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Blood Banking Store

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Abstract: *Although there are numerous online blood bank databases, none of them permit direct contact between the donor and recipient. This is a significant drawback, especially when there is an urgent need for blood. Our endeavour aims to remove this communication barrier by providing a direct call routing technique that utilises Asterisk hardware. Information from many sources, such as blood banks, the NSS, NGOs, hospitals, and web interfaces, is compiled to create a blood bank database. The collected data will be kept on a centralised server. Call the toll-free number that will be given to this central server to connect to it. An algorithm will be defined using a number of necessary considerations. Users will benefit from this in that they will be able to utilise GPS to find local blood banks and volunteer blood donors, then request blood in an emergency. Users will be able to examine information about various blood banks, the blood that is available in their repository, user registration data for users who could need blood in an emergency, and registration data for blood donors who want to donate when needed. The backend database will be used to store all the personal data of blood donors.*

Key Word: *Blood; Donor; Recipient; Android-based; GPS*

I.INTRODUCTION

The major objective of our initiative, "BLOOD BANKING STORE" is to play a significant part in saving human lives. Users of the app can examine information about registered blood donors, including their name, address, and other personal facts, as well as information about their blood group and other medical details. Consequently, using medical information and blood group information, this tool aids in making an instant donor selection. This initiative serves as a conduit between those who are interested in donating blood and others who are in need of it. By using the information provided in the app, the person in need of blood can find a donor. The main aim of developing our application is to reduce the time to a greater extent that is spent in searching for the right donor and the availability of blood required.

The goal of the initiative is to make the process of giving blood easier and more sophisticated. It was created with the intention of saving many lives. aids users in determining whether the necessary blood is available and provides contact information for the appropriate donors. The users can check the blood that is available and, if they so choose, register to donate blood. The operation of this programme does not require an internet connection. It receives the donor information as input and displays it so that others can use it to check for late blood availability.

II.MATERIAL AND METHODS

This project offers the following resolution:

We're giving users a better platform so they can view the closest blood banks, hospitals, and donors from anywhere in the world at any time.

GPS will assist blood donors in locating blood banks, hospitals, and blood donors who are located closer to the place where the need for blood is created.

The user will be guided to every module with ease thanks to the user-friendly design.

In the event that there is no internet connection, the user can also sync the data for later use.

- Models of the system:
  - ADMIN
  - DONORS
  - ACCEPTORS

- ADMIN:

The functionalities are:

- Login / SignUp
- Maintain Donor details
- Update and change database
- Observe and remove donor
- Logout

DONOR: Donor a person who donate blood voluntarily.

- Each donor has an individual account, the options given to each registered Donors are:

- Login / SignUp
- Update Information
- Delete Account
- Logout

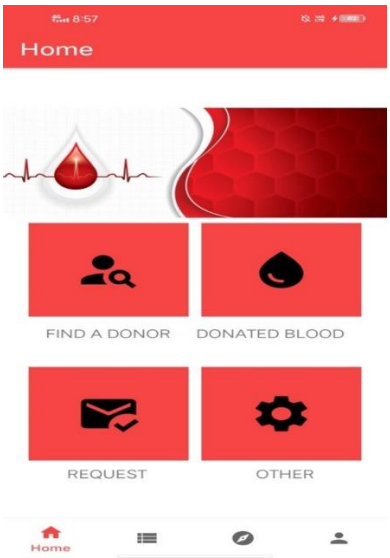
➢ ACCEPTOR:

- Acceptor are anyone who view the system
- Functionalities of Acceptor:
- Search for blood donor
- Find Donors at Emergency Zone
- Request or report to admin panel
- Can contact with the donor over phone number or email.

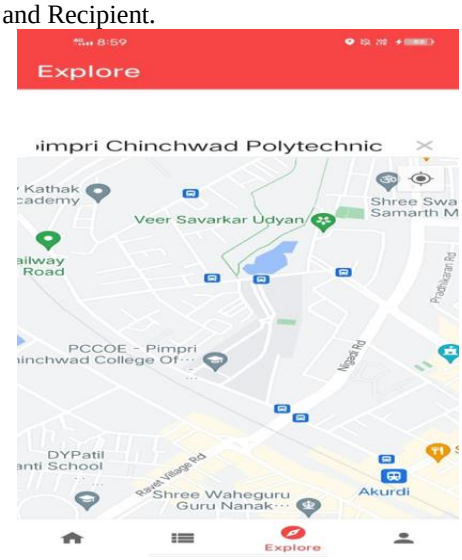
III.RESULT

- When there is an immediate need for blood, it might not be possible for people to access to the internet and search the existing online blood database systems. If we use this model, the donor and caller are connected right away.
- Take into account an SMS-based database system, which sends SMSs to potential senders depending on demand whenever one is sent. Here, the recipient's ability to view the SMS and subsequently respond to it will be significantly delayed. If the mechanism we suggest is put in place, only the most qualified donor will be called, and he will not be charged for the contact.
- The algorithm's consideration of the geographic information of potential donors is another key benefit. This makes sure that the nearest donor is automatically called and that the blood requirement is met right away. Several comparable systems lack such a facility, which further prolongs the wait for a donor.

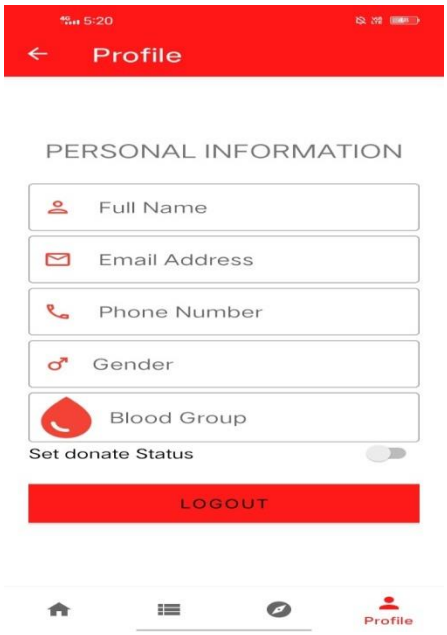
Home Page: Shows options to Find a Donor, Donate Blood, and Request Blood.



Explore Page: Shows the Nearest Donor and Recipient.



Profile Page: Personal information to store in the Database.



IV.DISCUSSION

Requirements:

Factors to be considered for blood donation A donor should be:

- A person who is between 18-60 years of age
- A person whose hemoglobin count is above 12.5 g/dl
- A person whose weight is not less than 45 kg
- A person whose body temperature is normal at the time of donation
- A person who has normal blood pressure at the time of donation
- A person who is free from all diseases
- A person who has not taken any medicine in the last 48 hours
- A person who has not contacted jaundice in the previous three years
- A person should not be addicted to drugs.

V.CONCLUSION

With modern technology and information systems getting better all the time, the blood bank system and its services are becoming more and more reliant on them. The system benefits both the provider and the requester. With the help of this system, communication between the donor and the requester is improved. As a result, the person making the request will get the blood they require when they need it. The services provided by the system will surely improve the healthcare business because patients' lives and safety are valued. The project's objective is to guarantee that patients will always have enough blood available when they require it. Otherwise, occasionally, their lives can be at risk. Even if there are blood units in the blood bank that are available but the requester is unaware of them, it is pointless. Such circumstances are avoided by this system, which allows every requester to be aware of the blood unit and blood bank in the area. The requester will be able to see the position of the local blood bank thanks to GPS technology.

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