



CENTER FOR DEVELOPMENT OF
ADVANCED COMPUTING

Project Documentation
Blood Donation Management System

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Project Functionality

- Main aim of the project is to provide blood to the needy person.
- User can login and send the request to get the required blood type.
- Any person who is interested in donating the blood can register himself.
- Admin is the main authority who can do addition, deletion, and modification if required.
- Only admin can see the list of donor and other details of the donor.
- If stock isn't available for the required type of blood in that case admin can contact donor for the blood donation.
- After login user can request for the required blood, If the blood is available in that case it will be granted by the admin.
- In case of unavailability of the required type of blood user will get the notification to wait and admin will contact him/her.

USE CASE

PRESENTATION LAYER:

- By default, routing path set by the react router home page will get open where home tab, about, contact and login tab can be seen.
- Home, About, Contact and Login tabs are connected through Navlink.
- In login tab we have given two options, which are login as Admin & user.
- Admin can also register the donor and admin can check the list of donors. Admin can search the donor based on blood group and location.
- In the stock tab, admin can increase or decrease the stock. The admin can also check all the stock.
- Admin can check the blood request raised by the user.
- The HTTP calls are done using “AXIOS http library”.

SERVICE LAYER:

- In the service layer, when user logs in with id and password it connects with backend by using “AXIOS http library”.
- When user requests for the blood, admin will get the notification via email.
- User will get the notification via email if the required type of blood is not available in the stock.

DAO Layer:

- We have created three tables in the database Admin, Donor, BloodRequest and User and connected them to the service layer by JDBC.

PROBLEMS FACED DURING PROJECT:

PROBLEM 1:

- We were facing problem while integrating the Login Page with the other components of the project.

RESOLUTION:

- Due to insufficient knowledge of Routing ,we did some POCs regarding React routes and we finally learnt how to integrate all the components with login page.

PROBLEM 2:

- We were having issue in connecting frontend to backend.

RESOLUTION:

- We tried multiple solutions by taking reference from google and finally resolved it by using axios.
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LEARNINGS DURING THE PROJECT

- We learnt a number of technologies like Java, Spring Boot, React, MySQL, Node, HTML,CSS.

- We got to know the end-to-end working of Web Applications(how the flow goes from the UI to the backend services and the storage of data in Database)
- We learnt how to use GitHub which simplified the process of working with other people and made it easy to collaborate on project. It helped us to easily merge our changes in with the master branch of the project.
- We also used HYGGER as our scrum board to organize tasks, assign specific tasks to team members, and track each task through its lifecycle.