

BLOOD REQUISITION SYSTEM ANDROID APPLICATION

Prof.Kaustubh Hiwarkar
Dept.Of Information Technlogy,
BRACT VIT, Pune, India

Jayesh Deshmukh
Dept.Of Information Technlogy,
BRACT VIT, Pune, India

-----***-----
Abstract—The world, we are living around where androids and information technology have become a major part of our daily stuff. And as we know Blood Deficiency is becoming major problem in number of patients and blood banks are out of stock because blood preservation is also a sort of a problem for blood banks, So to solve this problem we can use this application where a user (who needs blood) can request blood then all the other users who are having same blood group can see the ones request and accept it, then app will provide information about requester to donor and requester would get notified regarding his request is accepted. So here we will have requester to donor communication directly to effectively donating the fresh blood to Requester.

Keywords — Blood; Donation, requisition.

I.INTRODUCTION

The most important tasks of blood bank is to collect blood , monitor level of blood quality and supply, and distribute blood and blood components to hospitals within the network. If the blood bank is able to deliver blood supply is on time, Life of patients' will be saved. Nowadays, many regional blood banks confront with less effective communication channel and insufficient information. Thus, this leads to wrong blood distribution and time wastage, which can be harm to patients with are in critical conditions. It is our goal to build android application to manage blood requisition within the blood

supply chain. The system was designed to resolve this problem.

To provide blood to person who require it on direct user to user basis, In this application we can request blood then our request get registered in database & then other users who are in interest to donate blood could accept your request and they will get your information and they will contact you directly.

II.LITERATURE REVIEW

There are many online application available for blood donation but {none of them} of them is really as effective because privacy issues of end user. Also only few applications provide the status tracking of blood. At the time of requirement of websites and software's only provide information about blood banks rather than blood donors. This becomes difficult for user to contact blood banks and get blood from them as there is no source and standard procedure to deliver blood to the user. These systems do not give attention to the problems faced by users in the emergency situation.

Blood is a first and most important component amongst the most critical necessities of our life there isn't a practical substitution for human blood. Blood adds to saving countless lives consistently in both regular and emergency conditions. According to the per year requirement of blood unit in our country is approximately five crore units of blood out of which max eighty lakhs units of blood were gathered. Every two seconds there is a requirement for blood. Everyday 38000 blood units is required by our country(India).

Lives of patients is saved by the voluntary act of blood donors.. Growth is found in number of cell phones clients in developed and developing nations. Cell phones data and correspondence innovation are used by M-Health for the conveyance of services for health. In the early systems used for blood donation management were not that dependable as they use to scan for the donors get blood and collect them. Lesser enthusiasm for giving blood is found in donors due to the slow time consuming process. In the event of crisis circumstances like surgery ,relatives of patients go to blood donation center and check whether the required type of the blood is available or not. Relatives need to find contributor who satisfies has same blood group and other related factors to patient, Conventional strategies, for example, data leaflets, video and camps for awareness are utilized to draw in more blood donors. Applications utilizing present day advancements have been executed to draw in donors and increment the rate of blood donation .Several websites and applications on this topic are available, however it is hard to figure out which one of them is usable and supportive. Lesser security is provided to the user. Because of inabilities of existing frameworks individuals who wish to donate blood standby. "Call for Blood" given by the Maharashtra State provides requestor of blood to call 104 helpline numbers for delivery of blood. This service is not effective as the time taken to process is high.

III.METHODOLOGY/EXPERIMENTAL

A. Donor and Requester communication

In this project we made android application where requester can request blood and donor can

Accept request then app will provide info about requester to donor and requester would be notified about it by SMS here we can also see history of our blood tractions where we can track status of our request this app will also auto generate pdf about requester’s information and save it in donor’s device without moving their hands.

B. Synthesis/Algorithm/Design/Method

In this every background activity is done using web services where app requests required data to web service and web service replies required data in JSON format.

Each Functionality have its separate web service stored on server which is invoked from application by using Volley library by sending GET and POST requests.

C. View history option

Any user can see history and status of his blood transactions .

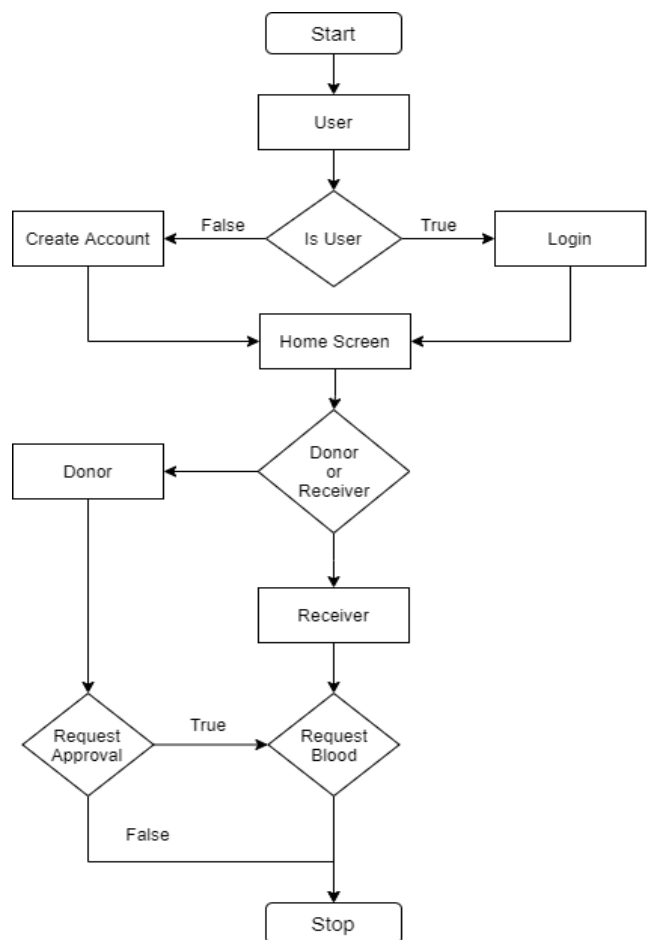


Fig.1: Dataflow diagram of blood requisition system.

The following facts are kept in mind during designing blood requisition system :

i. Register user option

Here user can register himself by entering his information and pressing register button.

ii. Login option

Here user can login himself by entering his credentials and pressing login button.

iii. Request blood option

Requester will request blood by pressing request blood button.

Then, the request entry will be inserted into database with respective blood group

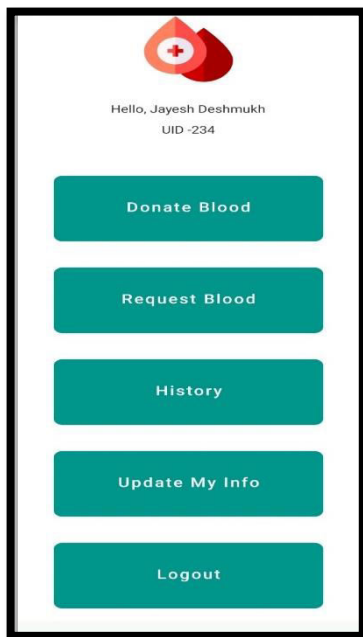


Fig.2: Screenshot of HomeActivity

iv. Donate blood option

Donor will able to see available blood requests by pressing donate blood button then pressing accept & donate button to

See requesters information to contact requester.



Fig.3: Screenshot of DonorActivity

IV. IMPLEMENTATION

The following steps are concerned within the implementation of the proposed system:

Step 1: Element Setup: Design and create data base on mysql considering required tables and fields.

Step 2: Design: First we design the application layout in android studio for user interaction and add all component required for application like Button, ImageView, TextView, EditText etc.

Step 3: Import libraries like volley to use web service API for database connection.

Step 4:- Write Java Code for working of application.

V. RESULTS

We have to request blood ,when we register ourselves and then login into application then click request blood button then the blood request would be submitted, then the other user who is willing to donate blood will register himself and press donate blood button and accept any request which is available then he will get all information about requester so that he could contact requester and donate blood.

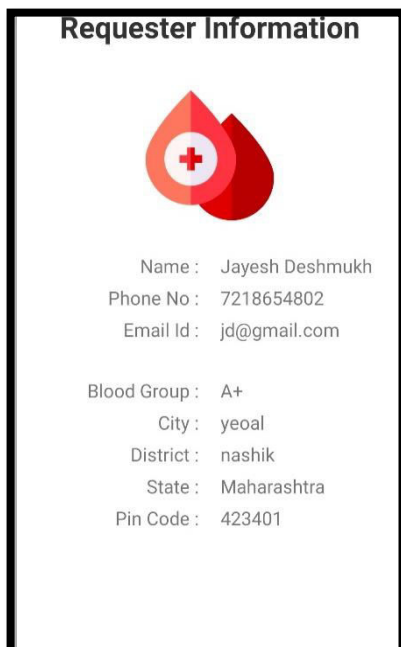


Fig.4: Screenshot of InfoActivity

made proposed application will help peoples who are seeking for blood. This application is completely free to use and is available for everyone.

VI.REFERENCES

- [1] Prof. Dhananjay S. Gaikwad, Rajkumar Patil, Mrunal Tilekar, Piyush Shah, Chinmayee Yeragi, Implementing system for blood request management system using Data Mining, Vol-4 Issue-2 2018, IJARIE-ISSN(O)-2395-4396.
- [2] S. Thomas A. Osuntogun J. Pitman B. Mulenga and S. Vempala "Design and Deployment of a Blood Safety Monitoring Tool" Proceedings of the 3rd International Conference on Information and Communication Technologies and Development (ICTD) 2009.
- [3] Wijai Boonyanusith; Phongchai Jittamai 2010 Seventh International Conference on Information Technology: New Generations 2010 IEEE.

VI. CONCLUSION

As there are many other blood donation system which works in conventional ways , This concept is different than conventional systems. The proposed system is more effective because its an mobile application so anyone can use it easily , has faced a variety of challenges to the fact that mobile devices have unique features like, limited range of bandwidth, unreliable networks and many more. So under consideration of this feature we