BBMS: Blood Bank Management System using Android

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Abstract: Blood is one of the most important for our body. There is an expectation that the blood will always be there when it is really needed. We proposed a technique of Blood Bank system using Android application in which blood donor and blood bank and blood donation event data will be managed online. In this application the administrator added the whole information about blood bank related to donor and stock of blood. Also user can quickly check for blood banks of nearby area in emergency situation. The main aim of our project is to bring blood bank, voluntary blood donors and those in need of blood on to a common platform. A blood bank database is created by collection of detail through app. If donor is willing to blood, he can easily find out registered blood bank through our app. Also using app user will get information of blood donation event organized by blood bank. The objective of our project is to reduce manual work of blood bank and give user information about nearest blood bank and available stock of blood to handle emergency situation.

keywords— blood donor; user; android system; blood bank; cloud database.

1. INTRODUCTION

Blood is important to life. Blood circulates in our body and providebody required substances like oxygen and nutrients to the body’s cells. It also transports metabolic waste products away from those same cells. There is no substitute for blood. It cannot be made or manufactured. Generous blood donors are the only source of blood for patients in need of a blood transfusion. Blood bank can store blood and blood components like WBC, RBC AND PLATELES which is to provide blood for needy people most of blood come from blood donor via blood donation, stored and preserved for later use in blood transfusion in body. In addition to this, the blood type of patients also needs to be determined for compatibility sake for a blood transfusion. It is possible in some situations that the patient is unable to get the required amount of blood at right time due to lack of interrelationship in form of a networked database among the blood banks which leads to the lack of knowledge of updated record of all blood donors. Today mobile and mobile based applications have become a part of our day to day life. With the revolution in mobile computing many great features were added to the field and the mobiles got smaller, faster and better as the decade passed. This Android application is developed to easily search for blood in nearby areas for emergency. In this Android app one will get clear access to blood in real time and right place.

The purpose of the blood bank system is to simplify and centralise system; all blood bank process of searching for blood in case of emergency also maintain the records of blood donors, recipients, blood donation programs and blood stocks in the bank.

This android system can daily update by blood bank management for data accuracy and stock of blood in blood bank. Also hospital and client can actually view stock of blood from registered blood bank.

The main aim of our proposed system is to maintain centralize database of blood bank and reduce the manual work. Also from the donor/user point of view handle the emergency condition whenever they are in need of blood.

2. LITERATURE REVIEW

In the literature survey we are going to discuss some existing technique for cloud.
(A) Blood Bank Management Information System in India[1] Blood bank is a collection blood or blood components like WBC, RBC and PLATELES gathered as a result of blood essentials for donation, stored and preserved for later use in blood transfusion, stored and preserved for later use in blood transfusion. There are many of online web based or online blood bank system exists in our society that can make interaction between hospital and blood bank to give information about this blood. Manual systems as compared to Computer Based Information Systems are much time consuming, and costly.

(B) We want to build a network of people who can help each other during an emergency. This application timely updates the information regarding the donors where the administrator accesses the whole information about blood bank management system. Donor will be prompted to enter an individual’s details, like Blood is a saver of all existing lives in case of emergency needs. The task of blood bank is to receive blood from various donors, to monitor the blood groups database and to provide blood during the need to the hospital in case of emergencies. The problem is not insufficient donors, but finding a willing donor at the blood group. In the urgent time of a blood requirement, you can quickly check for blood banks donors and hospitals.

**Android Blood Bank**

### 3. EXISTING SYSTEM

In the literature survey we have learnt about different methods for storing information of blood type a blood donors. Most of methods are not convenient for users. To provide the best solution for the cloud based system we introduce BBMS (Blood Bank Management System). Creating a user interface which is both easily navigable and effective will be a difficult challenge for us. The basic and primary constraint will be that we are developing an application for mobile platform. The big issue will be rendering and bounded resolution as the application is for mobile devices. The other constraint regarding mobile handset will be processing power and limited memory. Responsive management of functions which deals with tremendous

### 3.2 DRAWBACKS OF EXISTING SYSTEM:

1. Availability of valid information is very low.
2. They have distributed system so security of personal information is at risk.
3. There are many chances to misplace of data using manual data entry.
4. There is less security to manual data entry.

### 5. PROPOSED SYSTEMS

The system that is going to be developed is Blood Bank System. This is an android-based application system that can be used by both blood banks as well as donors. This system overcome the drawbacks of existing systems available. Some features of proposed system are as follows:

1. Here we are going to use centralise system for interconnection between blood bank, donors and hospitals.
2. Registered users/donors receive notification about nearest blood bank donation events.
3. It provides security for users using unique id and passwords.
4. GPS system is use to track nearest location of blood bank or donors.

### 6. CONCLUSION

As the paper suggest to us mobile communication is much faster than computer system. The contributions of this system towards this cause: Using our app 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 emergency situation. This will decrease manual work of blood bank and mange blood bank database more efficiently.
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Paper 2: Android Blood Bank
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