

## Blood Donor Live

### Be a donor and save lives.

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**Abstract**— Blood donor live is a website that offers resources to those who can donate blood for transfusion by registering as a donor. Blood in these programs. Donation is a dynamic mechanism that takes time to identify. Any donor who is compliant with both the blood group. It is the patient. We also developed a web-based donation of blood. As a blood donation option for forming a link between the applicant and the donor at any time and It is everywhere. The purpose of this website is to provide information about the blood requested and the number of donors available in these locations. It is supporting the Requester to relay the message through the maintained voluntary blood donation network through our request and to update the requester at the same time who is available to donate the blood needed. To assess our submission, we also developed and evaluated the applicant-donor profiles that will help to increase quick access to information and quick response in emergency situations. In these we have used Php for websites and sql for databases. Languages we have used in this project is JavaScript, HTML and CSS

**Keywords**— Blood Donor; transfusion.

#### I. INTRODUCTION

A blood donor is a service that processes and saves blood collected as a result of blood transfusion to later use. The blood is essential because it provides oxygen to the body's cells and eliminates carbon dioxide. In the lungs, Blood consumes air oxygen. It also helps to get rid of carbon dioxide emissions. The term "blood donor" normally means a person who supplies transfusion of blood. The term "live" usually means that we will send Live Chatbot to update the details every hour. It would save lives. Everyone wants blood every two seconds of any day.

The stock should be replenished annually by generous blood donors, as blood cannot be manufactured outside the body and has a low shelf-life. There are several explanations that people need blood. A common misconception about blood intake is that those who draw more

blood are the victims of accidents.

The most blood-based people are Cancer Treatment Orthopedic Activity According to Cardiovascular activity Genetic blood disorder treatment. Similar Registration as a donor will also require the module. (Blood Group Details, Donation Details, Name, Contact No etc.)

Check for Blood Availability from nearby hospitals or we will give govt. website eraktkosh.in to get access to nearby blood banks. Giving the option to donate blood to the nearby blood banks. Camp Schedule date we will provide for donating blood also Request for Blood from user to user.[11]

Chat Options will be available on the website itself Live Chatbot. (It will include frequently asked question like: -

- Hi! I am BD LiveBot.
- I am here to assist you in your blood quest, blood donation FAQs, and everything else related to blood donors.
- Type 'help' for help and 'contact' for contact details.

Donor and receiver position. The whole data can be saved to all local hospitals and is stored in the archive. We will show you who contributed the blood on the website. After 56 days they could donate the blood again if he/she has donated the blood. Our camp schedule information, details of blood supply, local blood banks will be given. We would reveal the specifics of My Sponsorship if the individual has spent the blood on our websites. In contemporary medicine and primary care, the blood requirement is critical and a second of a There's a guy who wants to save his life with blood. Transfusion of the blood is a life-saving procedure. A significant role in the overall healthcare system treatment of patients. The principal responsibility to provide a secure, adequate and stable service is the Blood Transfusion Service (BTS). Rapid blood and blood supplies delivery.[12]

## II. RELATED SURVEY

This project's key aim is to support those who require transfusion blood. The project we have carried out is an online blood bank scheme, with live blood donor names on website sites. This website helps users to get and view information. Information such as local hospitals, blood and camp schedules. Information. All data such as name, contact no, birth dates, email-id, blood type, ethnicity, state, district and pin code can be found on this website.

**Computerized Central Blood Bank Management System** The system is used in blood bank divisions to track and oversee all activities. The programmes include all blood tests, blood statistics, test outcomes, blood supply to hospitals, removal of blood defects and medical records. The computerized management system was set-up in various stages, first by visiting the national blood transfusion center in Khartoum, collecting donor and Blood data, and then processing the data and extracting the information required. The architecture has been developed to create databases using My SQL and link the server screens to the PHP programming language file. The barcode technology was used and a barcode that saved the precious information was generated by the system. The barcode has been deciphered using another QR code reader method. It meets the patient's conditions, has been checked and guarantees equal acceptance from the Blood Bank team. In general, this project only designs a prototype of the management system of the central blood bank, which focuses on the principal blood divisions. CCBBMS will adapt to meet all requirements and extend to include other organizations. This project usually designs only a prototype of the structure that focuses on the central blood bank division. To accommodate all requests and other organizations not discussed here, CCBBMS is open to modifying. [1]

**mHealth: Blood Donation Application using Android Smartphone** MHealth is one of the best possible concepts to deliver and improve health systems. This post dealt with the conceptual nature and prototype of the blood donation programme mHealth. In order to make it a suitable approach, we explore standards for networking, storage, transmission and smartphone frameworks. We believe that our application is an all-embracing solution, which provides immediate access to emergency response blood donors and requesters.

We are planning to add to our submission vaccination schedules and public service announcements We are now seeking to boost the program's operations by excluding a legitimate donor for 89 days after the information on the last day of the donation from the information note list.

MHealth is a new horizon for wellness through the use of smart devices and network infrastructure. Blood donation is a complex process in healthcare establishments that takes time to find a donor with a blood-type match. As a mHealth solution, we have created an android-based blood donation programme that lies at anytime and anywhere between the applicant and the donor. The intent of this request is to provide information about the blood needed in those areas and the number of donors available. It helps the applicant to respond through our application to the charitable blood donation network, while updating the applicant qualified to spend the required blood. We also created and tested the applicant-donor profiles to enable easy access to data and a rapid response in an emergency to validate our proposal. [2]

**Blood Donation and Life Saver-Blood Donation App** According to the overall analysis, blood is necessary for any human being in this world without blood. The physicians can check in the ambulance or blood bank whether there is an emergency in which the patient needs blood. We can use this form of apps if blood is not available. You should register all the details in this questionnaire and can donate blood. In the event of urgency, when we enter the blood community we wanted, the patient could not get blood, which would indicate the nearest donor who can donate blood. Once the blood is donating the donor's records, the next three months will go down.

For each living being, blood is a vital insight. If a disaster is required, so it turns out to be a lifesaving section. There are a variety of e-blood donations available between blood donor centres and emergency clinics for communications. Blood donation saves lives in various situations daily. A blood transfusion will allow them to spend energy with their families and companions. It can only come as a gift from people who can't make the blood. Only 6 pints of blood were allowed by one man. Up to 33 blood pints will be saved.

The initiative seeks to provide blood donors in real-time to the general public. This project is an online blood banking system on an android platform. The Android app helps users browse and access information such as local clinics, blood donors and blood donor supply. The App contains blood donor names, addresses, contacts and blood types nearby from people needing blood. GPS for tracking donors or local blood banks is used for this use. Because of the supply of one touch of the hand of blood donors and the local hospitals. The time limit is greatly reduced, and users will look for the required blood from the closest blood donors, blood banks and hospitals. The programme would record and validate consumers who need blood as well as donor, to make a swift decision that will save their lives. [3]

### **Blood Donor's safety using Data Mining.**

The BBMS development has been chosen by three programmes as the benchmark. They are at <http://www.bloodbankindia.net> Blood Bank India (BBI), the Lions Blood Bank & Research Foundation (LBBRF) and a former BBMS standalone edition of <http://www.Llionsbloodbank.net>. The Blood Bank India website offers the donor the facility to enroll as a blood donor for itself. It can only be registered by the resident in India. It is also a mechanism by which an individual or hospital may request a blood bag or blood stock from Blood Bank India. LBBRF is a charitable organisation that serves as a blood bank. The funds they collect, though, are not for their own use, but rather to offset the expenses of recruiting and educating contributors. Furthermore, blood transfusions must be as clean as possible. They ensure that blood reserves are available at the Lions Bank & Research Base's blood bank. The most recent blood shortage status is also available on the organization's website. This is to ensure that visitors to the website, in particular blood donors, are updated. The donor and the public are both informed of the location of the next case. This blood bank provides the donor and patient with no facilities, however. So, how many times they donated their blood they cannot remember. The donor cannot know their blood screening results at any occasion they donate. Without this position in the system, the donor cannot monitor its welfare. The donor does not know the health condition of the donor. The basic functions of the blood bank management system are included in this stand-alone system. As a system archive, this system uses Microsoft Access. Function modules include the maintenance of user account, display inventory list, donor registration and client login. [4]

### **Intelligent Blood Management System**

Blood scarcity is prevalent in healthcare systems and is attributed to a rise in demand for safe blood and blood products, the incompetence to co-ordinate everyday deliveries of blood due to misconception, perceived harms and risks and the reluctance to attract prospective donors. Blood shortages have a strong effect. Medical university students can act as a voluntary blood donation pool for clinics next to the medical university that can help remove some of the blood deficit and blood products. However, several medical students' research expressed an interest in their poor comprehension and unsatisfactory charitable efforts for blood donation. Few types of research have also shown a low blood donation practice among students given a relatively decent understanding and favourable approach to voluntary blood donation. There is an even lower rate of voluntary blood donation among women. Therefore, it is important to address the different factors that can

contribute to voluntary blood donation. Millions of lives can be saved by blood, and young people are the hope and the future of the world's healthy blood supply. The theme of World Health Day 2000 was "Blood saves a life, healthy blood begins with me" The first move is to do rigorous research on population understanding of blood donation to assess the present condition and the beliefs, as well as the positive or negative attitudes of people to blood donation. In India, 50-60% of the population is aged between 18 and 65, but there is a continued scarcity of blood because of the steady increase in patients over blood donors. Furthermore, hiring unpaid, unpaid donors is a major challenge with worldwide transfusion programmes.

Furthermore, the supply of safe blood appears to be below global demand notwithstanding the joint efforts of governments and foreign organisations, including the Red Cross Society and the World Health Organisation. This study aims to reach young people in India. The sourcing of donors is an indispensable way to improve blood supply overall health. Students form a broad, stable and committed network of voluntary blood donors to fulfil the need for secure blood. [5,10]

### **III. PROPOSED WORK**

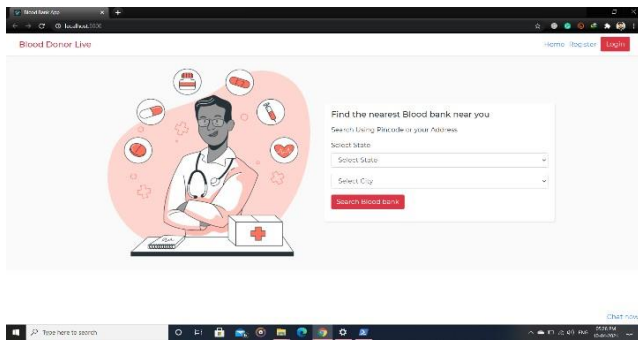
Our key goal in this is to support the vulnerable by supplying blood user to user so that they do not have to worry about finding blood in local hospitals. In addition, we have created a Broadcast message that helps users to connect with other online users at the same time, as well as a live chat bot on the homepage. Anyone can register and view blood details and records. Eraktosh.in a government database, has collected blood data. In our project, we will collect information from the user such as blood group specifics, name, contact number, place, state, and date of birth.

In this build, we are using NodeJS + Express + MongoDB as the server backend (Database). Both the server and the frontend are hosted on AWS ec2.

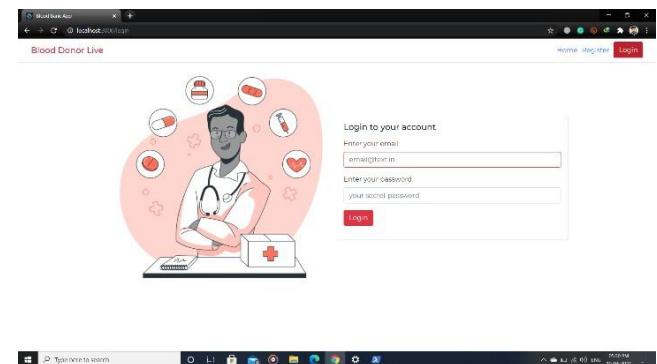
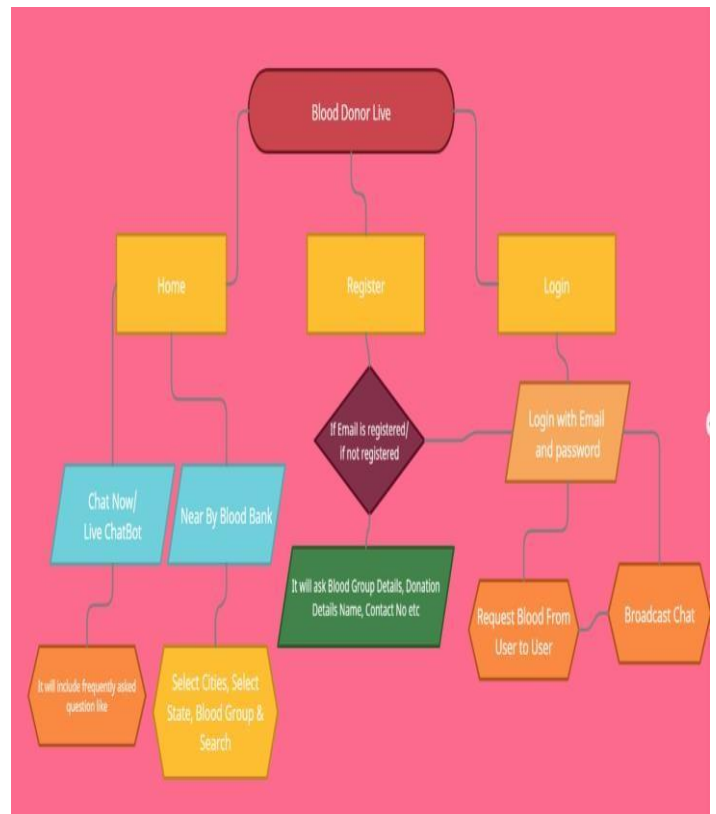
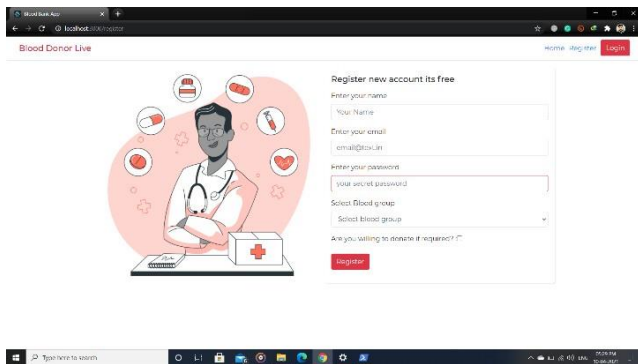
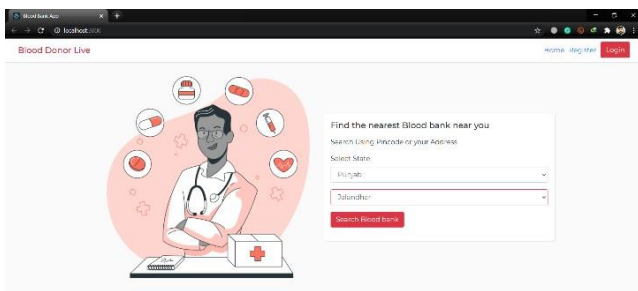
Blood donation is an integral aspect of sustaining one's wellbeing. As transfusion treatment and technologies have progressed, it has been important to impose steps to ensure the consistency of blood and its components. The blood transfusion scheme has advanced significantly in fields such as donor control, blood collection, grouping and cross matching, scanning for transmissible infections, justification utilisation of blood and delivery, and so on. The National AIDS Management Agency, through the Professional Resource Group on Blood Protection, has established a strategic strategy to strengthen the standards of Blood Banks and Blood Transfusion services in our country. standards to maintain a stronger quality management method for processing, storage, and delivery Blood and its constituents are screened and transmitted. [6,13]

**Flow Chart**

**SIMULATION RESULTS**



**Description-** This is our project's homepage. There is. There is. Two choices Choose state and choose city as blood bank quest.



**IV. CONCLUSION**

To give blood to the recipient, we must support all so that they can help someone else. So, I came to the realization that we need to help by supplying our website, which helps users to connect with other users in need of blood. It also displays the camp timetable for local dates and months. Every day, new technological advancements are introduced, reducing the time required to complete tasks. In an emergency, the proposed procedure will be used to reduce the amount of time it takes to supply needed blood to those in need. People who want to donate blood will use the online application to locate the nearest blood bank. The online framework makes it easier for hospitals and blood banks to collaborate and coordinate. In the event of an emergency, it also allows them to communicate with nearby donors. The archive is an essential part of the scheme. The

database of hospitals and blood banks must be checked for consistency on a daily basis to ensure smooth system service. The proposed approach makes use of Google Maps to assist the user in quickly locating the closest donors / blood banks. The Android project is designed with open-source applications, Android Workshop, and the online interface for hospitals and blood banks is built with developer tools as well, so the framework produced is very feasible.

I hope that these recommendations will help blood banks around the country raise their expectations and, as a result, provide exceptional and high-quality service to our residents. The vast majority of donors expressed a desire to contribute on a regular basis. Following the gift, the donors demonstrated positive outcomes such as a sense of pride. Organizing multiple blood donation camps to increase the number of voluntary blood donors might be a smart idea.

Our research shows that having more awareness about blood donation does not contribute to a higher rate of blood donation among medical college students. Medical students will participate in a special programme to encourage them to donate blood. On the eve of World Donation Day, if medical college students set an example of blood donation, it will inspire and raise the morale of the society to save human lives by donating blood. Voluntary blood donation by medical students, together with sufficient communication materials for the general public and more advertising to overcome the fears associated with blood donation, would raise public awareness and enable voluntary blood donors to donate blood on a regular basis to meet the challenges of blood transfusion for vulnerable people. [7,8,9]

## References

- [1] "Computerized Central Blood Bank Management System," by "Mohammed Y. Esmail and Yousra Sayed Hammad Osman", <https://ieeexplore.ieee.org/document/8515789>
- [2] "Muhammad Fahim, Halil Ibrahim Cebe, Jawad Rasheed, and Farzad Kiani"- "mHealth: Blood Donation Application UsingAndroidSmartphone,"<http://ieeexplore.ieee.org/document/7543997>
- [3] "M R Annish Brislin, J Albert Mayan, R Aroul Canessane, and M R Anish Hamlin" -"Blood donation and life saver app,"<https://ieeexplore.ieee.org/document/8321318/authors#authors>
- [4]"Blood security donor employing the data processing industry," Namrata Ghuse, Rohini Patil, Madhu Poi, Pooja Pawar, Tejashree Patil  
<http://ieeexplore.ieee.org/document/7380516/authors>
- [5] "Intelligent Blood Management System," by "Mitesh Sarode, Ayush Ghanekar, Sahil Krishnadas, Yash Patil, and Manish Parmar",  
<https://ieeexplore.ieee.org/abstract/document/8973008>
- [6] Data for Blood-  
<https://www.eraktosh.in/BLDAHIMS/bloodbank/transactions/bpublicindex.html>
- [7] "An Android Blood Donors' Application," "Sultan Turhan, Department of Computer Engineering, Galatasaray University, Istanbul, TURKEY", url:[sturhan@gsu.edu.tr](mailto:sturhan@gsu.edu.tr)
- [8] "Real-time Blood Donor Management Uses Dashboards Based on Data Mining Models," ShyamSundaram,Santhanam, Dept. of Computer Science, DG Vaishnav College Chennai 600106, Tamil Nadu, India.
- [9] "Blood Donation and Community: Exploring the Influence of Social Capital," André Smith, Ralph Matthews, and Jay Fiddler, International Journal of Social Inquiry, Volume 4, No. 1, 2011, pp 45-63.
- [10] "Blood Donation Management System," Institute of Information Technology, Jahangirnagar University, Dhaka, Bangladesh, Department of Computer Science and Engineering, Jahangirnagar University, Dhaka, Bangladesh, K M Akkas Ali, Israt Jahan, Md. Ariful Islam, Md. Shafaat Parvez.
- [11] "A government website Eraktosh" -  
<https://www.eraktosh.in/BLDAHIMS/bloodbank/transactions/bpublicindex.html>
- [12] "Blood Bank-  
[https://en.wikipedia.org/wiki/Blood\\_bank](https://en.wikipedia.org/wiki/Blood_bank)"
- [13] "Selection of blood donors Guidelines for determining a donor's suitability for blood donation 3. annex [17 August 2012] Geneva: World Health Organization. [www.who.int/bloodsafety/publications/bts/guideline1/en/index.html](http://www.who.int/bloodsafety/publications/bts/guideline1/en/index.html)"