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ONLINE BLOOD BANK MANAGEMENT SYSTEM

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Abstract In this paper we focus on systems that can support health care in the very challenging aspects where the large majority of the world's population reside. Data will be hosted in the Internet and medical staff, donor and needy can find it wherever and whenever they want. Application is made for Blood Bank Management System for providing fast service blood at notify message. Alike many countries, India is facing a deficiency of blood donors. If more eligible donors arise for donating the blood, the difficulties could be lessened. This online application is the beginning to assist people reach the right blood donor at the right moment. It instantaneously connects large group of blood donors in locality with those who are in urgent need of blood for their companions and relatives.

Introduction In many different situations like in anemia and accidents, there could be a crucial requirement for particular blood group. As compared to the percentage for which the blood is required, very less number of people donate the blood, hence the need of the blood increases. Donating the Blood and Blood Transfusion Services (BTS) are significant for saving the lives of people.

In today's rapid developing scientific world technology has become a very important aspect of life. Today's generation is more depended on advanced technology than any other aspect. Today, most of the people use advance technologies in their daily life like Internet and Smartphone. So, the proposal has been mentioned in this paper that will make the process of blood bank system very less time consuming. The blood Bank Management System provides services to quick access to donor records that is collected from various regions of the country. It monitors the performance of the blood donation activity such that the relevant purpose and the objectives of the organization can be checked. The blood bank system consists of various connected blood centers which store, distribute and collect human blood and hospital blood banks charging of transfusion related services.

During the process of updating and maintaining the data and information on the daily intervals, various errors which are impossible to avoid lead to significant risks in the mentioned procedure of blood donation and transfusion service. Errors at the time of administration of blood or blood components and sometimes the wrong entry of blood groups are the most frequent documented site of error this leads to storage or accumulation of wrong data in the records.

Literature Review

In this work they have designed and developed an android application known as the blood bank. This application saves the lives of many people who are in need of blood. People can search the nearest blood banks centers and volunteer donors who have registered. It is a slow procedure to search blood groups by manual process. This application helps to check out the available blood groups in the blood banks and also search the donors from the place where we are. It saves many lives during emergency situations.

The study has expanded to an online platform which has made the bridge between the blood receivers and the blood donors during the necessity. Based on the Age specifications it enables blood receivers to get more prospective blood contributors within the limits of blood donation criteria. Due to use of sorting algorithms the more prospective contributors are registered in top rows of the result table which helps in selection of blood donors by the blood receivers.

The aim was to establish the system which will saves the time which is required to gather the donor details. Their proposed system provides easier method for the one who are in urgent need of blood. Proposed system focused to supply the lifeblood as immediately as possible by searching the nearest blood bank centers and nearest blood donors. In addition, when the blood donor require the blood the concession is given to such person.

They have proposed such system which will be different and one step ahead as compared to the other blood donation systems. Blood receivers can communicate the blood donor directly by using this system. An algorithm was proposed to find the appropriate donor based on the blood type and location.

Problem Statement

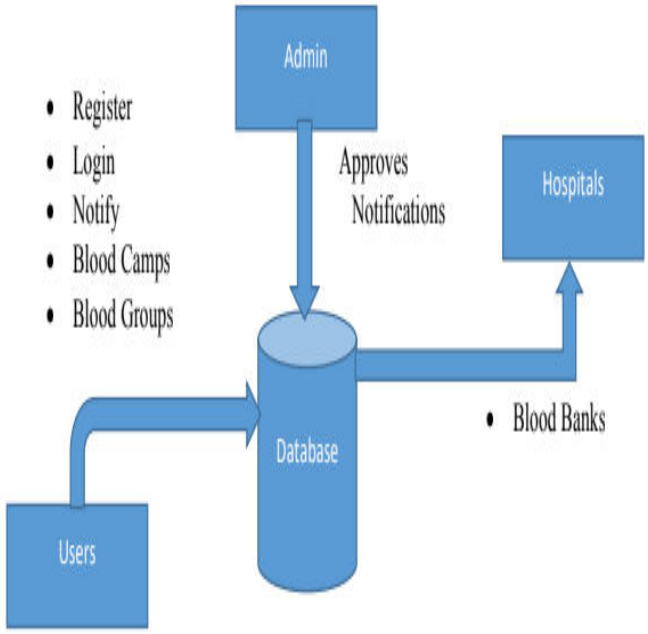
Alike many countries, India is facing a deficiency of blood donors. It focus on systems that can support health care in the very challenging aspects where the large majority of the world's population reside. This online application is the beginning to assist people reach the right blood donor at the right moment.

Goals And Objective

- Access from anywhere of the world
- Access at any time
- Quick Search
- Better Communication
- Optimize to Volunteer
- Time Optimize
- Cost Optimize
- Easy to handle patients record's
- Information of the donors stores permanently
- Software reduces paper work
- A patient does not need to wait in long queue

Proposed System

The system is used for maintaining all the process and activities of blood bank management system. The system can be extended to be used for maintaining records of hospital, organ donation and other similar sectors. While developing the system, there shall be space for further modification. There shall be a proper documentation so that further enhancement becomes easy. As a whole the system is focused to work with blood bank management system and on additional modification it can be also used as management systems of similar organizations.



Stakeholders

- System Owner: The Blood Bank
- System Users:
  - Administrators: has full privilege on the system's functions
  - Staffs of Blood Bank: has privilege on the system's functions as assigned by the administrator
  - Public: can view the blood donation events and donate or can make Requests for donation (Donor and Recipients fall under this category)

Data

1. Data about Donor and recipients

- Donor/ Recipient Id
- Name

- Date of Birth
- Gender
- Blood Group
- Address
- Contact Number
- Email Address
- Diseases (if any)
- Blood Id
- Event Id

2. Donation program

- Organizer
- Event Id
- Date of Donation
- Venue
- Volunteers
- Amount of blood collected

3. Blood

- Blood Id
- Blood Group
- Date of collection
- Expiry date
- 4. Staff
- Staff Id
- Name
- User Name
- Password
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PROJECT APPROACH ROUTE

- Problem Identification
- System Design
- System Building
- Testing and Implementation

MANAGERIAL APPROACH

- **Team Building Consideration**
- Each of the team member will be given a job
- The work division shall be on the basis of expertise
- The progress shall be synchronized on weekly basis
- **Training requirements**
- PHP programming
- AWS Cloud Computing
- Web Designing

Conclusion

In this work we have proposed an application which is called as blood bank management system. This application saves the life of many people who are in need of blood. The work focusses on creating such application that can be accessible to worldwide and making the application extensible, such that everyone can utilize this application and to make process fast as many lives will be saved during emergency situation with the help of this application. As India is facing a deficiency of blood donors, it will also results in diminishing the death ratio, particularly in India.

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