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## BLOOD DONOR APP

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### ABSTRACT:

The main aim of this project is to save lives of people by providing blood. Our project Online Blood Donor app using Android is developed so that users can view the information of nearby hospitals, blood banks and volunteer donors. Four perspectives i.e., hospital, blood bank, volunteer donors and patient develop this project. This application helps us to select the nearby hospitals, blood banks, donors online instantly by tracing its location using GPS.

### 1. INTRODUCTION

Generally if we need blood in any emergency cases we have to search for blood in blood banks or else for any blood donor but it is a time taking process. There are also few situations where we lost few lives in search of blood. So to overcome this problem we had created a app called “**BLOOD DONOR APP**” in this app we can request for the blood group what we need very quickly. And we can also access location of the donor who had accepted the request by using geo- location. Once the donor had accepted the request the contact is shared to both the donor as well as seeker.

Appypie is an application development platform that enables users to create mobile applications compatible with operating systems such as Android, iOS and Windows mobile OS. The solutions creates applications for a variety of industries including casinos, gyms, small businesses and religious organizations. Configurable application templates allow organizations to create games, organizational apps, shopping carts, customer relationship management apps and more based on existing application frameworks.

Applications can be shared with potential customers on various social platforms that include Facebook and Twitter, as well as the Appy Pie marketplace. Appy Pie’s application analytics feature enables managers to track application performance by measuring parameters such as conversion rates, engagement levels and current active users. The platform is available with monthly subscription pricing or with a one-time perpetual license fee.

### 2. REATED WORK

#### Existing System

There are many blood donor apps and websites in online but they does not provide geo location and there is no data base connection which send confirmation mails like comments mails, app rating mails, password changing mails, login details mails. So here we added both geo- location and database. Disadvantages of existing system No geo-location ,No database connection.

#### Proposed System

To create an application that matches blood donors and recipients through angeo-location. It is useful to find local

blood donors quickly and easily. It gives a popup message to the donor in the specified location. Data is stored in the database. We track donor's location, Time saving process. Can easily interact with donors and gets blood requirement fastly.

### 3. METHODOLOGY

Generally if we need blood in any emergency cases we have to search for blood in blood banks or else for any blood donor but it is a time taking process. There are also few situations where we lost few lives in search of blood. So to overcome this problem we had created an app called "Blood Donor App" in this app we can request for the blood group what we need very quickly. And we can also access location of the donor who had accepted the request by using geolocation. Once the donor had accepted the request the contact is shared to both the donor as well as seeker. The overview of this project is to give customers a quick interaction between vendor and user. A website is created for this purpose. This website allows the user to request the vendor the action he/she wants.

#### Seeker Module

Seekers are allowed to register, log in, and log out. Each seeker is assigned one role. Here in our project, a new seeker is able to register into the application. The seeker can log in to the application and can be able to request any type of blood group he/she wants from all available blood groups. The seeker is also provided with the facility of canceling the request made by him/her within a specified time. Seeker is provided with the contact information of the donor for any questionable purposes.

#### Donor Module

Here in our project, a new donor is able to register into the application and be able to log in to add their blood details and whatever the description they need to add. Donors have to provide their contact information in order to meet seeker's queries. They can view the listings, request made by the seekers and can accept or reject the request based on availability and logout.

#### Hospital Module

Hospitals are allowed to register, log in, and log out. Here the hospital plays a dual role. They act as both seeker and the donor.

#### Blood Bank Module

Blood banks are also allowed to register, log in, and log out. Here the blood banks play a dual role. They act as both seeker and the donor. A blood bank is a center where different types of blood groups are available. As a result of blood donation is stored and preserved for later use in blood transfusion. More number of units are also available in blood banks than compared with other modules.

#### Functional Requirements

A functional requirement (FR) is a description of the service that the software must offer. It describes a software system or its components. It can be a calculation, data manipulation, business process, user interaction or any specific functionality which defines what function a system is likely to perform. Functional requirements drive the application architecture of a system. A requirements analyst generates use cases after gathering and validating a set of functional requirements. Functional requirement may be technical details, data

manipulation and other specific functionality of the project is to provide the information to the user.

### **Non-Functional Requirements**

In systems engineering and requirements engineering, a nonfunctional requirement (NFR) is a requirement that specifies the criteria that can be used to judge the operation of a system, rather than specific behaviors. They are contrasted with functional requirements that define specific behavior or functions. The non-functional requirements mostly include the scalability, capacity, availability, reliability, recoverability and data integrity here.

### **Availability**

The availability of blood as blood group and number of units requirement of blood. It's related to the donor providing the service to the seeker in displaying the availability.

### **Efficiency**

It specifies how well the software utilizes scarce resources: smart phone, memory, bandwidth etc.

### **Flexibility**

If the admin intends to increase or extend the functionality of the software after it is deployed, that should be planned from the beginning; it influences choices made during the design, development, testing and deployment of our application. New modules can be easily integrated to our system without disturbing the existing modules or modifying the logical schema of the existing applications.

### **Usability**

Ease-of-use requirements address the factors that constitute the capacity of the

software to be understood, learned and used by its intended users. A system that has a high usability coefficient makes the work of the user easier.

### **Performance**

The performance constraints specify the timing characteristics of the software. Our system easily navigates from one page to the other. The query related search is effective in short period results, so the speed of the system is very high.

### **Scalability**

The scalability of our application is very well worked on a small set of people. The reachability is likely to be good when implemented. The system mustn't let the same username log in at the same time. Member information must be private. Updating the donors thoroughly on the application.

### **Input Design**

Inputs, in simple terms are those things that we use in the project to implement it. For example, in any project, inputs would include things like time of internal and/or external employees, finances in the form of money, hardware and/or software, office space, and so on. To design data entry and input procedures. To reduce input volume. To design source documents for data capture or devise other data capture methods. To design input data records, data entry screens, user interface screens, etc. To use validation checks and develop effective input controls.

In our system, the input here mainly revolves around a good user-friendly interface. We developed a user friendly interface so that any user can easily access the application. The input controls are effective on this application. Data entries

and input procedures are easily maintained with this application. The user's personal information is kept confidential and is not accessible to any other parties. And is very easy to navigate. The input here in our system is all about providing information to users and collecting information from the donor. Authentication is done before adding any new donors. And the changes in the application are only done by the admin and the user's personal information is modified by the user themselves.

## Output Design

The design of output is the most important task of any system. During output design, developers identify the type of outputs needed, and consider the output controls and prototype report layouts. Project output is the final measurable result received upon successful completion of a project when all planned tasks and activities are accomplished and project deliverables are produced. Output of a project is received through complex activities that define the project lifecycle. The output design in this website application mainly revolves around the user's request upon a certain action that's linked to the donor and their blood groups. The user here makes a request that he/she wants blood of certain blood group and number of units of blood through our application. The request that's been created by the seeker is now visible to the donor and now the donor can either reject or accept the seeker's proposal regarding blood group. The donor here can be able to contact the seeker with their contact information that's been provided by the user themselves. And in the same way, seeker is able to contact the particular donor regarding information or queries about blood.

## 4. STUDY OF RESULTS:

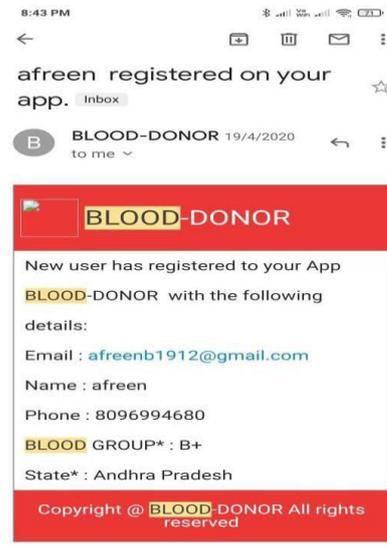
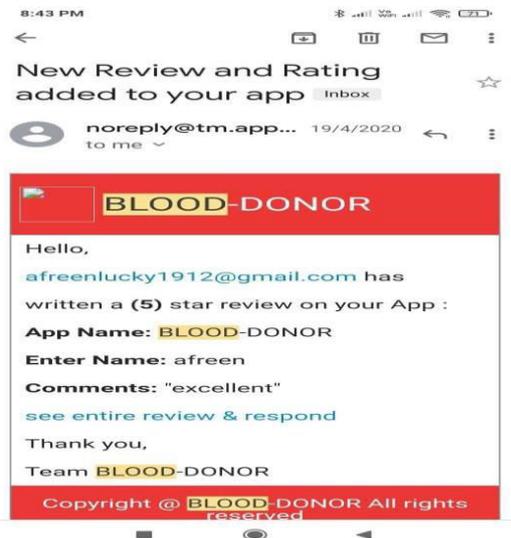


Figure 1: Mail confirmation of a New User Registration



Figure 2: User has changed his Password



**Figure 3:Ratings and Reviews given by the user**

## 5.CONCLUSION :

“Blood Donor App” is used to manage in an easy way. This application acts as a platform between donor and seeker by providing a facility of requesting blood for seekers. This application consists of a number of donors owned by different donors along with the details of the blood group, which is provided by the seeker at the time of adding a blood group. seeker has a scope of choosing from all the available donors and request for blood of their need. Donor has a chance of accepting or rejecting the request made by the seeker. If a request has been rejected by the donor, then it is indicated as, that particular blood is being requested by some other seeker for that time span. seekers can cancel the request if they don't want to avail the services. Hence, it is a user-friendly web providing you all the possible ways of a better experience with new themes in the near future.

Blood donor app has been developed in such a way that the future requirements are

met. This project adapts to the changes efficiently without affecting the present system. We are trying to include range within specified area and connect through more blood banks.

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