

Blood Banking Store

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Date of Submission: 01-01-2023

Date of Acceptance: 08-01-2023

ABSTRACT:

There are many online blood bank databases, but none of them allow for direct communication between the donor and beneficiary. This is a serious downside, particularly when there is an immediate need for blood. By offering a direct call routing method that makes use of Asterisk hardware, our initiative seeks to break down this communication barrier. A blood bank database is generated by compiling information from a variety of sources, including blood banks, the NSS, NGOs, hospitals, and web interfaces. A central server will be used to store the acquired data. To connect to this central server, call the toll-free number that will be assigned to it. Various parameters that must be taken into account will be used to define an algorithm. This will help the users in such a way that users can locate different volunteer blood donors and blood banks in their locality through GPS and then request for the blood in case of emergency. The users will be able to view information about different blood banks along with the blood available in their repository, the information of the registers users who need blood in case of emergency and the blood donors who wish to donate blood when required. All the personal information about blood donors will be kept at the backend database.

I. INTRODUCTION:

Our project titled "BLOOD BANKING STORE" act as an important role in saving life of human beings, which is its main aim. This project is developed, so that users of the app can view the information about registered blood donors such as name, address, and other such personal information along with their details of blood group and other medical information of donor. Thus this application helps to select the right donor instantly using medical details along with the blood group. This project acts as a link between the person interested in donating their blood and those who are in need of the blood. The one who require blood can search

for the donor by the details given in the app. 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 project is developed to make the process of blood donation in a convenient and more sophisticated manner. It is developed with the motive of saving life of many human beings. Helps the users to check the availability of the required blood and the right donor along with their contact details. The users can view the availability of blood and may also register to donate blood if he/she wishes to. This application does not require internet access for its working. It gets the details of the donors as input and displays them so that others can use that to check for the availability of blood late.

Models of the system:

- ADMIN
- DONORS
- ACCEPTORS
- ADMIN:

The functionalities are:

- Login
- 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
- Update Information
- Delete Account
- Logout

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

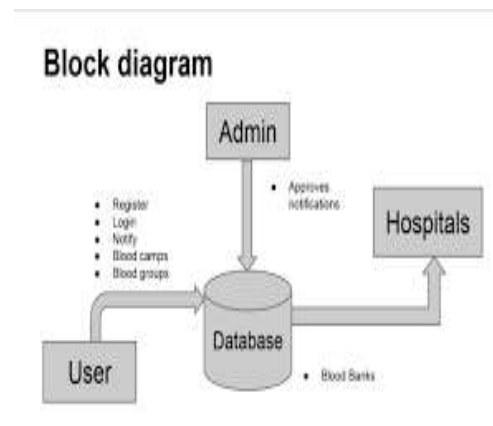
II. LITERATURE REVIEW:

Blood is vital because in terms of circumstances selection it saves multiple lives all over the world. The computer architecture of the blood donation center system is database based. Web management and mobile governance allow use of cloud servers. Structure consists of: Online Policies: Internet administrators were used to Android based for the user. Versatile administrations: Mobile administrations used to look through the contributor via portable application. Database: Database is used by applications. Webs vises and compact administrators used much of data. Adequate Contributor and Acceptor upgrade is needed. Client: The patient/acceptor are the main customer in the system layout. Contributor data is retrieved at any stage required / required by understanding/ acceptor. The structure of this system for the management of blood donation centers appears in Data Manager blood donation center technology is rendered using Android studio.

1. Proposed methodology:

In this project, the following solution is given

- We are providing a better platform for the users to view the nearest blood donors, hospitals, and blood banks anywhere anytime in the world.
- GPS will help blood seekers to find hospitals, blood donors, and blood banks nearer to the location from where the request for the blood is generated.
- The very friendly design will lead the user to every module very easily without any difficulty.
- The user can also sync the data for later use in case of no internet connection



Blocked Diagram of Proposed Model

➤ DETAILS ABOUT BLOOD

A) Constituents of blood

- Plasma: Medium in which the blood cells are transported around the body
- Red blood cells: Carries oxygen
- White blood cells: Part of the immune system
- Platelets: To facilitate blood clotting

B) Need for blood transfusion

According to statistics, someone dies every two seconds blood transfusion is necessary. Patients undergoing treatment for leukaemia, cancer, or other diseases, such as sickle cell disease and thalassemia, as well as trauma victims—from accidents and burns—heart surgery, organ transplants, women who had complications during childbirth, newborns, and premature babies—all require blood transfusions.

III. 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 kgs
- 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 not addicted to drugs

ADVANTAGES:

- When there is urgent need for blood, it may not be possible for people to connect to the

internet to look into the online blood database systems that are already in existence. If we adopt this model, the caller is immediately connected to the donor.

- Consider a SMS based database system is in which whenever a SMS is send to prospective senders, based on the demand. Here there will be a significant delay in the recipient side in viewing the SMS and then responding to it. If the system that we propose is setup, only the most eligible donor is contacted and that too with no cost being borne by him.
- Another significant advantage is the fact that location details of prospective donors is taken into account by the algorithm. This ensures that automatically the nearest donor is contacted and immediate fulfillment of blood requirement is done. In other similar systems, there is no such provision, which again adds on to the delay in getting a donor.
- A toll free number is used to connect to the server. Any other additional cost that may occur will be minimal that can be borne by government or NGO's. So any common man at the time his utmost need can connect to this system for help

IV. CONCLUSION:

The blood bank system and its services are increasingly dependent on modern technology and information systems as their quality rises. Both the giver and the requester gain from the system. This System lowers the barrier between the donor and the requester, improving communication between them. Consequently, the requester will receive the blood they need when they need it. The health industry would be undoubtedly benefited by the services offered by the system as patients safety and life is regarded valuable. The project's goal is to ensure that patients always have access to enough blood when they need it. Otherwise, their lives may occasionally be in danger. It is useless even if blood units are available in the blood bank but the requester is unaware of them. 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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