International Journal of Scientific Research in Computer Science, Engineering and Information Technology
© 2017 IJSRCSEIT | Volume 2 | Issue 2 | ISSN : 2456-3307

Blood Bank Mobile Application

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ABSTRACT

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 send the required blood during the need to the hospital in case of emergencies. The problem is not insufficient number of donors, but finding a willing donor at the right time. 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 name, phone number, and blood group. In the urgent time of a blood requirement, you can quickly check for blood banks or hospitals matching a particular or related blood group and reach out to them through the app. Blood bank app provides list of blood banks in your area. A large number of blood donors are attracted using an android application. Since almost everyone carries a mobile phone with him, it ensures instant location tracking and communication. Only a registered person, with willingness to donate blood, will be able to access the service. In this application we are using the gps technology that will be used to trace the way to the blood bank. The user will get the route to reach the desired location and he won't have to ask manually, therefore time can be saved.

Keywords: Blood Bank, Android, Blood Transfusion, Database, Donors, Acceptors, Administrator, Geographic Information System

I. INTRODUCTION

The donation is when a donor gives blood at a blood bank or hospital to an unknown recipient. Blood donation is one of the noblest donations someone can ever make in his life. It is a great service that a person can offer to the society. In the medical field, someone needs blood to save some one's life every minute. In developing all blood banks receive blood from various donors, monitor blood groups database and send the required blood to the hospitals in case of emergencies. But the blood resource lacks in quantity which is a barrier to save others life in a critical moment. The decentralized nature of donor and limited information hampers blood availability at serious times. It is quite difficult tracking the database for particular blood group and maintain it updated using existing system.

II. METHODS AND MATERIAL

1. Project Scope

The scope of the project is that in a very short span it provides user with many facilities. It provides an elegant management of blood, list of hospitals, blood banks and donors online. The main purpose of this project is to interconnect all the blood banks, hospitals, donors into a single network, validation, store various data and information of blood and health of each individual. This system is used to store data over a centralized server which consists of database where the individuals' information cannot be accessed by a third party.

2. Literature Survey

1) The proposed system (blood bank management system) is designed to help the blood bank administrator to meet the demand of blood by sending and/or serving the request for blood as and when required. The proposed system gives the procedural approach of how to bridge the gap between recipient, donor, and blood banks.

This application will provide a common ground for all the three arties (i.e. Recipient, donor, and blood banks) and will ensure the fulfillment of demand for blood requested by recipient and/or blood bank.

2) The user can search for blood banks and blood camps. He can view other people who have already registered and he can search donors by location or type.

He can organize blood camps by specifying the venue and date of the activity. This information is added in blood camps. By using gps „search nearby places "searches nearby hospitals and also gives the direction to the hospital. The user can also request for required blood by giving any small description. This request is submitted to admin who accepts or rejects the request.

Accepted request is published by admin. The registered user gets notification of this published request. This information about the request is added to „requirement for blood" option. The user can also check various first aid details. He can update his own profile.

3) The current web based system's in india for blood bank are not available according to the user's requirement as they are deployed on web which are handy to use as they can be accessed in the case of emergency or an trauma situation. The mobility provided by android based system which is accessible on mobile through application is available on the go.
4) Blood donation can occur at a number of places including blood donation centers, mobile camps and mobile vans etc. In bangladesh, organizations like sandhani and bangladesh red crescent works on safe blood transfusion. The group of people donate blood mostly are aged between18-25 years (43%). rest of them are between 26-30 years (23%), 31-40 years (25%), 41-50 years (7%) and 51-60 years (2%). The maximum numbers of donors are students (58%), others are businessmen (21%), service holders (19%) and housewives (2%) .sandhani collected 37403 bags of blood in 2010-11, 38102 bags in 2011-12 and 38604 bags in 2012-13 from general people and donors
5) This module helps to manage and control mobile blood bank movement or programs and serves as marketing information collector. Its web-based feature works on anytime and anywhere concept and helps to capture data from the various locations. In this phase we list out the donor based on mobile gprs services so easy to get the more information about donors in particular region.

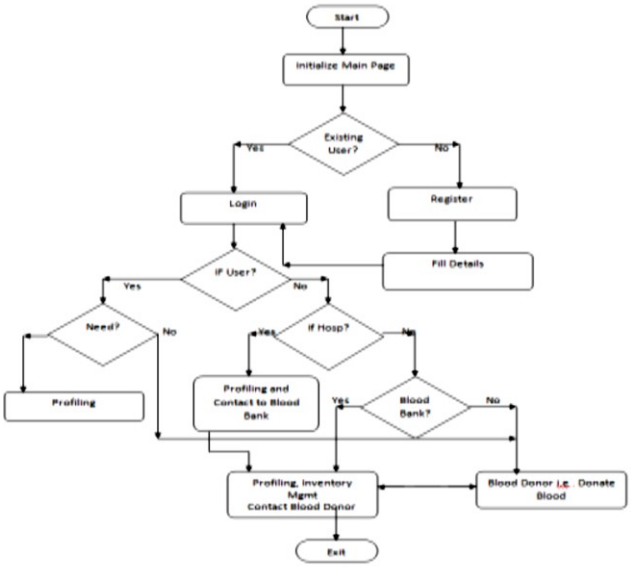
3. Existing System

Existing system is Android Application. So much time consuming this application also one machine and one by one record stored. Single Blood bank application also inquiry for directly information collection inall Blood banks and Blood donors.

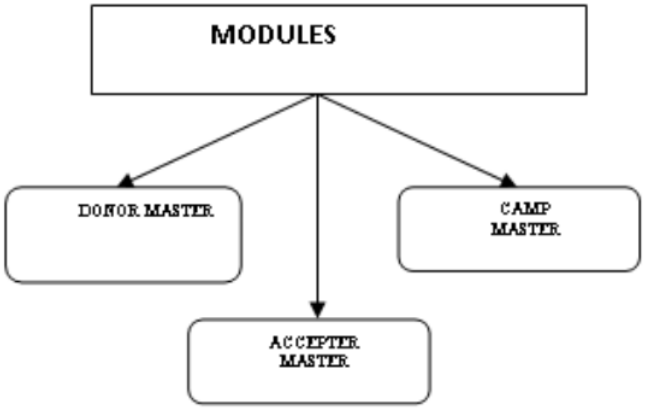
4. Proposed Work

The application is a user friendly one, that anyone can access for free of cost. The basic idea for this project was to guide the blood bank with the blood donors, all the possible donors list that come on their way to the destination and moreover, display maps and track their locations and show the estimate remaining time required to reach. The aim is to overcome all the drawbacks faced in all the previous applications and generate fast and accurate results.

ARCHITECTURE



1. Modules



2. Donor Master

The donor master contains the main fields like donor no, donor name, and reg. No, weight, donating date, blood group, temperature, bp, pulse, age and donor details like city, phone number, street and address. It will perform the operations like save, update, delete, clear and close. These operations are to be affected to the database.

a) Camp Master

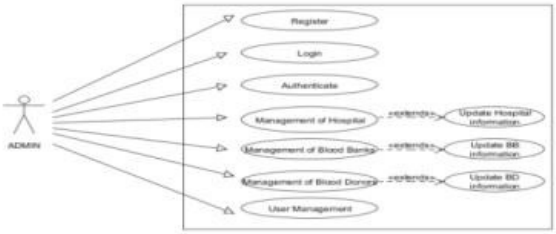
The camp master contains the main fields like camp code, camp date, place of camp, organizer of camp and no. Of donors. It will perform the operations like save, update, delete, clear and close. These operations are to be affected to the database and it will be displayed through the data set.

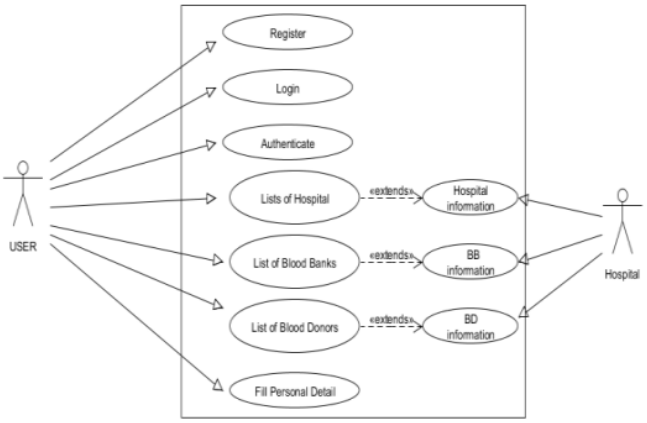
b) Accepter Master

The accepter master contains the main fields like blood group needed. It will perform the operations like save, update, delete, clear and close. These operations are to be affected to the database and it will be displayed through the data set.

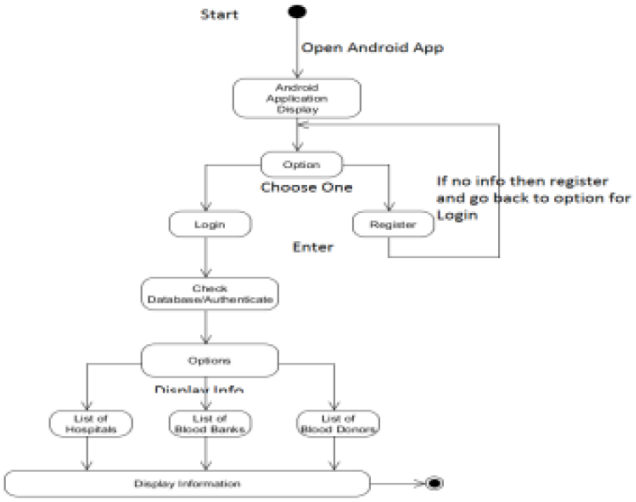
UML DIAGRAMS

1) Use Case Diagram





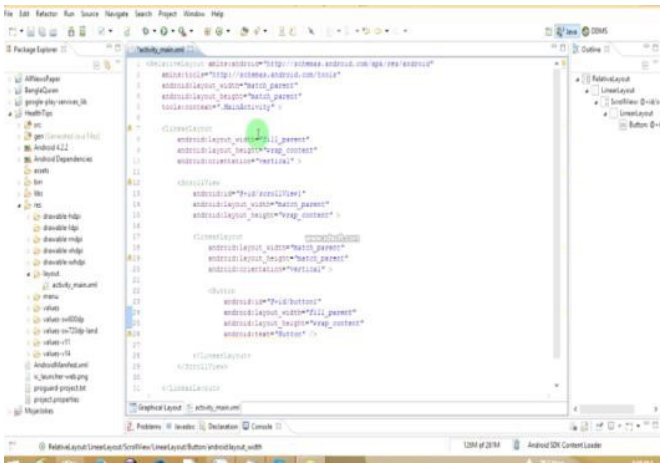
2) State transition diagram

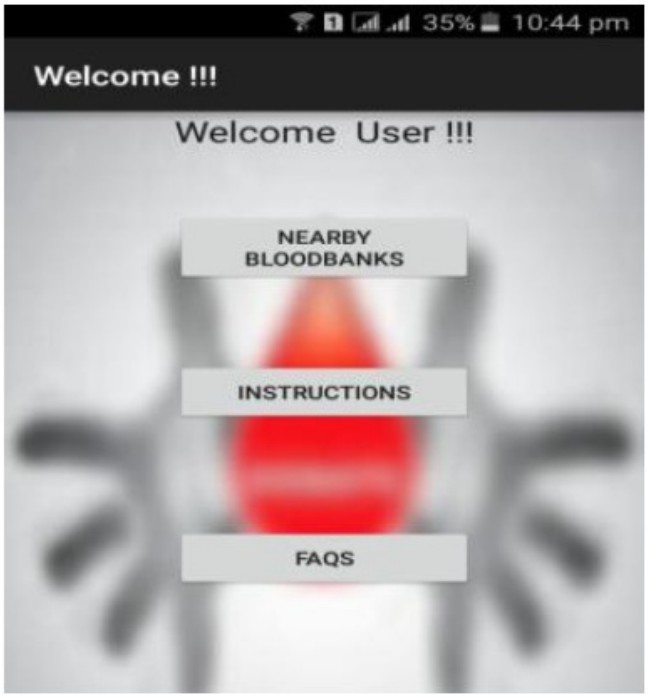


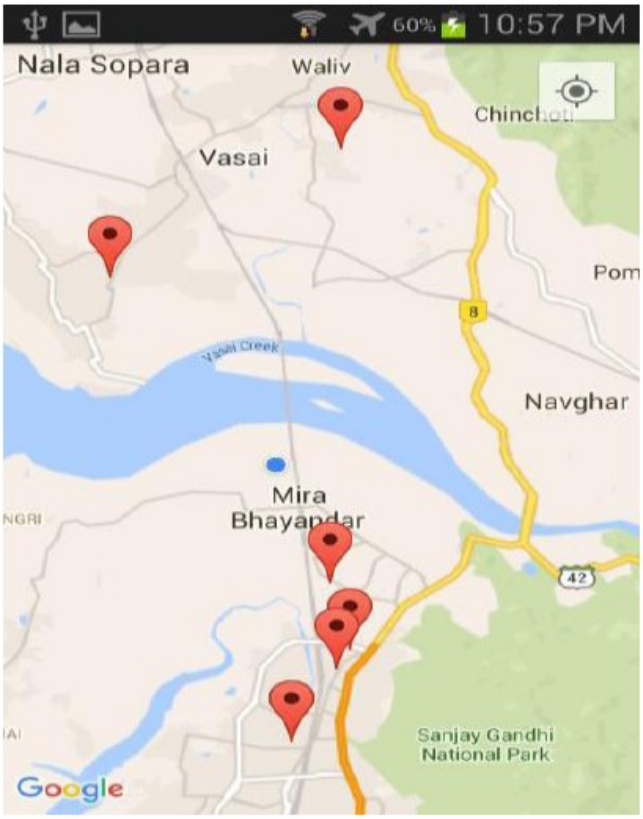
Objective

The main goal of the project is to create a professional web browser that has some added features for users. The browser is light-weight such that execution is much faster than the existing web browsers. Adding downloads and add-ons can be done. To increase the performance and efficiency of the browser, using other java languages integrating with Andoid can be done

III. RESULTS AND DISCUSSION







IV.CONCLUSION

V. CONCLUSION AND FUTURE WORK

The professional browser performs the operations of automatic zooming, which is very much helpful in this information era with lot of information available online to read upon. The history is added as simple containers, which reduces the weight of code or size of the browser. The tabbed browser is created for multi-tasking in a single window of web browser, different from traditional multiple windows for multi-tasking. Adding downloads and add-ons can be done. To increase the performance and efficiency of the browser, using other scripting languages integrating with vb.net can be done

VI.ACKNOWLEDGEMENTS

I thank mrs. A. Valarmathi for guiding me and supporting me till the end of the project.

VII. REFERENCES