Project and Professionalism (6CS007)

Milestone-3

Artefacts Design and Test Plan

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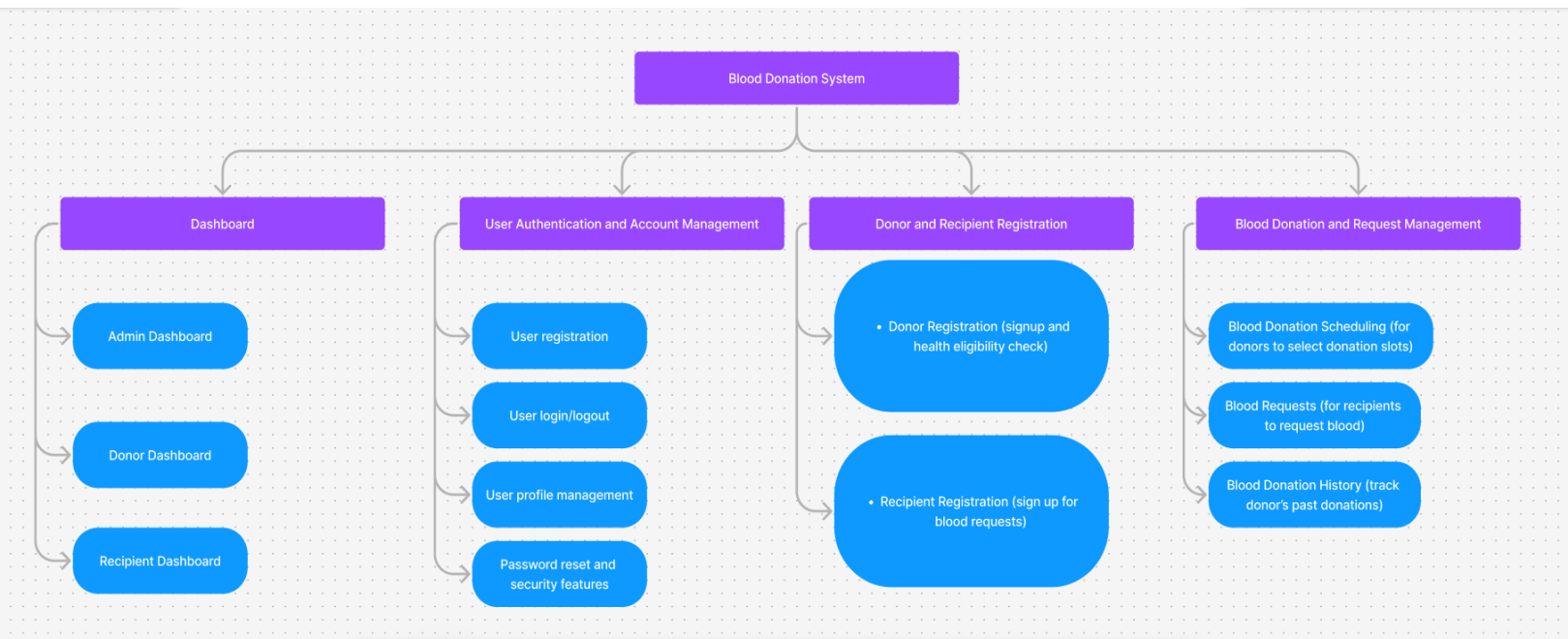
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1. Functional Decomposition Diagram(FDD)

2. User Interface (UI)

| Req. Code	Req. Description	Use Case	Moscow Prioritization
UI -1.0	The system should enable users to register as donor and receiver	Registration	Should have
UI -F-2.0	Allow users to search for nearby blood	Donor search	Must Have
UI -F-2.1	Allow users to sehedule blood donation appointments	Appoinment	Must Have
UI -UR-2.2	Enable admins to approve or reject donor registrations	Admin Panel	Must Have
UI -F-3.0	Allow users to view their donation history	User Profile	Should Have

Use case Diagram of UI
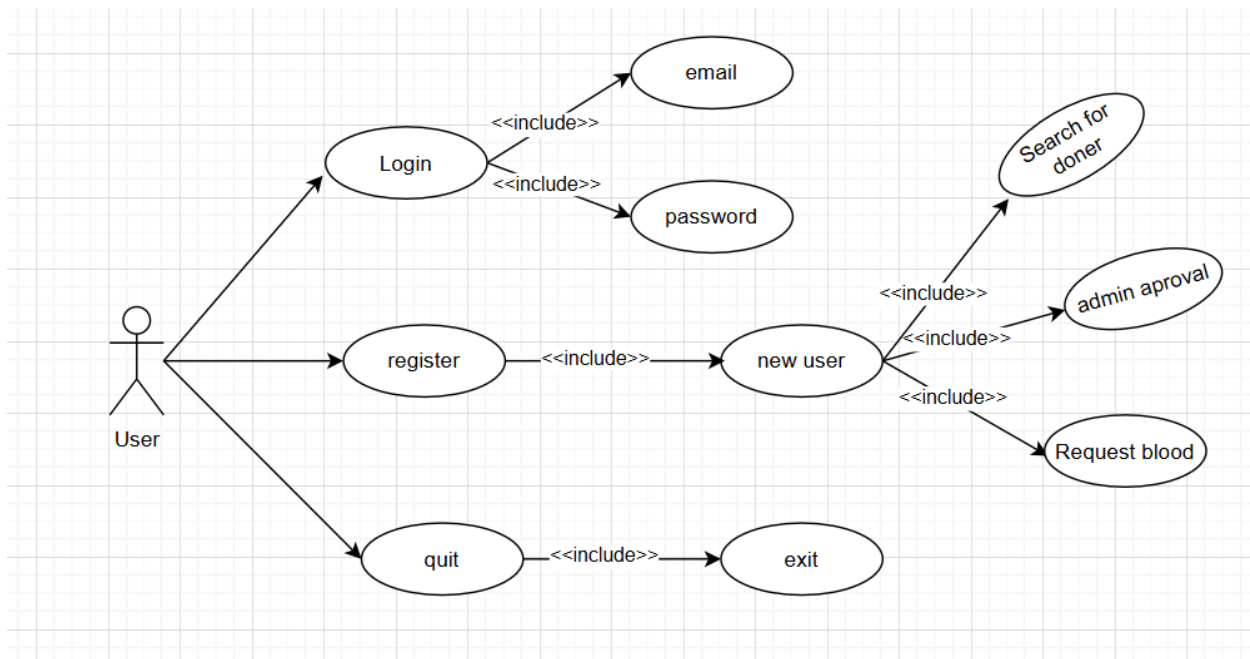
Figure 1 Use Case Diagram of UI

This use case diagram shows the interaction of a user-a donor or recipient-with the blood donation system. A user can log in using an email and password or register to create a new user profile. After registration, users can perform actions such as searching for donors or requesting blood, which may require admin approval for verification. Additionally, users can choose to quit, which leads to the exit process. The diagram illustrates key system functionalities and dependencies, such as login validation, admin oversight, and registration requirements, ensuring a secure and efficient workflow.
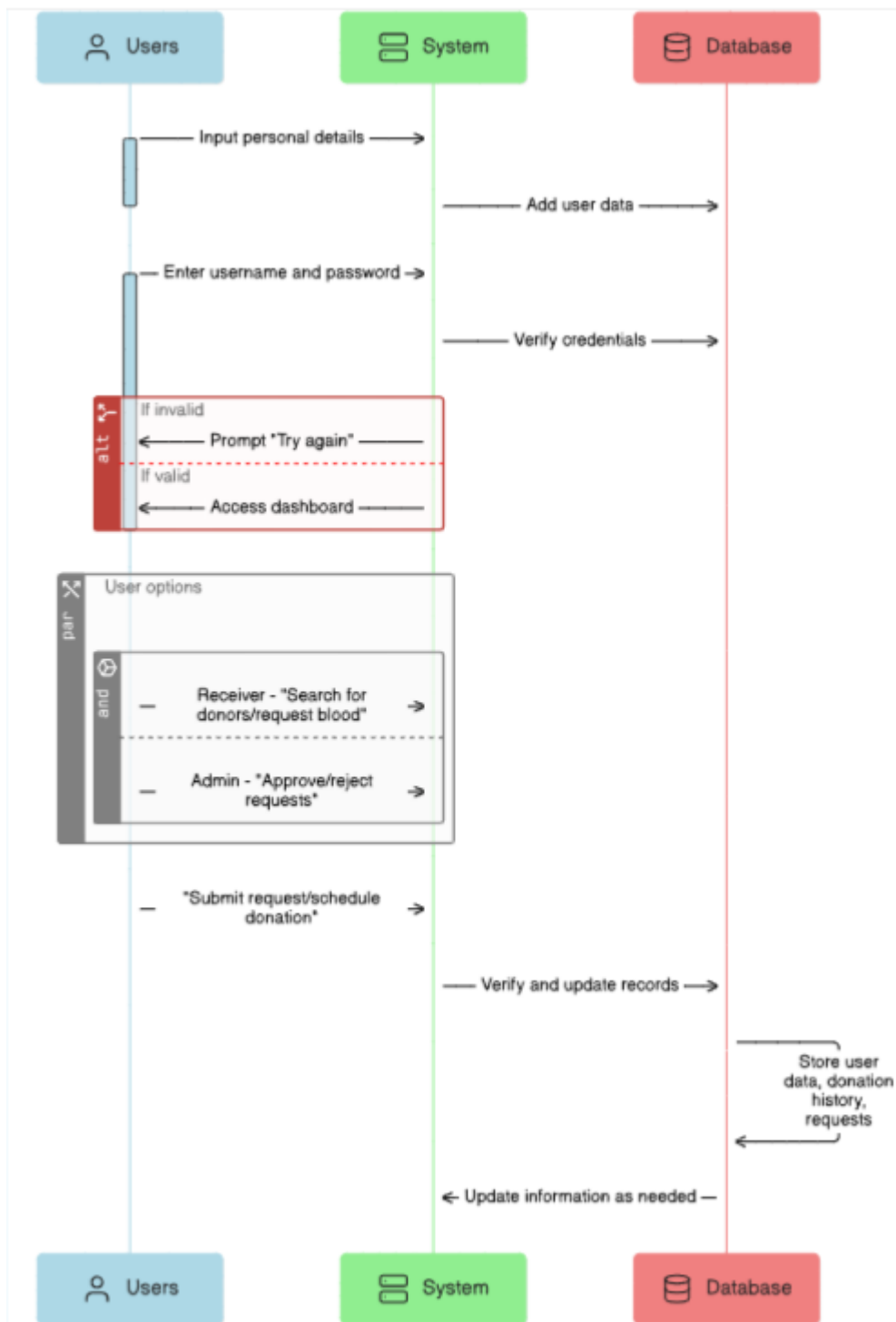
Figure 2 Sequence Diagram of UI

This sequence diagram represents the process flow of a blood donation system. It interacts between three vital components: Users, System, and Database.

User Interaction: The user will provide personal information that gets forwarded to the system in order to create user data to the database.

Login: A user enters the username and password, and the system verifies them against the database. If invalid, the user is prompted to "Try again"; if valid, the user is taken to the dashboard.

User Options: On the dashboard are mainly two actions: Receiver: A receiver can search for a donor or request blood.

Admin: An admin can approve or reject a blood request.

Request Submission: The user can submit a request or schedule a donation. The system verifies and updates the record to the database containing information about the users, history of donation, and demand. It sends back updated information to the user.
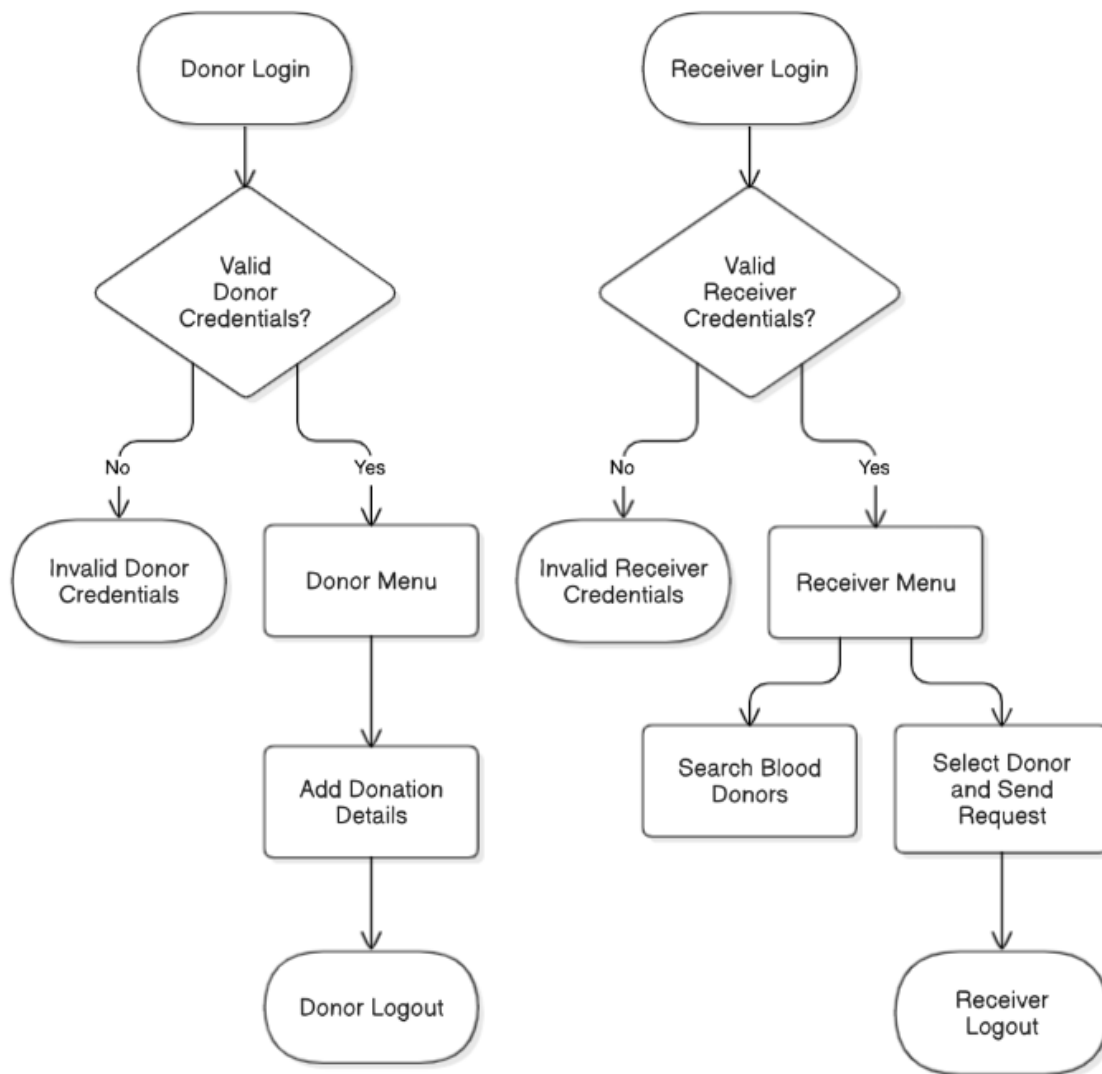
Figure 3 Activity Diagrams of UI

This Activity diagaram depicts the Donor and Receiver workflows of an Online Blood Donation System:

Donor Workflow:

The donor logs in with his/her credentials.

The gateway checks if the username and password are valid:

Invalid credentials: Shows error message ("Invalid username and password") and terminates the process.

Valid credentials: The process proceeds to "Donor Menu."

Under Donor Menu, they have the option of adding details, such as your blood group, availability, as well as providing other useful data to receivers,

After the end of the session, they logged out

Receiver Workflow:

The receiver logs into the portal, entering their "username and Password"

Decision Point: to Check whether entered Username and Password Are valid.

Invalid: display an error ("invalid username and password") and kill the process.

Valid credentials: The receiver goes to the "Receiver Menu."

In the Receiver Menu, they can:

Search for Blood Donors: Search for donors according to their needs.
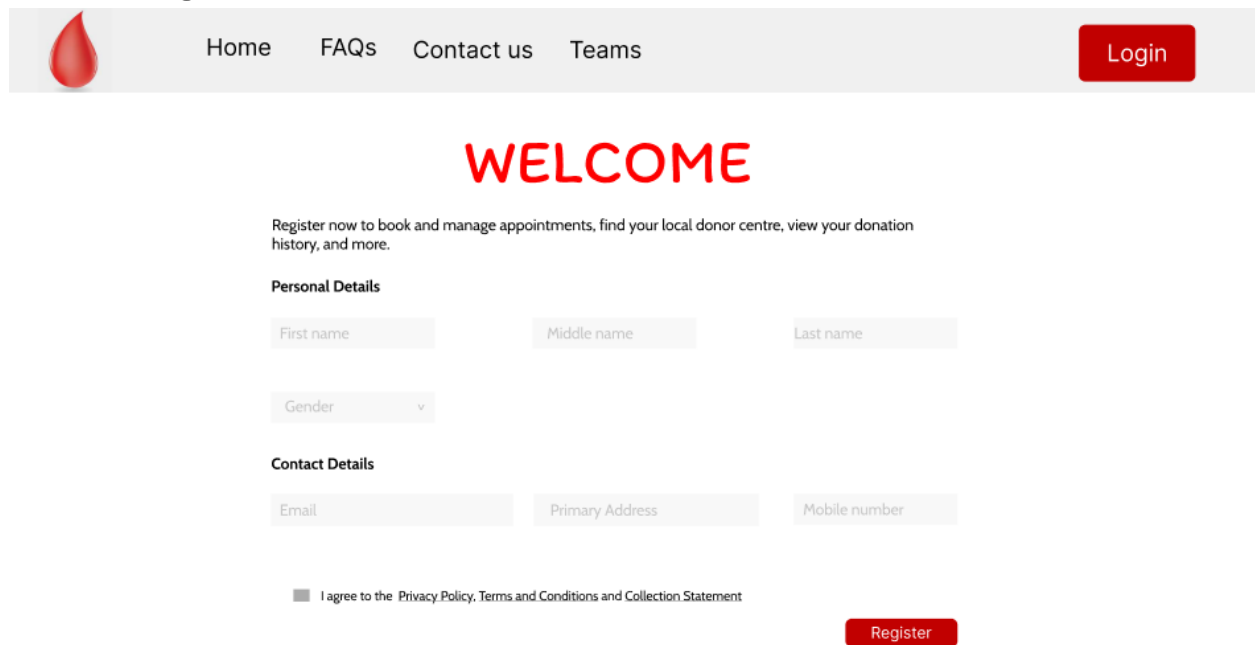
Select a Donor and Send Request: They can contact the donor for blood donation.

After their work is done, they can log out, which will end the session.

Test Case:

Particulars	Description
Test case id	signup
Priority	High
Test case	Verify User Sign Up – **Positive test case**
Test step	Enter a valid username, and password. Click on the signin
Pre-Condition	The user should have valid data.
Test Data	Username: nischalraj00@gmail.com Password: 123123@456
Post Condition	The user should be able to access the dashboard
Expected Result	Dashboard access
Actual Result	Dashboard access
Conclusion	Pass

3. Design/UI

Home   FAQs   Contact us   Teams   Login

WELCOME

Register now to book and manage appointments, find your local donor centre, view your donation history, and more.

Personal Details
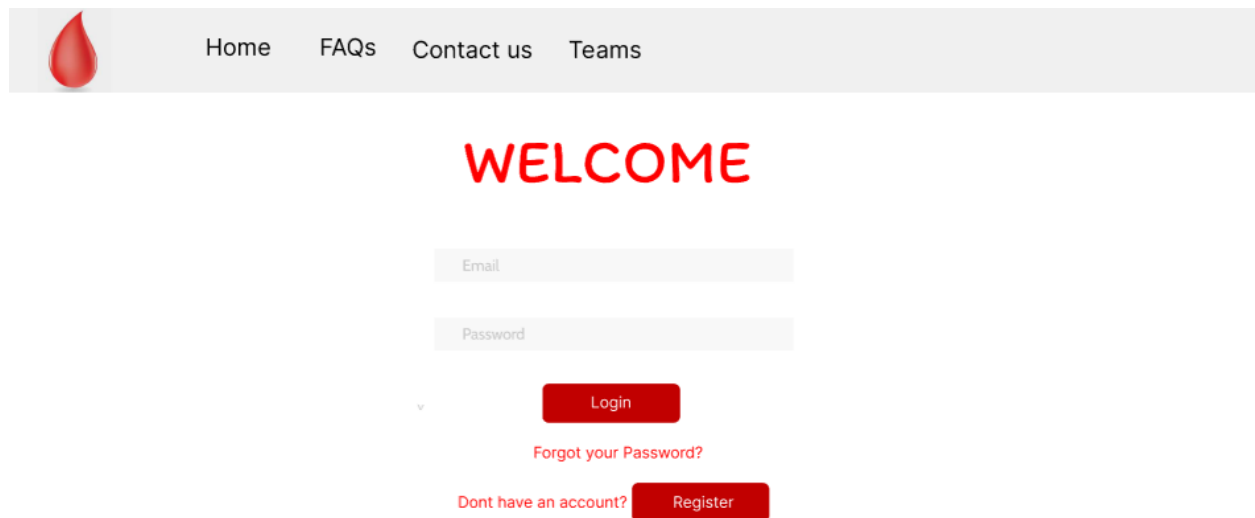
First name   Middle name   Last name

Gender

Contact Details

Email   Primary Address   Mobile number

☐ I agree to the Privacy Policy, Terms and Conditions and Collection Statement

Register

Figure 4: Login Page

Home   FAQs   Contact us   Teams

WELCOME

Email

Password

Login

Forgot your Password?
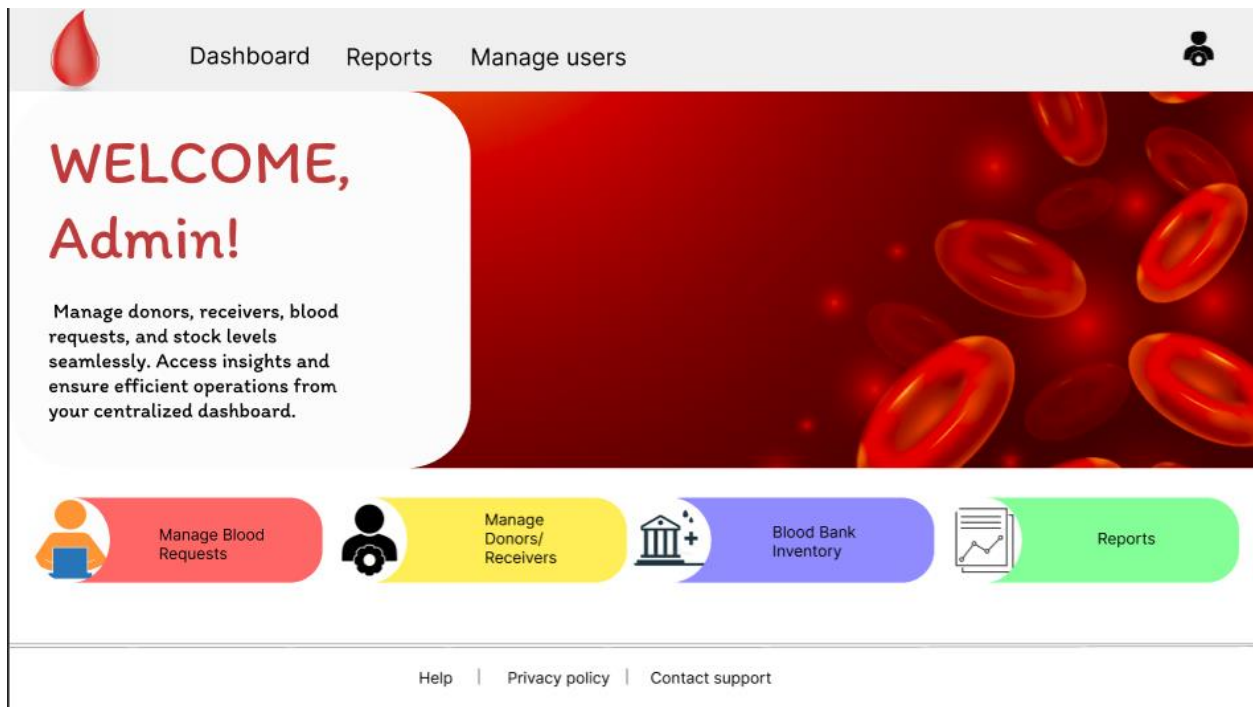
Dont have an account?   Register

Figure 5: Register page
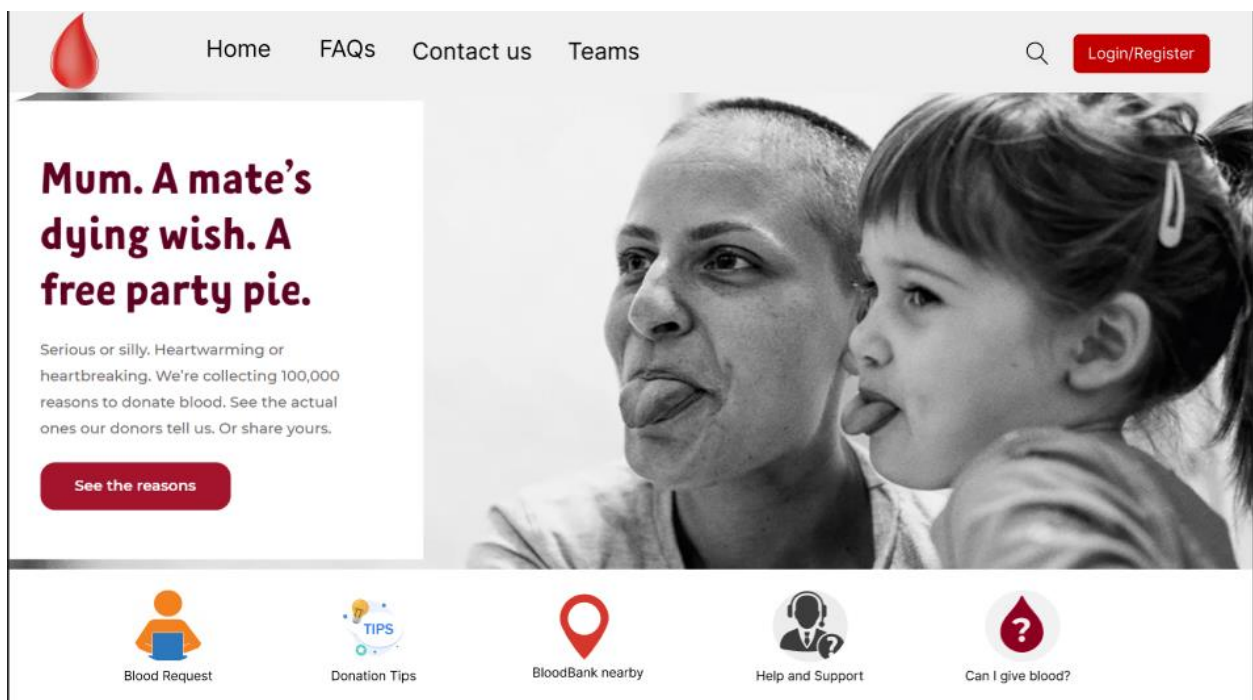
Figure 6: Admin Dashboard

Figure 7: User Dashboard