Fr. Conceicao Rodrigues College of Engineering, Bandra (W)

TE Electronics & Computer Science (SEM V)

Mini Project-2A Proposal Form
AY -2022 - 23

1. **Name of the student(s) with roll numbers**

   - Raj Shetty (Roll No. 9243)
   - Simon D'souza (Roll No. 9457)
   - Akshay Manan (Roll No. 9338)

2. **Title of the Mini Project:**

   "VitalFlow - Blood Donation Management"

3. **Mini Project Category:**

Research		Software	√
Application	√	Hardware	
Product		Software and Hardware	

4. **Mini Project Area/ Problem Characteristics:**

Analog Circuits		Software Tools	
Digital Circuits		Web/Mobile Application	√
Microcontroller based circuits		DBMS/Data Structure Application	√
Basic Science/Engineering		Social/Environmental issues	√
Others (Please Specify)			

Background
[**Literature Survey**: Why is the project being undertaken? Describe identification of the Problem and its characteristics in detail?

In light of the critical importance of timely access to blood donors, addressing this need becomes important for saving lives. Recognizing this urgency, the 'VitalFlow' project emerges as a solution aimed at facilitating the swift and efficient connection between donors and recipients. This initiative plays a vital role in the overarching mission of preserving human life by providing users with easy access to comprehensive information about registered blood donors. Through this system, users can readily access essential details including the donor's name, address, blood group, and pertinent medical information, ensuring a streamlined process for securing much-needed donations when every moment counts.
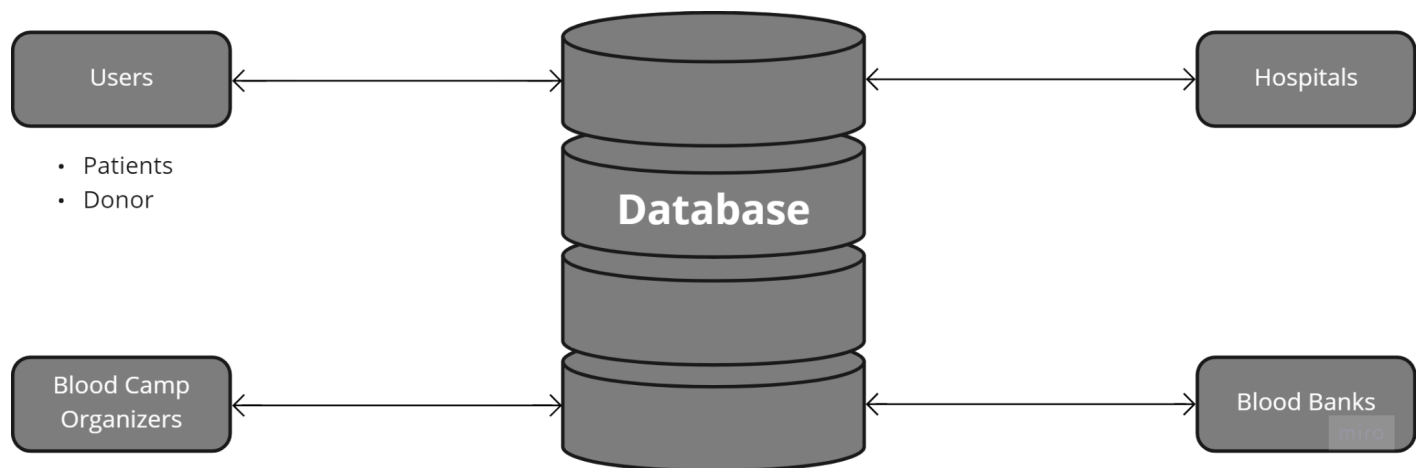
5 A. Mini Project Abstract:

We know, blood is one of the most important necessities of our life. It is our source of living. Therefore, it is important to find the right match blood donor on time for a person in need. It is possible in some situations,the patient is unable to get the required amount of blood or the required blood type at the right time due to lack of interrelationship in the form of a networked database among the blood banks which leads to the lack of knowledge of updated records of all blood donors. However, in this project, we aim to develop a website that allows us to easily search for blood in nearby areas for emergencies. With the help of this website, one will get clear access to blood in real time and the right place. With a touch of a button, a user can also become a donor by entering his/her personal details. The user can then donate blood at the nearest blood bank or at a blood donation campaign. The website will also keep track of the number of times the user/donor has donated blood.

5 B. Project Objectives: [Clearly State the desired objectives in the chosen problem.]

- To reduce the time in searching for the right donor and the availability of blood required.
- To design a system that helps patients in case of emergency.
- To make the blood donation process easier.

6. Technical Feasibility
   (Include block diagram)

7. System Requirements

7.1 Software Requirements
1. Windows 10
2. Code editor (Visual Studio recommended)
3. Web browser (Chrome recommended)
4. Git

7.2 Hardware Requirements

Laptop or pc with:

1. i3 processor or higher
2. 4GB RAM or higher

8. What is the Novelty / Innovation/ Social relevance in the proposed project?

The main aim of developing this application is to reduce the time to a great extent that is spent in searching for the right donor and the availability of blood required. Thus this application provides the required information in no time and also helps in quicker decision making.

9. References

[1] Title of the paper: "AN ANDROID APPLICATION FOR VOLUNTEER BLOOD DONORS" Author: Sultan Turhan, Fifth International Conference on Computational Science, Engineering and Information Technology, May 2015

[2] Title of the paper: "A Research Paper on Blood Donation Management System" Authors: Devanjan K. Srivastava, Utkarsh Tanwar, M.G.Krishna Rao, Priya Manohar, Balraj Singh, International Journal of Creative Research Thoughts (IJCRT), May 2021

[3] Title of the paper: "Android Blood Bank" Authors: Prof. Snigdha , Varsha Anabhavane , Pratiksha lokhande , Siddhi Kasar , Pranita More, International Journal of Advanced Research in Computer and Communication Engineering(IJARCCE), April 2016

[4] A Blood Donation WebApp called 'Ublood' - https://www.ublood.com/

[5] A Blood Donation WebApp called 'BloodLine' - https://bloodline.app/

[6] https://www.redcrossblood.org/

[7] https://ebloodbankodisha.nic.in/