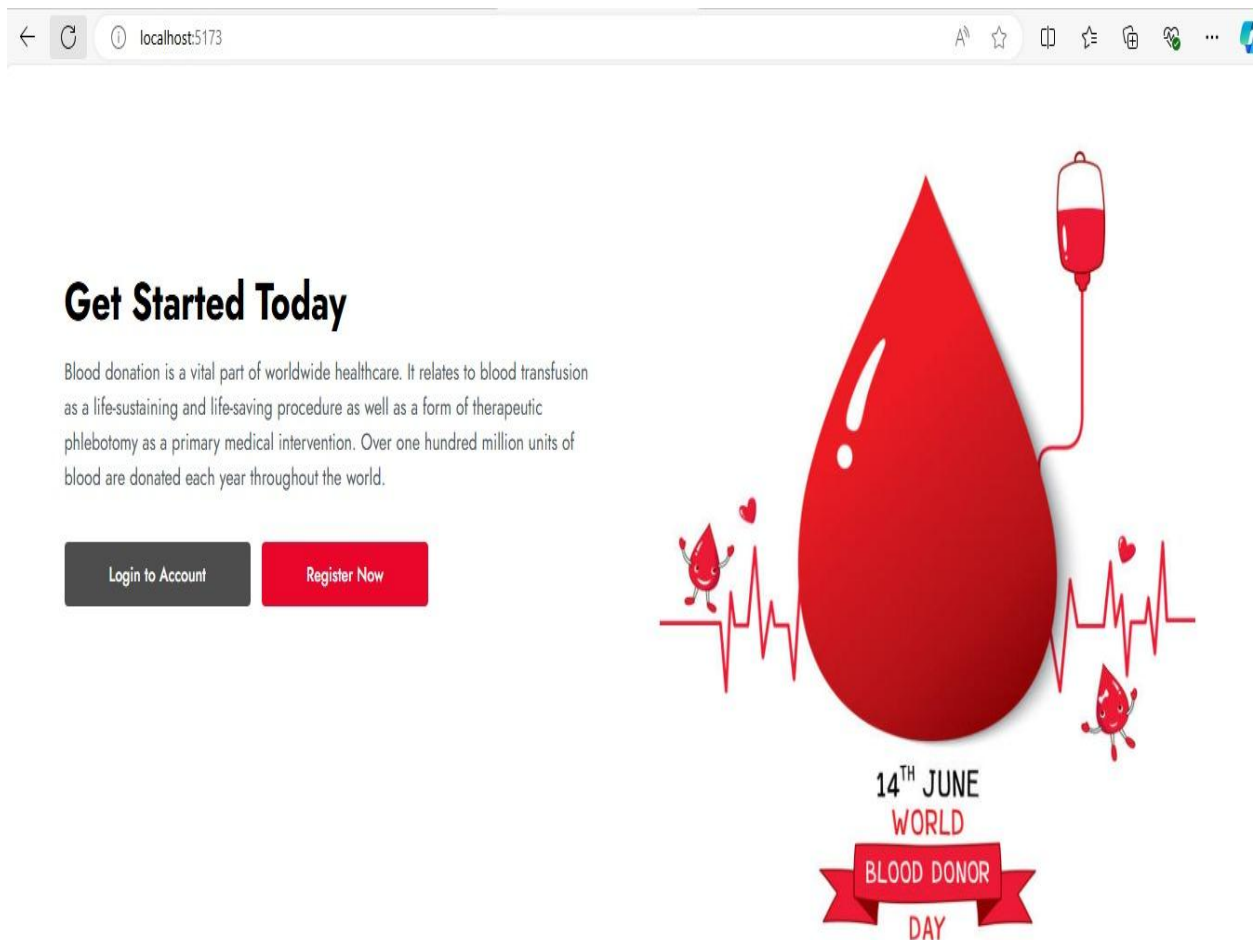
This is the home screen of the website.

SIGNUP SCREEN:

This is a sign up screen for a website. The user can enter their email address, password, and confirm their password. After filling in the information, the user can click on the "REGISTER" button to complete the registration process. You can register yourself as patient and donor.

LOGIN SCREEN:

This is a login screen. It has two text fields for email and password and a button "Log In". This allows users to log in to their accounts as patient or donor

PATIENT PORTAL SCREEN:
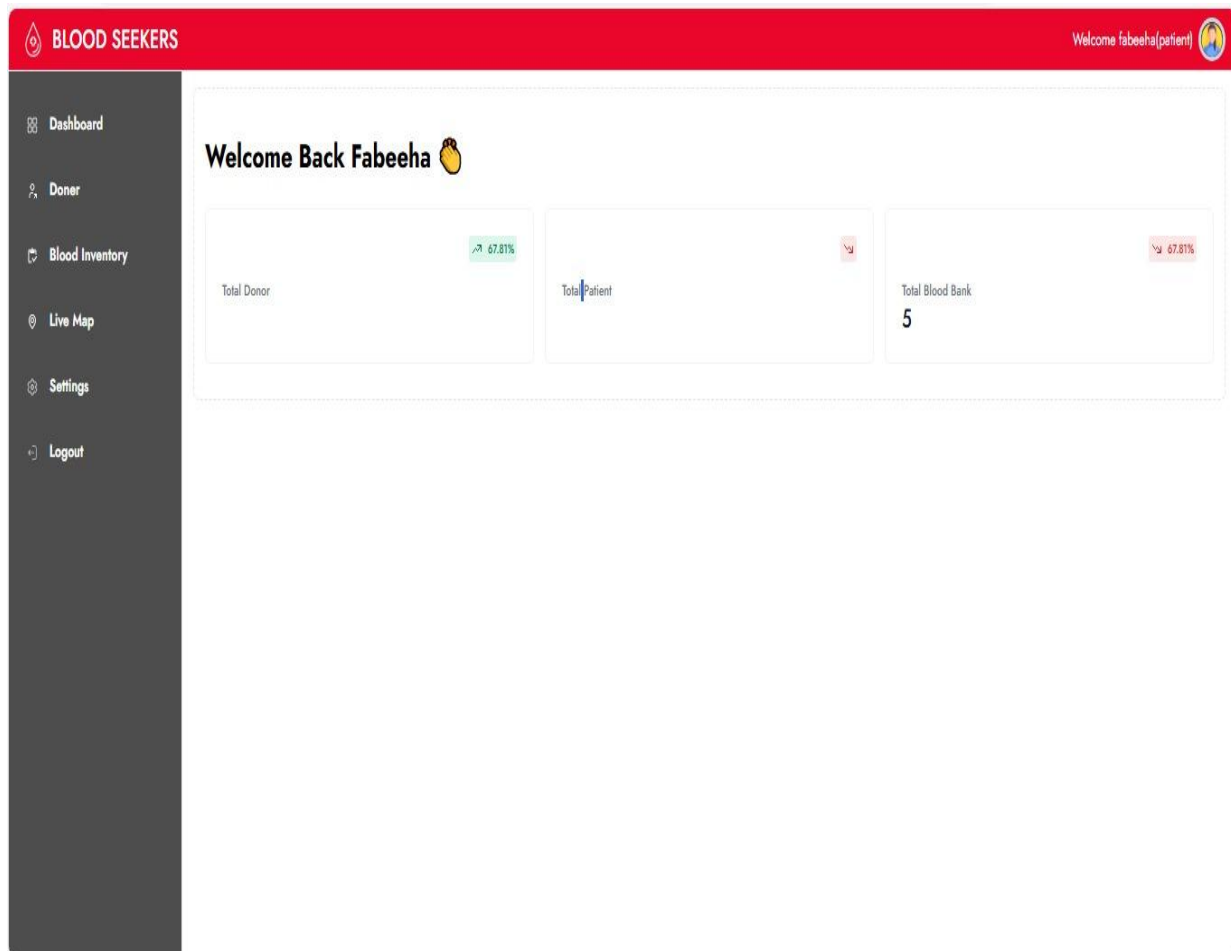
This is the patient portal screen where user who is in need of blood can view the available donor and make blood request to them.
User can view the blood inventory including blood availability, blood type and blood quantity.
User can view the map for the nearest location.

DONOR SCREEN:
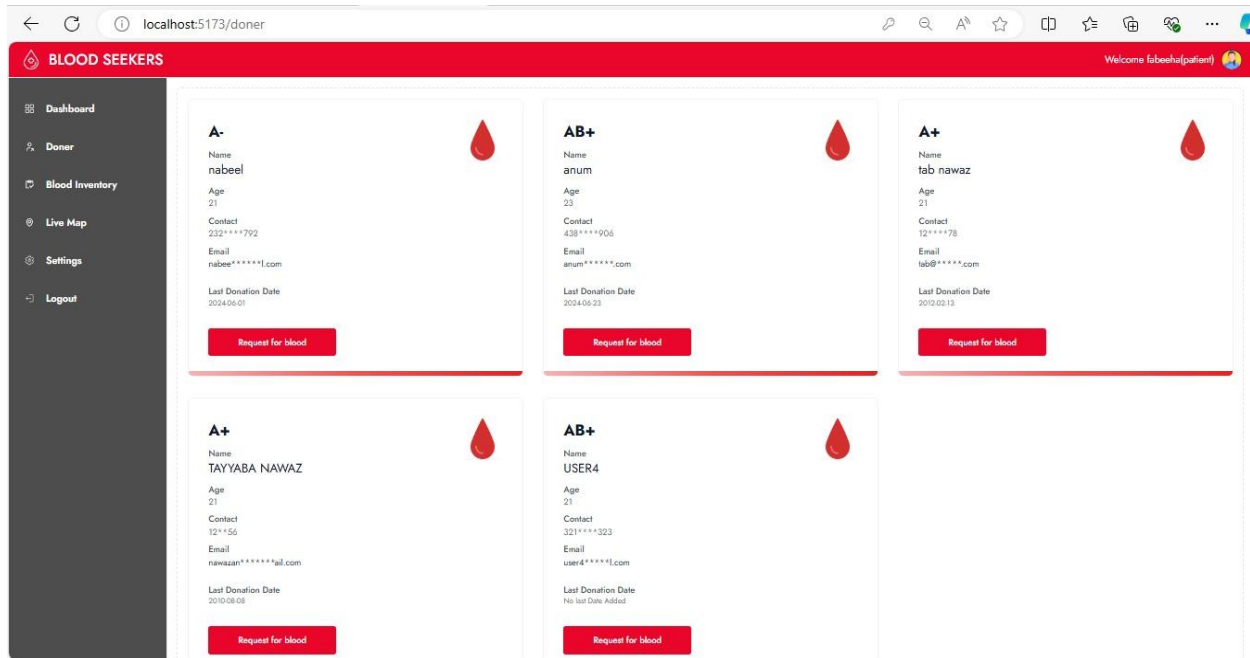
This is the donor screen where user can view all the donors as well as make blood request to donor.

BLOOD REQUEST FORM SCREEN:
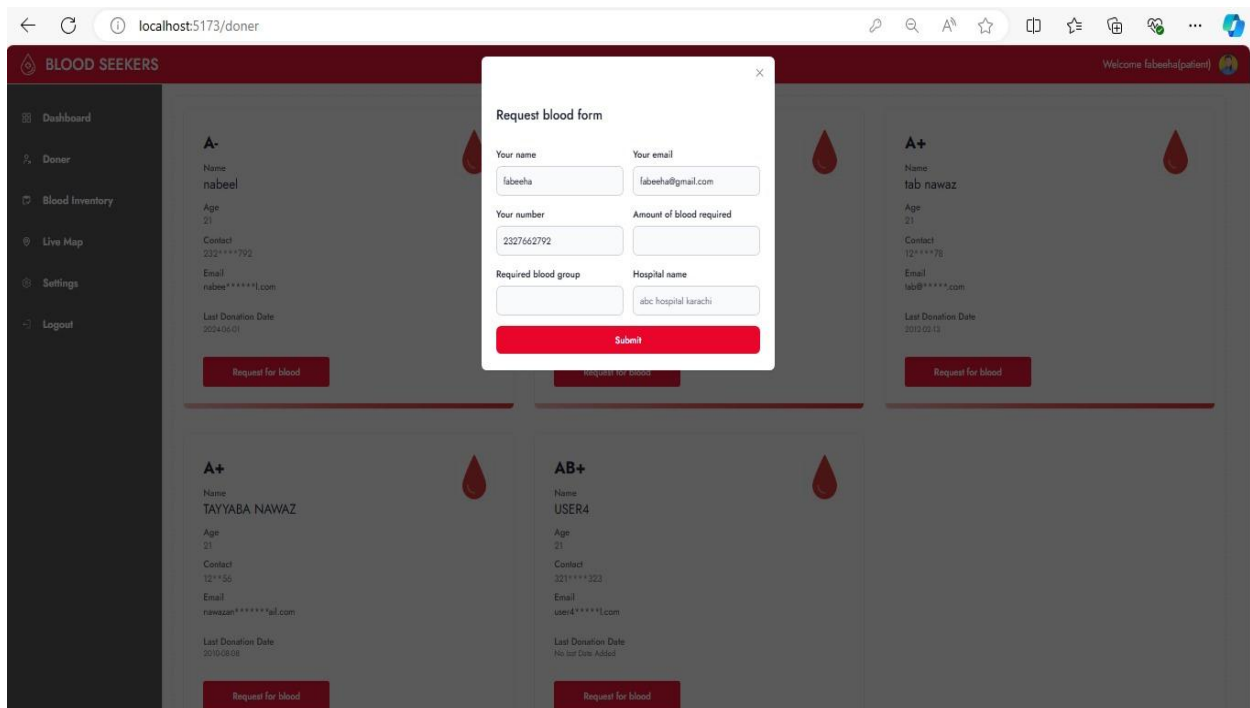
This is blood request form screen where user can enter the details and submit blood request to donor.

BLOOD INVENTORY SCREEN:

This is blood inventory screen. In which user can view blood availability, blood types, quantity and last update.

ADMIN PORTAL SCREEN:
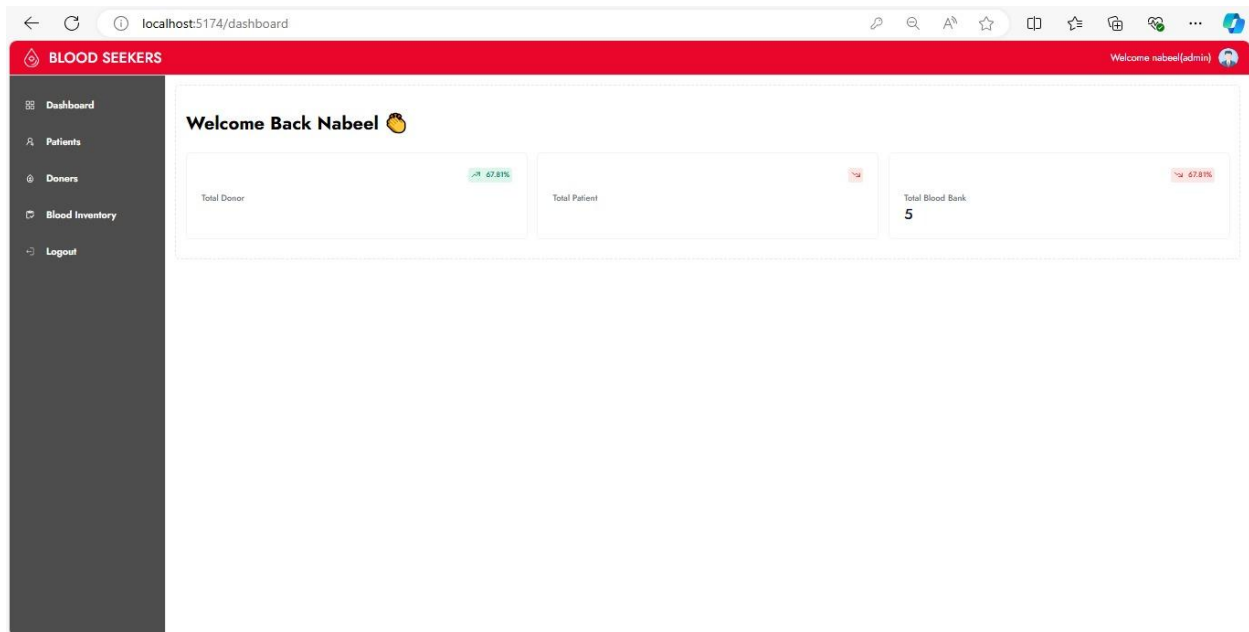
This is admin portal screen. Only admin can access this portal. In this admin can manage patient, donor and blood inventory.

DONOR SCREEN:
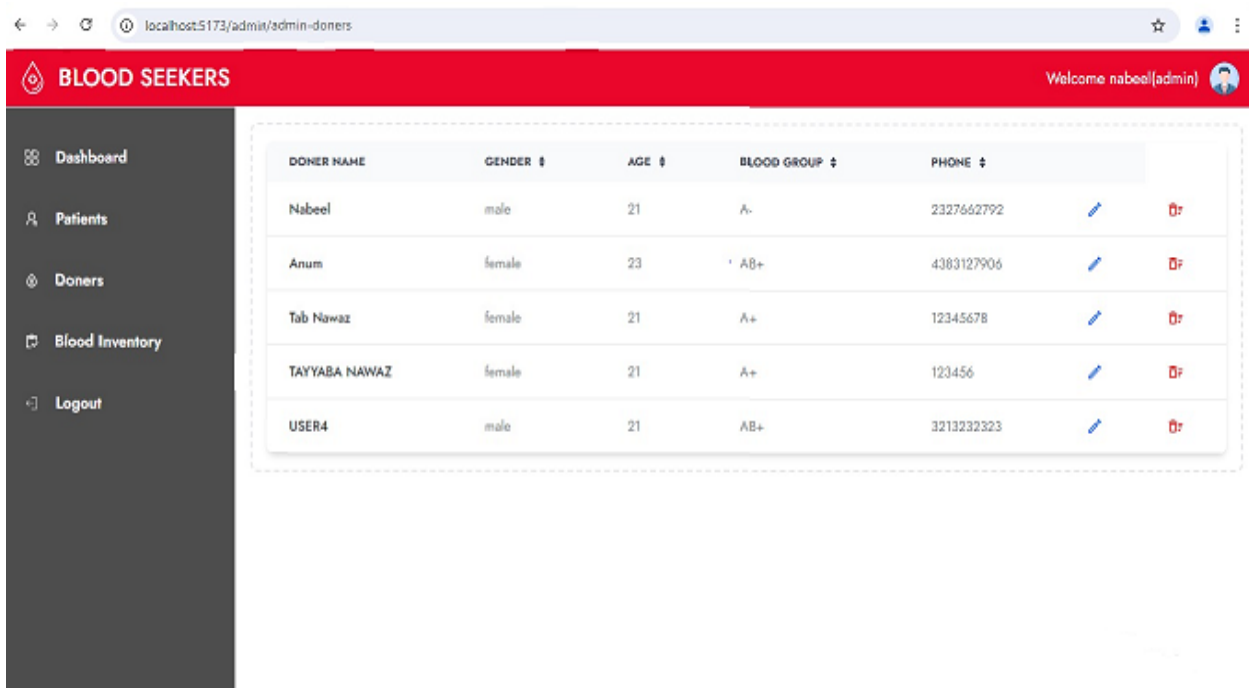
In this screen admin can add, delete and modify the donor detail.

BLOOD INVENTORY SCREEN:

In this screen admin can add, delete and modify the blood inventory details.

PATIENT SCREEN:

In this screen admin can add, delete and modify the patient details.

DONOR PORTAL SCREEN:
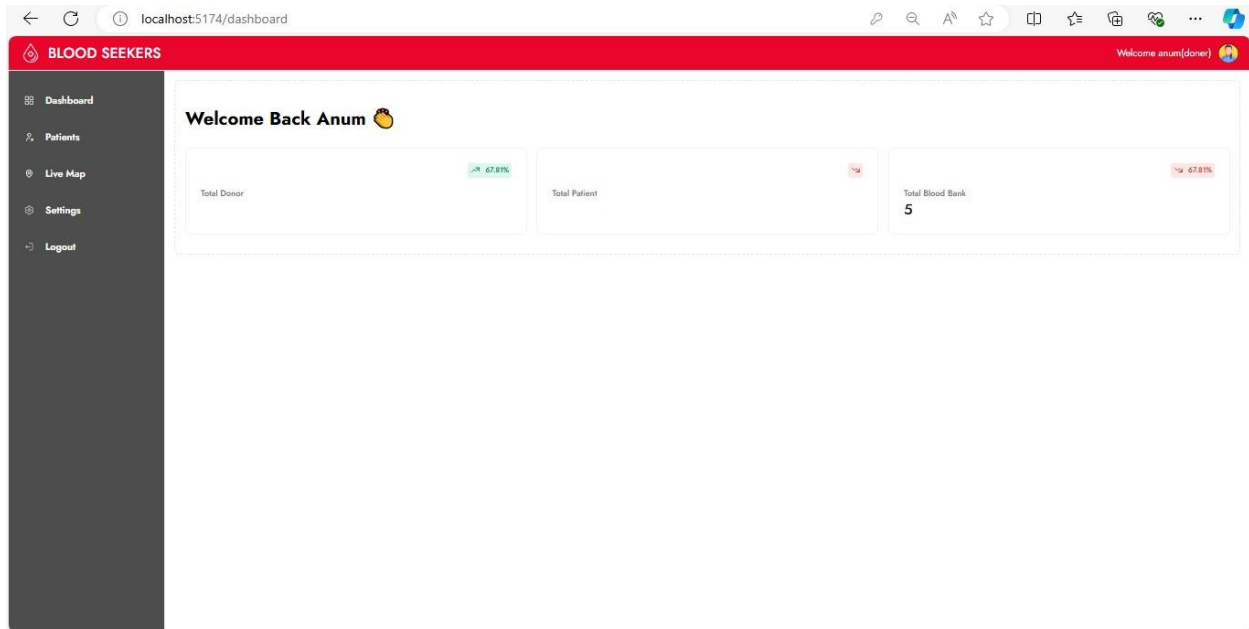
This portal allow donor to view the patient and its request.

User can also edit there profile.

PATIENT SCREEN:
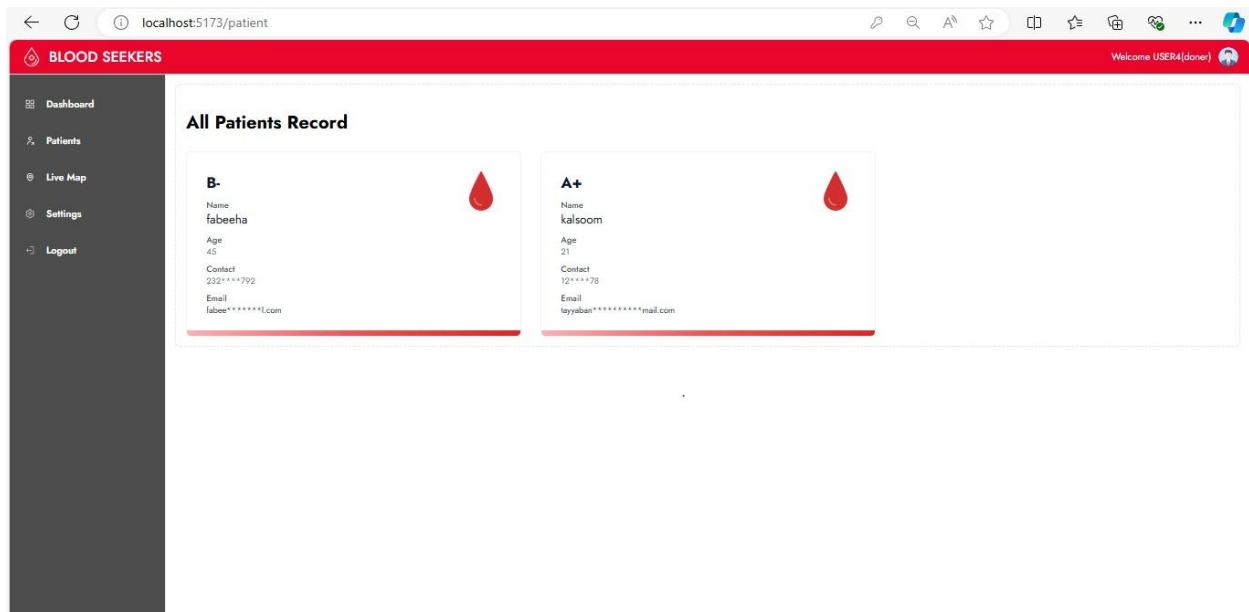
In this screen user can view patient and see its request.

PROFILE SCREEN:

In this screen user can edit their personal profile.

REQUEST SCREEN:

This is the screen when donor have no blood request from patient.