# **Blood Bank Application**

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Abstract – Blood Bank acts as an important role in medical world by saving lives of human beings and this is also the main aim of this android application. The Android Blood Bank Application is a project developed for people to view the information and details about registered blood donors such as name, contact number, address, details of blood group and other medical information of donor. The project has a login page where the user is can register and only then can view the availability of blood. The user can also register to donate blood if he/she wishes to. The main aim of developing this application is to reduce the time to a great extent that is spent in searching for the right donor and the availability of blood required. This Blood Bank Application gives the requested information in the fastest way possible and makes decision making quicker.

# Index Terms - Blood Bank, Donor, Application

#### 1. INTRODUCTION

Android is an open source operating system used in smartphones and tablets. Android is a very powerful Operating System which runs a large number of applications in tablets and smartphones. Basically, Android is a software which is responsible for the functioning of your hardware. An Android Application is a software application running on android platform.

This project is basically an android blood bank application which can be used by the users to book appointments at blood banks to donate blood and also check for required blood at various blood banks nearby.

Blood is crucial part of life. Many human lives are lost due to loss of blood or blood related diseases. In these cases, external supply of blood is required to compensate the loss of blood or for blood transfusion respectively.

Blood Banks play an important role in saving human lives by providing the requested blood when required, as well as collecting blood from blood donors which will be used for future emergencies. This android Blood Bank Application connects the blood banks and the user. The user can register to this application and get access to information regarding available bloods in nearby blood banks when needed.

The user can also choose to donate blood by booking an appointment at a desired blood bank through the application.

This application makes the work easier when compared to the existing manual system. This saves time and also saves lives in case of emergencies.

#### 2. RELATED WORK

#### A. Red Donate:

This paper implementation of blood bank application uses integrated Geographic Information System which is designed to capture, store, manipulate, analyze, and present spatial or geographic data. This application provides efficient and reliable blood donor information and a proper management system. But the downside of this application is that it does not do a good job in connecting the donor side and the receiver side of the application. Also, it does not have an SOS emergency feature.

## B. Android Blood Bank:

This project uses basic PHP, MySQL and android application development and has a simple user interface. This application also provides various other features like appointment bookings for blood test. The simple user interface keeps the users clear and is not confusing during emergencies.

This application is only available on android and not on iOS platform.

# C. Online Blood Bank Management System:

This paper the implementation of Blood Bank Application uses technologies like android application development,

MySQL and GPS. In this application, GPS is used to detect the user's location and provide the nearby blood banks. This makes the search easier and more accurate. This application also has a uniform and simple user interface. But the alert system on the application is not optimized.

D. An Efficient Android Application for Blood Donation Process:

This proposed project uses regular techniques like android application development, MySQL, and servers. This application links all the information of the registered users to the application from social media. This results in unsafe personal information of the uses. This application contains a lot of data and uses huge database, hence it should be migrated to cloud servers. This makes the application management expensive.

E. Blood Bank Smartphone Application for managing and organizing the blood donation:

This paper implementation of blood bank application uses technologies like android application development, Apache, MySQL, Sublime Text 2 and PHP. This application has increased sharing. It updates and displays data and information faster. But this application does not provide adequate communication features between the donor and receiver.

## 3. EXISTING SYSTEM

- Blood Bank Centres is the most commonly used system for blood donation and blood receiving.
- It is not easily accessible and uses manual documentation and data entry methods.
- There is no proper coordination between the user and the management and is time consuming in cases of emergencies.

## 4. PROPOSED THEORY

In this paper, we are proposing the system from the study of literature survey. This is an Android Blood Bank Application, which is used to make appointments at blood banks to donate blood, as well as request required blood from nearby blood banks. This application is made using android application development, MySQL and PHP. It uses GPS technology to detect the location of the user. The proposed system, i.e. a Blood Bank Application is user friendly and comes with helpful features. This system makes the overall blood bank management system much easier, accessible and flexible. It provides high security and keeps personal data safe. The customer can also choose to donate blood by booking an appointment at any blood bank. This method is very efficient and consumes less time. The customer won't have to wait for long time for manual response. All the information is stored in the database instead of hand written files. The information is easily accessed from the database in no time.

## 5. FUTURE SCOPE AND CONCLUSION

Our main goal is to develop the blood bank system in a large scale all over the nation and encourage blood donation. This can save many human lives that are in urgent need of blood.

This is an Android Blood Bank Application which is used to book appointments at blood banks to donate blood, as well as request the required blood from nearby blood banks. This system is time saving and efficient.

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