Online Blood Bank Management System

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ABSTRACT

Every year our nation requires about 4 Cr. Units of blood, out of which only 5lakh units of blood are available.it is not that, people do not want to donate blood. often, they are unaware of the need and also, they do not have a proper facility to enquire about it.as a result, needy people end up going through a lot of pain. India has many blood banks, all functioning in a decentralized fashion. All the blood banks are attached to hospitals and there is no standalone blood bank. The coordination between the bold banks is practically impossible. Because of low number of donors and more number of blood banks, the efficiency and quality of blood banks are low, hence to overcome these drawbacks we propose an android application.

Keywords: Android Application, Available Blood Group Details, Available Donor Details ,New Donor Registration, Check Out Availability Of Blood.

I. INTRODUCTION

Emergency situations, such as accidents, create an immediate, critical need for specific blood type. In addition to emergency requirements, advances in medicine have increased the need for blood in many on-going treatments and elective surgeries. Despite increasing requirements for blood, only about 5% of the Indian population donates blood. We have to create a new idea, just touch the button. Donor will be prompted to enter an individual's details, like name, phone number and blood type. After that the contact details will appear on the screen; the urgent time of a blood requirement one can quickly check for contacts matching a particular or related blood group and reach out to them via Phone call/SMS through this application. This app provides list of donors in the city/area. A large number of blood donors are attracted using either web or an android application. Since almost everyone carries a mobile phone with them, it ensures instant location tracking and communication. This application will help users easily to find donors of matching blood groups in their location and access their mobile numbers for instant help.

II. RELATED WORK

LIMITATIONS IDENTIFIED : the paper development of a blood bank management system(Sumazly Sulaimana,*, Abdul Aziz K.Abdul Hamida, Nurul Ain Najihah Yusri) Explains that from the observations and interview conducted that have been made during the user requirements phase, it was found out that there is no interaction medium between HSNZ and the public to announce their blood donation schedule.

The paper novel technique for online blood bank management (selvamani ka, ashok Kumar rai b)is only about donation system, it is not supporting for people who is in requirement blood

III. PROBLEM STATEMENT

The main aim of the project is to effectively manage the blood banking system. This project enables the users to access nearest blood bank, it also checks the availability of the required blood group, provides necessary information about the volunteer blood donors.

IV. PROPOSED SOLUTION

Using this Android application one can register as a volunteer blood donor, search for the availability of blood units in the blood bank, search nearest blood banks and can also get the details of the volunteer blood donors. Admin of the web application can also register or update the donor details. Admin can have the access to check the available blood details and also the details of volunteer donor details.

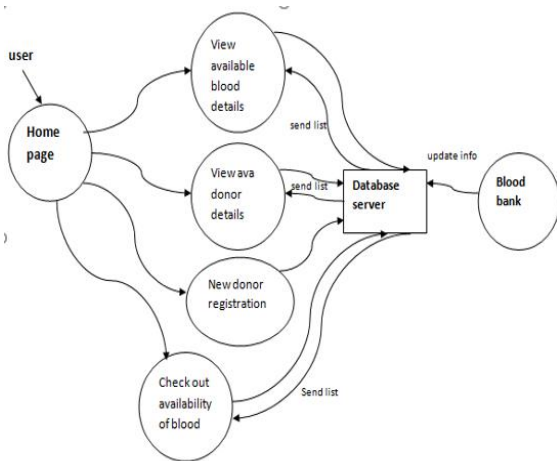## V. PROPOSED SYSTEM OBJECTIVE

Figure 1. data flow diagram

Fig 1 shows the dataflow diagram of the application. When the user enters the application for the first time with proper internet connection he will get the options either to search the blood group without any registrations or he may be given options to register as a volunteer blood donor. After the successful registration the user will be directed to the activity where he will be provided with options like search donors, search blood in the nearest blood banks. A series of activities will be done when the user clicks on any of the displayed options. The database is used to search blood groups and donors. When the user double taps on back button the application will be stopped.

VI. ADVANTAGES OF THE SYSTEM

The application educates to know how about the blood banking system.

- Enables the users to easily locate the nearest blood banks.
- The users to request for the necessary blood units

to a large number of donors if they fail to find blood in blood banks.
- Hospitals can also effectively find the volunteer blood donors.
- Nowadays most of the people are equipped with the smart phones which creates a greater exposure for the blood banking system which saves considerably greater number of lives.

VII. SYSTEM SERVICES PROVIDES

This section deals with the services that are offered by our application. The file of the application needs to be installed on the android device of the user. Once the application is launched,
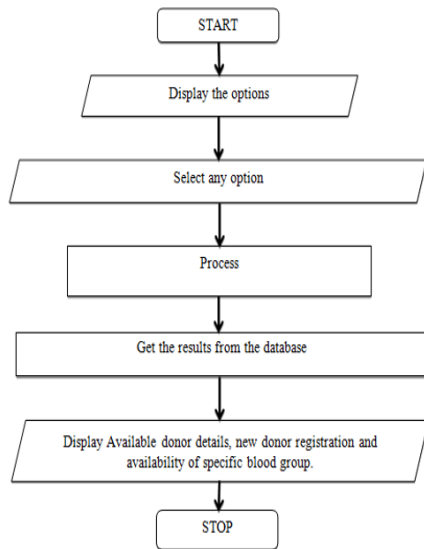
Admin: He is the one who have got access to check volunteer blood donor details, modify their details, check the blood count details, add new blood donation entry by logging into the web application with his username and password.

Donor: Using either web or Android application public can register as a volunteer blood donor by providing all the specified information. Donor can check the availability of the blood units present in the blood bank. Can also check the details of the registered volunteer blood donors. Donor will also have the provision of editing his details.

Public: Using either web or Android application public without any registration can check the details of the volunteer blood donors who have registered to the application and also heck the availability of the blood units in the blood bank

VIII. WORK FLOW PROCEDURE

Following figure 5.1is the flow chart for our project, it emphasizes the stepwise procedure involving the implementation scenario of the project.
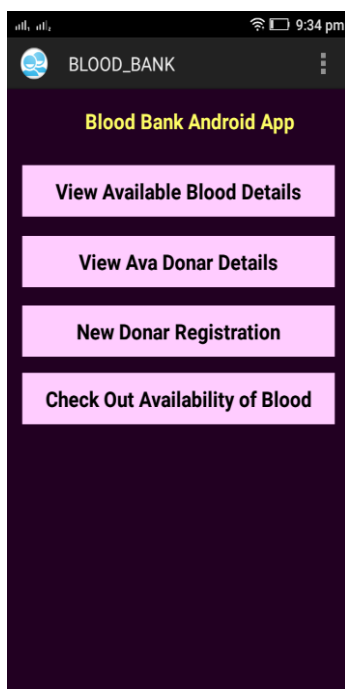
Figure 2. System Flow
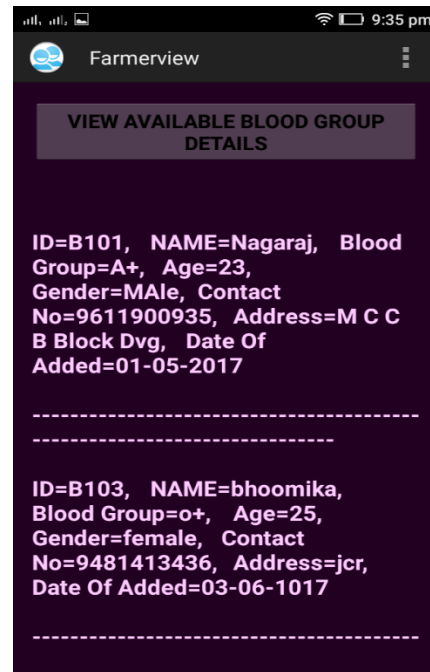
IX. RESULTS AND DISCUSSION

Fig 3 shows the home page of our Android application. It contains the options to check

a) Available blood group details

b) View available donor details

c) New donor registration form
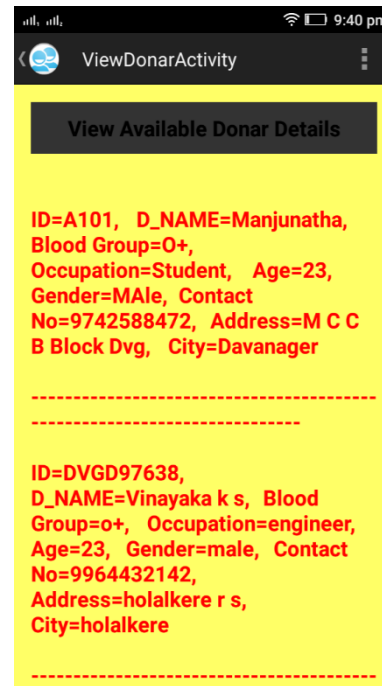
d) Check out availability of blood

Figure 3. Snap shot of Main Activity

Fig 4 is the activity which displays the available blood group details when clicked on the option in the main activity.
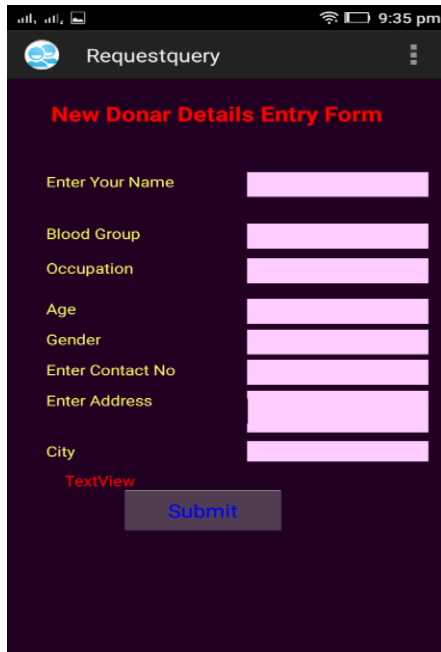

Figure 4. Snap shot of viewing available blood group details activity

Fig 5 is the activity which displays the details of the available donors
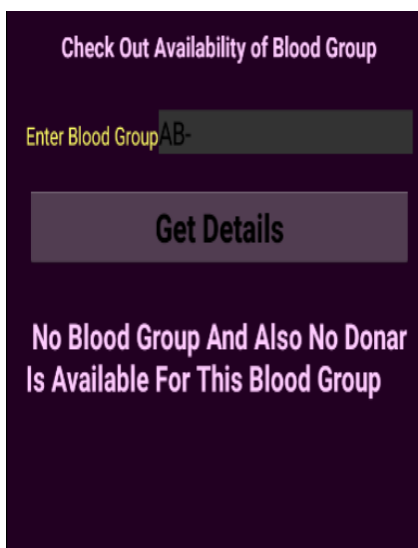

Figure 5. Snap shot of viewing available donor details activity

Fig 6 shows the activity which collects the details of the volunteer blood donors who wants to register to the application

Figure 6. Snap shot of Registration form activity

Fig 7 shows the activity which can be used to search the required blood units in the nearest blood banks.

Figure 7. Snap shot of Searching page activity

X. CONCLUSION

In this work we have designed and developed an android application called blood bank. This application helps many people who are in need of blood. People can locate nearest blood banks and volunteer donors who have registered. It is tedious process to search blood units by manual process. This application helps to check the available blood units in the blood banks and also the volunteer donors from the place where we are. It saves many lives during emergency situations as it takes less time to locate blood units. One who is in need of blood need not go in search of all the blood banks and hospitals which is time consuming process.

XI. FUTURE SCOPE

The future work focusses on making the application scalable and make this application available to a large region, like for an entire state or a nation. So that everybody can make use of this application and helps users to easily locate the required blood units and it is the faster process. This will result in decrease in death rates in India.

XII. REFERENCES

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