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Itgalpura, Rajanukunte, Bengaluru - 560064

School of Engineering

A Project Report on Review-1

DONOR HUB

Submitted in partial fulfillment of the requirement for the course

CAPSTONE PROJECT (**CSE7301**)

Submitted by:

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Contents

Abstract :

The BDMS is a computerized system for handling records of blood donors. It is a bridge from a donor to a recipient, a one-stop shop for donors and a user-friendly way to connect. Medical institutions, hospitals, blood banks may keep donors database including blood types, contacts, and donation history. It Improves blood supply chain by inventory control, shortage alert, and fast matching of donor blood type with the patient blood type. It also supports backed logging for administrators, staff and donors for confidentiality and data security. Potential donors can register online, find out if they are eligible to donate and receive reminders of donation opportunities. When the system transitions from a manual to automated process, it can minimize errors, save time and help guarantee that the blood going into and coming out of the blood bank meet all specifications.

Hardware and Software tools used:

Hardware Requirements:

- **Servers:** For backend processing and data management
- **Network Infrastructure:** For communication
- **Devices:** For user access and testing (e.g., mobile devices, computers)

Software Requirements:

- **Frontend:** Status tracking, notifications.
- **Backend:** Integrate databases, handle notifications
- **Database:** Store records and user data
- **APIs:** RESTful for data handling

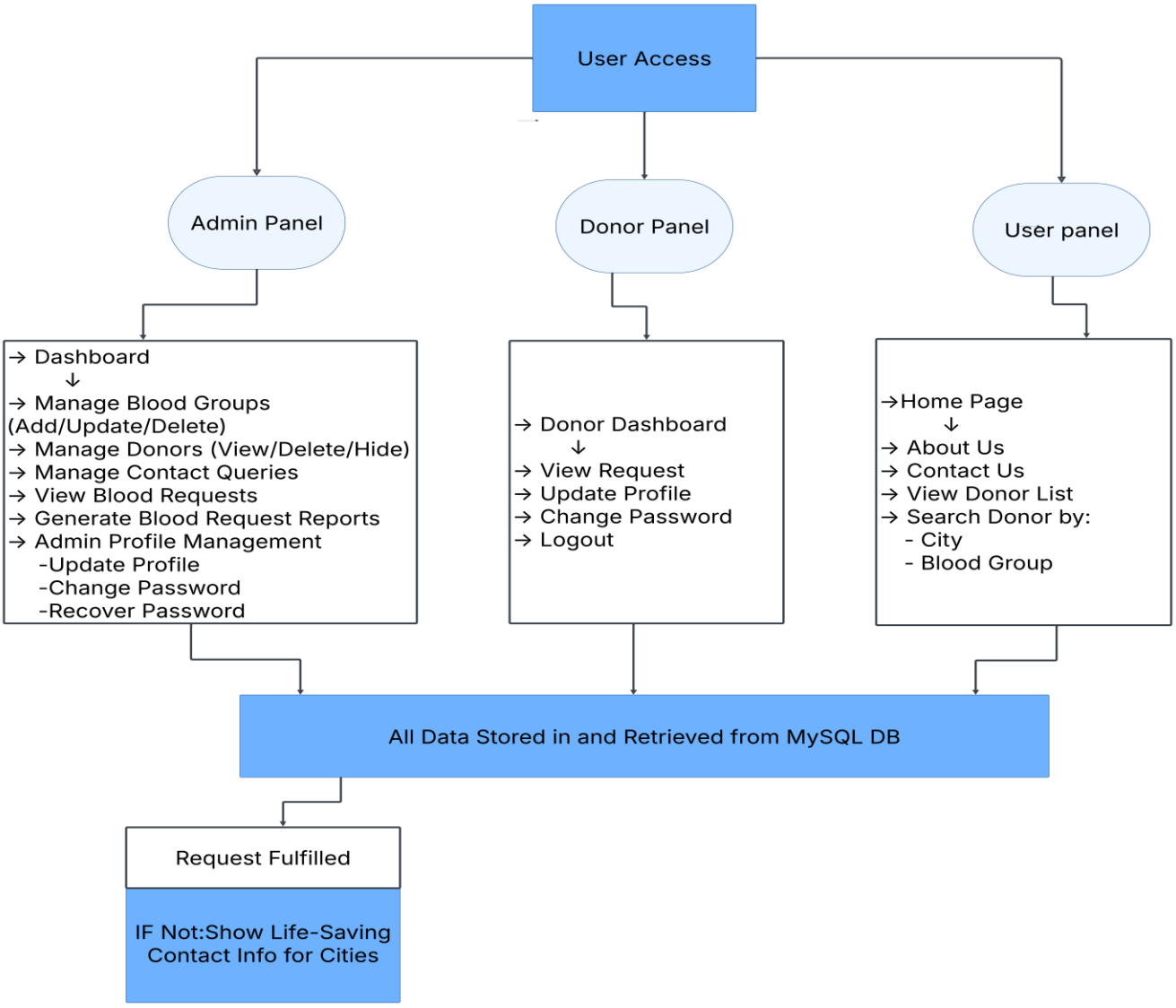
Methodology/Modules

Module 1: Admin Panel
Manage blood groups, donor records, and user queries.
View and respond to blood requests.
Generate blood request reports and maintain secure admin access.

Module 2: Donor Panel
Donors can register, update their profiles, and manage their availability.
View incoming blood requests and respond accordingly.
Maintain secure account access with password management.

Module 3: User Panel
Search for donors based on city and blood group.
View donor contact details and send blood requests.
Access informational pages like Home, About Us, and Contact Us.

Block diagram :



Challenges faced:

1. Looking for guidance to know more about the project
2. Finding ways to enhance the functionalities
3. Choosing the appropriate tools
4. Testing and Deployment
5. Maintenance and Support
6. Time management

Conclusion:

The Donor Hub Project provides an effective and functional platform to aid the coordination and management of blood donation events. The integrated system & platform centralizes donor information, allows for better inventory tracking, and creates quicker communication between donor & medical institutions. When all facets are used effectively, the system can help meet critical blood needs promptly and efficiently. The platform design creates a safer user background, in tandem with real-time updates and automated notifications. Results from the project can significantly improve operational efficiency on many levels, while also encouraging routine donor usage and participation. All in all, the project is a progressive addition to the field of digital healthcare insights and solutions and is ultimately a better initiative towards preparedness in events of emergencies, and ultimately more lives saved and improved blood availability.

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