



## TRACKING BLOOD DONOR INFORMATION USING M-HEALTH APP

SOWMIYA.K<sup>1</sup>, SHANMUGANATHAN<sup>2</sup>

<sup>1</sup>PG Student, <sup>2</sup>Assistant Professor

<sup>1,2</sup>Dept of M.C.A., Panimalar Engineering College, Chennai.



### ABSTRACT

Mobile Health(mHealth) applications are a perfect device for checking and following long haul wellbeing conditions they are turning out to be staggeringly prominent regardless of posturing dangers to individual information protection and security. In this paper, we propose a testing technique for Android mHealth applications which is composed utilizing a danger investigation, considering conceivable assault situations and vulnerabilities particular to the area. The application Blood donor information aggregates together every one of the givers under one gathering. No such framework has been produced till now. The application goes for bringing the contributors under one rooftop with the goal that they can give blood effectively. As of now the benefactors need to search for the blood gift camps that cause wastage of time. This application will discover blood contributors effectively. Blood contributors can enroll to think about the blood donation centers and blood gift camps closest to them. Associations like healing centers and blood donation centers or any individual needing blood can likewise enlist and discover contributors in their predefined territory. It is programming created for mobile phones or smart phones where blood donation centers and clinics can search for givers in their close-by zone who will be accessible in brisk time.

**Keywords:** Blood bank, Android, Blood transfusion, Database, Donors, Recipient, Administrator

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### 1. INTRODUCTION

Mobile health (mHealth) applications undertake health related activities, helping users monitor and manage their own health. They can be used to provide data to doctors and other healthcare professionals, improving service, reducing costs and bringing potential advances through data sharing. There is a diverse range of mHealth apps: from physical measurements such as heart rate monitoring, blood pressure and glucose level recording (perhaps assisted through Bluetooth enabled devices or sensors in patches); through to tools for recording sleep patterns, moods, and

providing medication reminders. The number of users of mHealth apps is increasing dramatically with the ubiquity of smartphones and availability on Google's Android and Apple's iOS platforms. Market analysts project that 500 million smartphone users will use mHealth apps this year, rising to 1.7 billion by 2017. The number of Google Play and iOS mHealth apps passed 100,000 in 2014; estimates are that hundreds of millions vital parameters are collected each month. This trend raises serious security and privacy concerns. Healthcare data is one of the most sensitive kinds of personal information; yet in the US in 2014, the Identity Theft

Resource Center found that over 40% of thefts were in the medical and healthcare category, with 8 million records stolen<sup>1</sup>. Clearly, mHealth apps that collect private data have a responsibility to protect their users against data loss. Unfortunately, research by us and by others has demonstrated that many mHealth apps that collect and transmit private medical data often do a spectacularly bad job of securing it. The application Blood contributor database aggregates together every one of the givers under one gathering. No such framework has been produced till now. The application goes for bringing the contributors under one rooftop with the goal that they can give blood effectively. As of now the benefactors need to search for the blood gift camps that cause wastage of time. This application will discover blood contributors effectively. Blood contributors can enroll to think about the blood donation centers and blood gift camps closest to them. Associations like healing centers and blood donation centers or any individual needing blood can likewise enlist and discover contributors in their predefined territory.

It is programming created for windows telephone where blood donation centers and clinics can search for givers in their close-by zone who will be accessible in brisk time.

Online Blood Donation management System project is aimed to developing an online Blood Donation Information. The entire Online Blood Donation management System project has been developed keeping in view of the distributed client server computing technology in mind. The Blood Donation Agent is to create an e-Information about the donor and organization that are related to donating the blood. Through this Online Blood Donation management System application any person who is interested in donating the blood can register himself in the same way if any organization wants to register itself with this site that can also register. Moreover if any general consumer wants to make request blood online he can also take the help of this site. Admin is the main authority who can do addition, deletion, and modification if required.

## 2.EXISTING SYSTEM

Mobile health applications undertake health related activities, helping users monitor and manage their own health. They can be used to provide data to doctors and other healthcare professionals, improving service, reducing costs and bringing potential advances through data sharing. There is a diverse range of mHealth apps: from physical measurements such as heart rate monitoring, blood pressure and glucose level recording; through to tools for recording sleep patterns, moods, and providing medication reminders. The number of users of mHealth apps is increasing dramatically with the ubiquity of smartphones and availability on Google's Android and Apple's iOS platforms.

## DISADVANTAGES

- The pervasive lack of encryption, suggest security is not a priority for developers.
- Reports, charts, and tables of medical data are often stored without any protection, giving thieves and eavesdroppers easy access.
- We also pointed out that current malware and privacy scanners fail to identify privacy issues in mHealth apps.

On data entry, we found that input data was often not validated or badly validated. This can result in reporting invalid data with healthcare professionals and possible false alarms.

## 3.PROPOSED SYSTEM

The user has to first download the application. He/She will be provided with two options: Register and Login. If the person has already registered, then he/she has to login. If not, he/she has to create an account providing basic details like name, address, contact, date of birth, blood group, email id etc. The user is allowed to update his/her information. Once the user registers, he/she can check various blood banks that are located.

The user will get various options on screen:

- Blood care login
- View notification
- Awareness programmes
- View Awareness

- OTP Registration
- Registration
- Request for blood
- Search Hospital

In threat analysis for mHealth apps, and motivate a security testing method with a case study designed specifically for Android apps that monitor hypertension and diabetes. A main point of our study is that by focusing on a specific sub-category of apps, more precise security issues can be addressed, influencing the type of tests performed and their parameters. Our testing method is thus context-sensitive, and also multifaceted: as well as apps we propose testing their associated web servers and evaluate privacy policies. We have demonstrated the method is effective by testing over 150 apps, highlighting a number of flaws.

**ADVANTAGES**

- Health happens when you're on the move whether it's for a physician, clinician or patient.
- Can improve patients' health condition by enabling the physicians to frequently keep track of their patients and improving the quality of healthcare.
- M -Health has dramatically reduced the cost of visiting a nurse or a doctor with its services.
- Helping in boosting social network availability for doctors to reach out and connect to people in different locations.

**SYSTEM DESIGN**

**Block diagram**

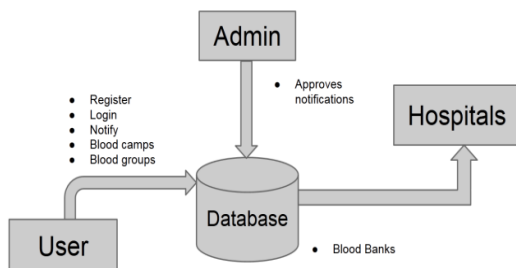


Fig:1-System Design of M-Health App

**3.1 SYSTEM ARCHITECTURE**

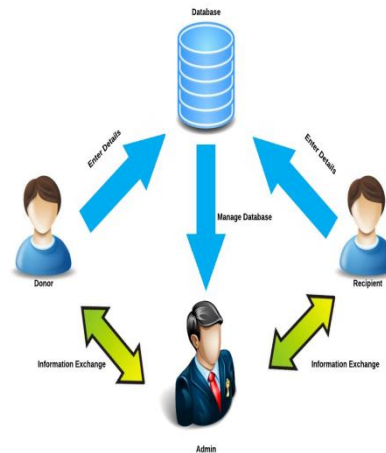


Fig:2-System Architecture

**4. SYSTEM IMPLEMENTATION**

The implementation of this proposed system involves the following modules.

- Authentication and Authorization
- Blood Bank Details
- Manage Database
- Information Change



**4.1 Authentication and Authorization**

In this module the User have to register first, then only he/she has to access the data base. After registration the user can login to the site. The authorization and authentication process facilitates the system to protect itself and besides it protects the whole mechanism from unauthorized usage.

The Registration involves in getting the details of the users who wants to use this application.

**Blood Hub**

Please Login to BloodCare

Username

Password

Admin  User

Login

Register Here

**Blood Hub**

Please Login to BloodCare

sss

...

Admin  User

Login

Register Here

**Blood Hub**

Welcome Admin!

new post

POST

Awareness Programmes

View Awareness

**Blood Hub**

Please Register to Mobile Number

9244033844

Register

**Blood Hub**

Please verify to Otp Number

270

Otp Verified

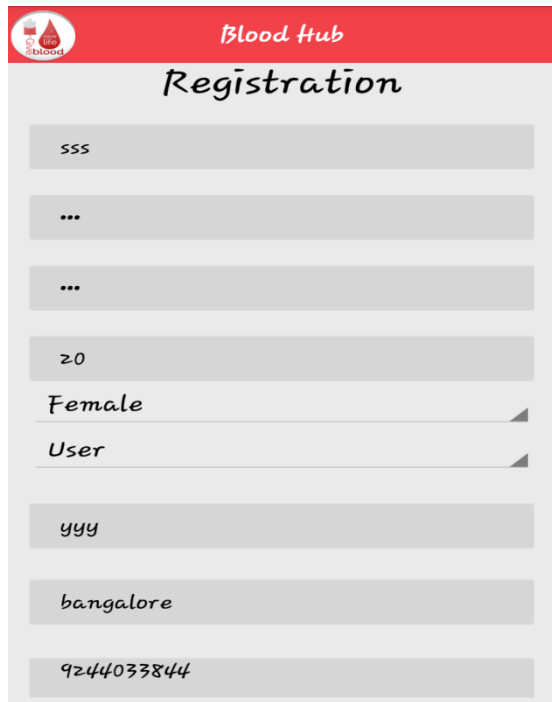
Registered Successfully

#### 4.2 Blood Bank Details

In this module in the Medinous hospital Management Software is quite comprehensive in its nature, maintaining all information regarding the blood donation. The details about the donors and recipients are maintained. The users are donor and recipient. The Donor enters details such as Blood group. Age, gender, Address etc. Similarly Recipient also enters such details. These details are stored in the database.

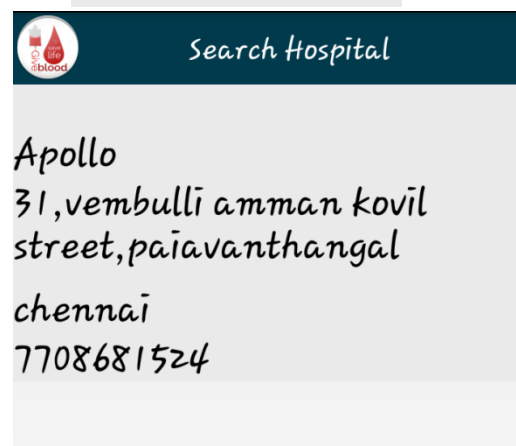
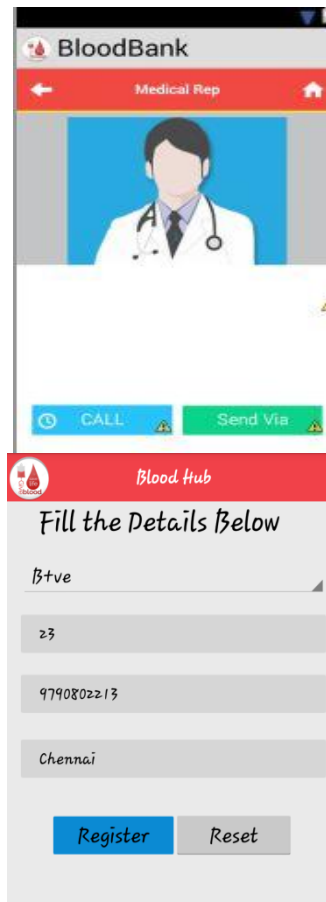
**4.3 Manage Database**

Every area has its own Admin. Administrator plays a very vital role. In this module the Admin uploads the information of blood bank details. And it also uploads the other information. The admin has all rights to perform manipulations on information.



**4.4 Information Exchange**

If the Donor and Recipient are in Same area then the Admin will send information of Donor to recipient and Recipient information to donor to donate blood. Admin plays a vital role in this model to change the information.



## 5. CONCLUSION

The conclusion is that we have a better system which will help in better interaction between the blood donors and the blood banks. This application has a wide usage and will encourage donors to donate blood.

Following are the contributions of this system towards this cause:

- The user can read information about blood and the basic requirements for a donor.
- The donor can find blood banks in his nearest area via maps or call a blood bank in his area by the numbers provided in the application.
- The blood banks can see a list of donors of a particular blood group and can contact them to donate blood.

The system is scalable and allows any number of different devices to be added with no major changes in its core.

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