

Blood Donor Assistance Application

Ms. J. Maheswari
Assistant Professor

Department of Computer Science & Engineering
Dhirajlal Gandhi College of Technology, Salem- 636309,
India

Mr. A. Safi
UG Scholar

Department of Computer Science & Engineering
Dhirajlal Gandhi College of Technology, Salem- 636309,
India

Mr. S. Ravikumar
UG Scholar

Department of Computer Science & Engineering
Dhirajlal Gandhi College of Technology, Salem- 636309,
India

Mr. S. Ramesh
UG Scholar

Department of Computer Science & Engineering
Dhirajlal Gandhi College of Technology, Salem- 636309,
India

Mr. N. Sakthivignesh
UG Scholar

Department of Computer Science & Engineering
Dhirajlal Gandhi College of Technology, Salem- 636309, India

Abstract

Blood Donation is a tedious process where it involves lot of manual work with the expense of time. Requesting blood is a highly critical task for the patients who are victims of several kinds of accidents. Their compatible blood types should be made readily available for their further treatment. Blood Donors should also be intimated appropriately for faster blood availability for a specific request of blood. Our project focuses on this blood donation process where Emergency situation, such as accidents, creates immediate and critical needs for specified blood type. The blood bank won't give blood for free unless you provide them another blood. Due to lack of communication between blood receivers and donors, people face problems in the blood transfusion. The donor has to forward the blood request with ease and his/ her privacy should be maintained.

Keywords: WEB SERVICE, MYSQL, XAMPP, Native go, PHP, Bootstrap, Android

I. INTRODUCTION

The project "A Blood Donor Assistance Application" is an application that is developed to help patients who are in need of blood. The existing system involves hospital authorities calling each blood donors whether they are willing to donate blood. This is a time consuming process where requisition of blood is a time critical one. The proposed system involves an application in which the recipient of blood sends a blood requesting notification to all available blood donors. The main objective of developing this system is to save work and time. The process of blood requisition and blood donation should be fast and reliable. Another thing one has to note is the security of the details of donors. This system mainly focusses on providing privacy to each donor.

The main idea behind this project is to provide blood timely to the recipient and maintain privacy of donors. The request forwarding will be automated. Users will be able to register as donors with geo location information and thus receive an SMS request to the nearer donors based on geodistance. There will be option to extend the request circle.

II. SYSTEM ANALYSIS

A. Existing System

The existing system involves hospital authorities calling each blood donors whether they are willing to donate blood. Calling volunteers one by one manually be a time consuming and difficult task in emergency situations. In this existing system, the volunteers contact details are visible publicly. This may affect the volunteer's privacy and may lead to unwanted disturbances.

B. Disadvantages

- 1) More human power.
- 2) More strain in manual labor needed.
- 3) Repetition of same procedure for every request.
- 4) Low security.
- 5) Difficulty to handle.

- 6) Poor communication.
- 7) Record keeping is difficult.

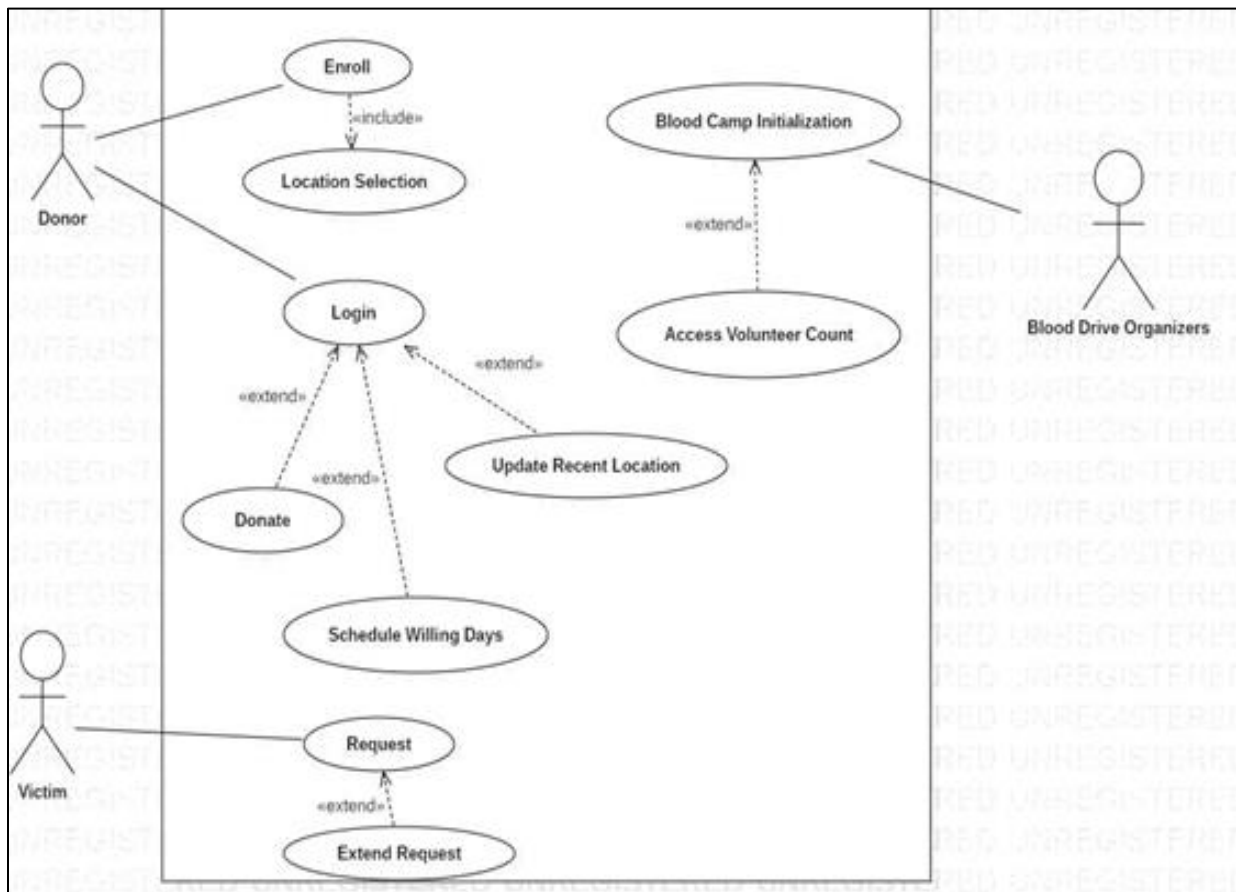
III. PROPOSED SYSTEM

In the proposed system, blood donation process is made easy. The recipient of blood posts the type of blood and required units. The compatible blood donors are notified through SMS and e-mail. This system also has the advantage of providing privacy to each donor, like one donor doesn't know the details of other donor. The system uses Maps JavaScript API of Google Cloud platform to know the exact location of blood donor. Every time when the donor logs in the current location is updated for receiving blood requests. This system also has the advantage of extending blood request if the blood donors are not available within the specified geographical boundary or if the response doesn't arrive within time.

A. Advantages

- 1) Privacy should be maintained
- 2) People have to easily and quickly forward the blood request
- 3) A Blood Donor Assistance Application is an efficient application for enrolling blood donors and fulfil the critical needs for specified blood types in case of emergency.
- 4) Volunteers can register themselves as donors
- 5) The victim can quickly request blood that enables our application to send SMS about user's request to nearby donors of respective groups
- 6) Option to extend the request circle.
- 7) Enables the Blood drive organizers to initialize blood camps.

IV. SYSTEM ARCHITECTURE



V. CONCLUSION

This project is developed using HTML, PHP, CSS and is based on the requirement specification of both blood requestor and blood donor. MySQL is the database used in this system. "A Blood Donor Assistance Application" is very useful for people who are victims of accidents where they need blood of compatible types for further treatment. This software is designed with

maximum privacy to donors and with the intent to save more time. Since blood requisition is a time critical task, this system allows users to request blood instantly without the need of calling each donor separately. This system also has the advantage of providing privacy to donors by hiding details of other available donors. The system is designed to be user friendly and more GUI oriented.

REFERENCES

- [1] [http://www.ajer.org/papers/v3\(2\)/O032105108.pdf](http://www.ajer.org/papers/v3(2)/O032105108.pdf)
- [2] American Journal of Engineering Research (AJER)e-ISSN: 2320-0847 p-ISSN: 2320-0936 Volume-03, Issue-02, pp-105-108.