

**BLOOD CONNECT APP**<sup>1</sup>B.ARCHANA, <sup>2</sup>K.SATHISH, <sup>3</sup>B.SURESH RAM, <sup>4</sup>S.VAMSHI, <sup>5</sup>Y.BHARATH<sup>1</sup>Asst. professor, Dept. of CSE, CMR COLLEGE OF ENGINEERING & TECHNOLOGY<sup>2</sup>Asst. professor, Dept. of MECH, CMR COLLEGE OF ENGINEERING & TECHNOLOGY<sup>3</sup>Assoc. professor, Dept. of ECE, CMR COLLEGE OF ENGINEERING & TECHNOLOGY<sup>4-5</sup>B-TECH, Dept. of CSE, CMR COLLEGE OF ENGINEERING & TECHNOLOGY**Abstract**

Blood is one of the most important necessity of our life the number of blood donors are very less in present days as of blood donation become a complex process consumes time to find some donors who is compatibility of blood group with patient and sometimes we go nearby blood banks for blood but if it is not available then it requires to go to another blood bank as it is difficult for patient that if we may not provide sufficient amount of required blood to patient in right time it may leads to his death. To overcome the problem we developed an android application (blood connect) so as to establish a connection between donor and requestor at any time and any place. In this application donors and requestors registers themselves in the app and entering the basic information like place address after it asks an OTP to verify the mobile number and a required email and password they login in to account and make request to donor and it shows all the donors who are near to us. If the donor is interested, he may accept the request and the requestors even contact the donors for help and they even directly send a message/call to the donors for blood donation by these application we can save the life of people who ever required for blood.

**1. INTRODUCTION**

Blood donation is the process of transferring blood from a healthy person to someone who needs it. It occurs when a person voluntarily has blood drawn and used for the required people. Blood donation is very important health care and blood is a very unique and precious resource because it only can be obtained from blood donors. Donors participate to save many human beings each year, although some still die or suffer because of the lack of access to a safe blood

transfusion (WHO,2010). Blood is the “gift of life” that transfers from a healthy individual to one in actual need of blood. In one hour’s time, from one unit of blood, red blood cells can be extracted for use in trauma or surgical patients. The liquid part of the blood, which called Plasma, is given to patients who have clotting problems. The third component of blood is platelets, which clot the blood when there are cuts and are often used in cancer and transplant patients. Although the number of people who need blood is increasing and the

availability of blood is decreasing their Blood Bank that can manage the blood donation in India. The general idea of the study is to develop a Blood Bank Application is to manage the records of the donors and the people who need blood. Others may need blood because of illnesses such as anemia cancer bleeding disorders, and disorders of the immune system (NIH, 2012). Doctors may give the person whole blood or part of the blood, depending on the person's condition. Some people need different blood of different blood group only if they are anemic or if they lost a lot of blood after having a serious accident. For those who are bleeding too much during surgery, they need plasma, and for those who have cancer or bleeding problem, they need platelets (Kids Health, 2012). The aim of the study is to develop a Blood Bank System to manage the records of the people who need blood they can find the available of blood in nearby location, also can find the appropriate donors who can easily donate blood to them.

## **2. RELATED WORK**

Emergency situations, such as accidents, create an immediate, critical need for specific blood type. In addition to emergency requirements, advances in medicine have increased the need for blood in many ongoing treatments and elective surgeries. Despite increasing

requirements for blood, only about 5% of the Indian population donates blood. In this paper we propose a new and efficient way to overcome such scenarios with our project. We have to create a new idea, just touch the button. Donor will be prompted to enter an individual's details, like name, phone number, and blood type. After that your contact details will appear in alphabetical order on the screen, the urgent time of a blood requirement, you can quickly check for contacts matching a particular or related blood group and reach out to them via Phone Call/SMS through the Blood Bank App. Blood Bank App provides list of donors in your city/area. Use this app in case of emergency. A large number of blood donors are attracted using an Android application. Fire-based services can prove important in emergency blood delivery since they can enable central and immediate access to donors' data and location from anywhere. Since almost everyone carries a mobile phone with them, it ensures instant communication. The location-based app, operational on android platform, will help users easily find donors of matching blood groups in their location and access their mobile numbers for instant help. Only a registered person, with willingness to donate blood. We have proposed an efficient and reliable android blood bank application. The service provided by the

proposed system is needed and valuable to health sector where a quality of blood is considered for the safety of the patient. The donor will get himself registered through these improved system. In case of emergency requirement the blood donor can place a request. The wireless internet technique enables the flow of data to work more rapidly and conveniently. Currently, the public can only know about the blood donation events through conventional media means such as radio, news paper or television advertisements. Even if there is electronic means, it is only used to publicize about that hospital or medical center blood donation drives provided if that hospital or medical center is having an online portal. There is no national wide information regarding the blood donation drive available on any of the portal.

- The current system that is using by the blood bank of most of the government hospital is manual system. With the manual system, there are problems in managing the donor's records. The records of the donor might not be kept safely where there might be missing of donor's records due to human error or disaster such as fire or flood. Besides that, human errors might occur when the staff keeps more than one record for the same donor.

### 3. IMPLEMENTATION

In these blood connect app at first the user has to register by providing his details like

name and address and then he has to verify his mobile no and then by using mail he can login in to app after that based on the requirement of user he can put the request or he accepts the request and even the user can contact the person that who accepts the request and the user can search according to the place where he lives get the information of donors here we use android studio to develop the app and worked with android virtual device to get the app in required form.

**DEFINITION:** The purpose is to meet the challenging requirement of modern day blood to efficiently collect blood during emergency this system presents an alert system to the donor about requirement of their blood to a person need and also provides online status of blood group wise availability of blood.

This project helps in saving many life of people. As of present days blood become most important factor as it became difficult to find the blood and that related blood group of the person due to unavailability of blood group sometimes . It leads to death so as the blood connect app helps in connecting the people who are near to us even we get the in information and address of the person that who want to donate the blood .

Blood connect helps in finding the donors easily and the required people can get the blood easily in required time that helps in

saving the life of many people and it helps the gap between blood banks, hospitals volunteer donors through this system some blood types are rare so the system can find the required donors with required donors with required blood type from a huge database by using the search feature in android app to provide the dynamic database that is storing donors information and can communicate with them easily

Blood is the most important factor in the everybody life blood donation helps in saving many life the main purpose of the blood connect app is to serve the people who were in required of blood to get help them and to get rid of the situation.

#### **Donor:**

The donor needs to register with the application by entering all the details. The donor can get login by entering valid username and password. The donor can search details of the patient and can contact them directly.

#### **Receiver:**

The receiver needs to register first with the app by entering all the details. Receive can get login by entering valid username and password. Receive can search details of the donor and can contact them directly.

#### **SCOPE:**

- o It can be used by all the people who ever in requirement of blood.
- o It can easily track the people and gives the information to user

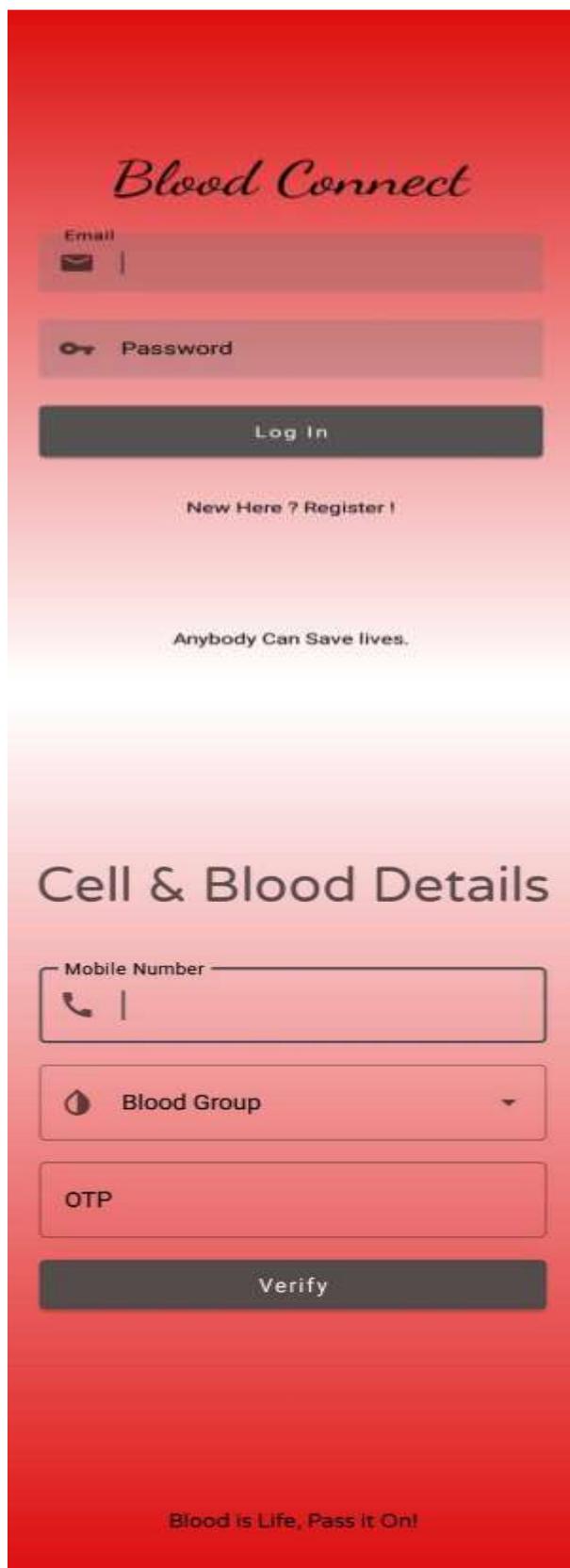
o The project gives all the necessary information about the donors that are needed.

o The analysis such as Frequently requested zone or hospital for Blood, Number of donors, mostly asked Blood Group, Age group of Patients need for blood etc. can be added as additional features.

#### **4. EXPERIMENTAL RESULTS**

Firestore is real time database lets you build rich and collaborative application by allowing secure access to database directly from client side code here data is persisted locally and even offline real time events continue to fire giving the end user a responsive experience so we use the database of the fire base to access the data we add our app product to the fire base we have to connect to the app.





*Blood Connect*

Email

Password

Log In

New Here ? Register !

Anybody Can Save lives.

## Cell & Blood Details

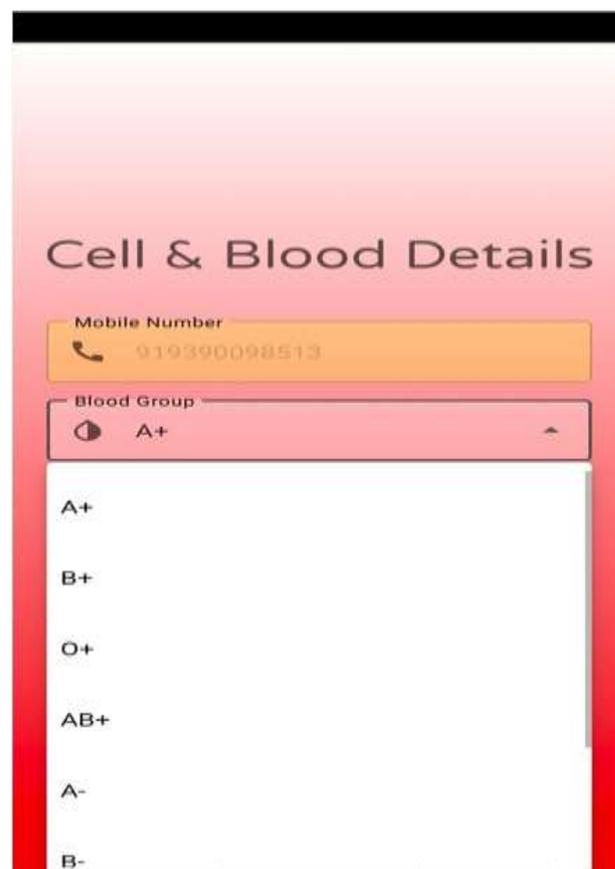
Mobile Number

Blood Group

OTP

Verify

Blood is Life, Pass it On!



## Cell & Blood Details

Mobile Number

Blood Group

- A+
- B+
- O+
- AB+
- A-
- B-

### 5. CONCLUSION

This app helps us to find the blood in difficult situations you can contact the donor in short period of time this the modern way to approach the donors it helps us to find the donor as fast as possible in this manner we have maximum probability of finding the exact blood group needed by patients.

## 6. REFERENCE

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