

## BLOOD MANAGEMENT APP

Jagadish R M<sup>1</sup>, Rajitha K<sup>2</sup>, Ravichandrika Ch<sup>3</sup>, Renuka Chowdari<sup>4</sup>, Srividhya Tamminedi<sup>5</sup>  
Department of CSE.

**Abstract:** This project acts as an important role in saving life of human beings and which is also its main aim. The project Blood Management App is developed so that users can give the information about registered blood donors such as name, address and other personal information along with their details of blood group. The project also has a login page where the user is required to register and only they can view the availability of blood and they can also register to donate blood if he/she interested. This project requires internet access and there may be a disadvantage of internet failure. Thus this application helps to select the right donor online using medical details and with blood group. The main aim developing this application is to reduce time as much as possible that is spent in searching for the correct donor and availability of blood.

### I. INTRODUCTION

There is an expectation that the blood will always be there when it is really needed. In an emergency situation, if the stocks are insufficient, for this reason, the health care center should call the nearest available donor in order to get the service as quickly as possible. A smart phone application is developed to facilitate the identification of the nearest available blood donor volunteer and the communication with him/her in the emergency situations where the blood can't be supplied through the blood banks' stocks.

### II. RELATED WORK

#### A. Purpose of the document

This paper is to design and develop the Android Application that is Blood Management App which provides list of blood donors in your interested area.

#### B. Scope of the project

The Scope of the project is that in a very short time it provides user with many facilities. It provides an easy management of blood, donors. The main purpose of this project is to interconnect all the blood donors, store various data and information of blood.

### III. EXISTING SYSTEM

Current systems is just providing the blood linked with the donors.

Limitations of the existing system

- It is not having the donor deactivation option.
- It is also not having the donor response to the user request.

### IV. PROPOSED SYSTEM

The user has to first download the application. He/She will be provided with two options: Register and Login. If the person is already registered then he/she has to login. If not he/she

has to create an account providing basic details which are given by App. The user is allowed to update his/her information and further he/she can check various blood requests.

The user will get various options on the screen:

- Profile.
- View requests.
- Response.
- Deactivate
- Logout.

### V. REQUIREMENTS AND SPECIFICATIONS

#### A. Functional Requirements

- Admin view Donor Details, Member details & View requests.
- Member get registered & login search for donors and will request for Blood.
- Donor also gets registered and Login, donor view request and response to request sent by member

#### B. Non-Functional Requirement

- Availability: Application should be available for any number of users and smart phones.
- Security: Authenticated users can access information and can change their own data.
- Reliability: Accurate information about donor and receiver is provided.
- Maintainability: Provides the easy management of all app related information.

#### C. Minimum Hardware Requirements

##### MACHINE CONFIGURATION

- Processor : Intel core.
- RAM : 1GB RAM.
- Hard Disk : 40GB Hard disk and above.

##### PERIPHERAL SPECIFICATION

- Monitor : At least a 15" B/W/COL Monitor.
- Mouse : Standard 2/3 Button.
- Keyboard : Standard US 104 keys.

#### D. Software Requirements

- Operating System : Window's 7 and later.
- Back End : MySQL.
- Front End : PHP.
- Browser : Internet Explorer, chrome.
- Web server : apache-tomcat 6.0.14Server.
- Development Tool : Eclipse (3.4.0).

### VI. SYSTEM DESIGN

**USECASE DIAGRAM:** A use case diagram is a graph of actors, a set of use cases enclosed by a system boundary, communication associations between the actors and users and generalization among use cases.

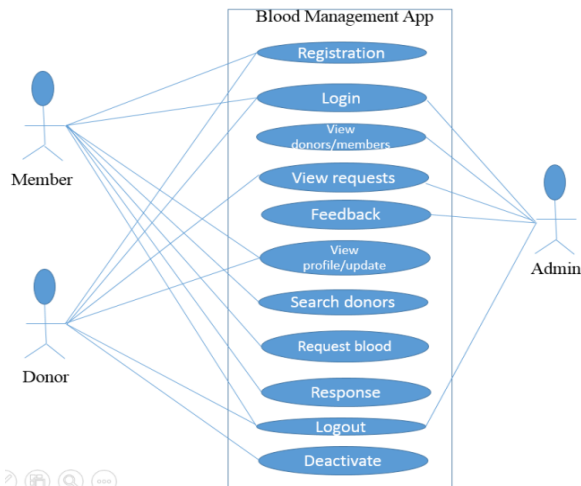


Fig 6.1 Use case Diagram for Admin, Member and Donor.

SEQUENCE DIAGRAM: It is an interaction diagram that shows how the objects operate with one another and in what order. It shows objects interactions arranged in time sequence.

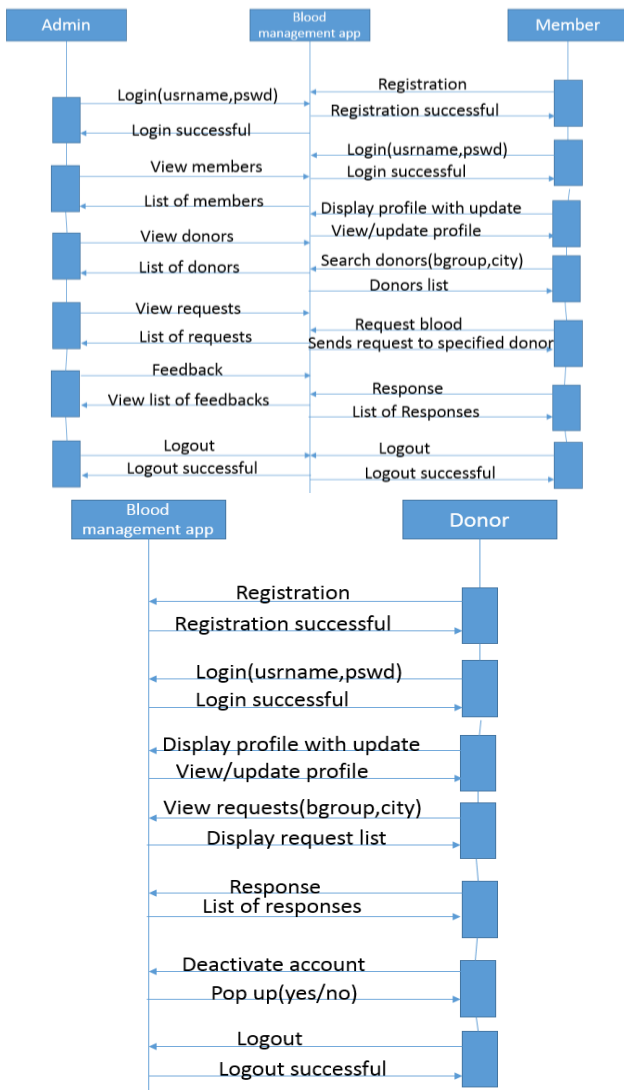


Fig 6.2:Sequence diagram for Blood Management App

DATA FLOW DIAGRAM(DFD):

It is the graphical representation of the flow of data through an information system, modelling its process aspects. A DFD is often used as a preliminary step to create an overview of the system without going into great detail which can be later elaborated.

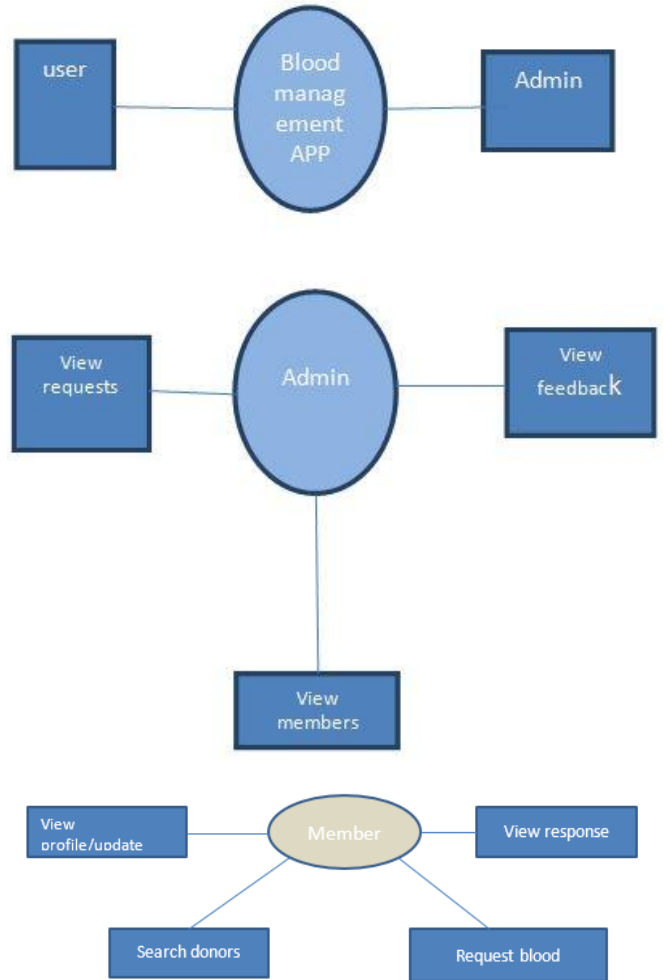
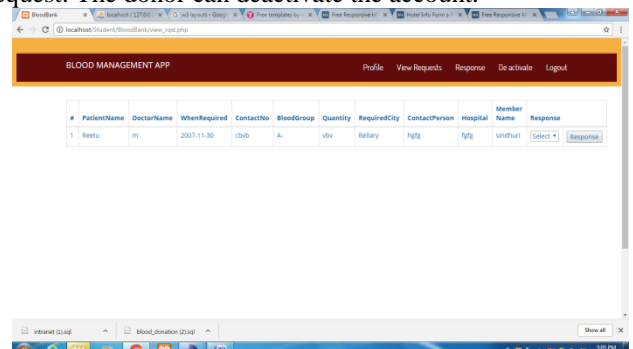


Fig 6.3 DFD for Blood Management App

## VII. RESULTS

The result consist of admin, member and donor modules. In which member and donor has to get registered before login. The donor view the requests and responses to the appropriate request. The donor can deactivate the account.



The member can view the list of donors and requests for the blood. The member can also see the response for his/her request



### VIII. CONCLUSION

Blood Management App is a application based system that is designed to store, retrieve and analyze information concerned with the administrative within a Blood Management App. This project aims at maintaining all the information pertaining to members, blood donors, different blood groups available. It allows us to access the information to meet the complex need of Blood in Healthcare Sector.

### REFERENCES

- [1] P. Priya, V Saranya, S. Shabana, Kavitha ,”the optimization of blood donar information and management system, volume 3 February 2014.
- [2] Tushar Pandit, Satish Niloor and A.S Shinde, a survey paper on e-blood bank Sinhgad academy of engineering ,pune,india,2015
- [3] Medlineplus U.S National Library of Medicine, NIH,USA. Blood transfusion and Donation,2011
- [4] Narendra Gupta, Ramakanth Gawande and Nikhil Thengadi,” a life saving application cse department, volume 2 ,march 2015.
- [5] Michael Chau, Eddie Cheng and Chi Wai Chan, "Data Analysis for Healthcare: A Case Study in Blood Donation Center Analysis", Proceedings of Sixteenth Americas Conference on Information Systems(AMICS), 2010.