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# Blood Point

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***Abstract:*** *In many cases when a critical patient needs blood; usually routes with their family, friends, and community. This procedure is considered time consuming and can lead to patient health risks. Although information and technology are available and communication users are available, people find it difficult to find someone who will donate blood. Therefore, the android-based app 'Blood Point' is designed to overcome obstacles in a critical patient, its caregiver and provider. This application allows users to view supplier details and communicate in the event of an emergency. An interested blood donor can apply for the required form. Any regular blood donor can request a blood donor online, by downloading this app. Android Studio is used as a result of real-time app development using java language and firebase website. Blood Point app features such as; text message, email, and direct communication (phone). This app can be upgraded with additional features like in-app chat features, blood donor and Google map provider, and potential donors can view the user-provided functionality and develop compatible iOS.*

***Keywords:*** *- Android Studio, Firebase, Java.*

## I. INTRODUCTION

Blood is an essential part of human life and in many emergencies, it is the blood that is most needed compared to other human tissues. In many cases, when blood is needed during an emergency, those looking for blood donors often pass it on to family, friends, and the community. It is often recognized that hospitals or blood banks and clinics face challenges in providing complementary blood to an emergency patient. The process of finding a blood donor in the current situation is considered time consuming and leads to a health risk for a critical patient. Even on social media, reaching as many people as possible with the right person to donate blood is impossible. Health organizations in India have been actively promoting blood transfusions wherever necessary and organizing blood collection campaigns and other procedures such as donating, authorizing blood transfusions, and reviewing donor details. Despite adequate storage facilities, it is still a challenge to get blood from the donor. If so, there is a solution to the problem of insufficient shares in the blood bank which is the use of a Smartphone application. The Android "Blood Point" app, specially designed to search for blood donors as their desired location and blood type; create a quick channel and use it quickly. In this application, the user will be able to contact the donor in real time and receive the donation after confirming his or her blood type and the required details. Alternatively, hospitals can use this app to search for blood donors and contact blood donors in or near their location based on their location. Registered donors will receive a notification, a call or an email regarding the required blood at a particular clinic where they can donate blood. This app provides blood seekers with the function of requesting, calling, sending a message and email to a blood donor quickly and providing easy surgery to the donor in the event of any changes that need to be made at all times.

## II.LITERATURE REVIEW

Blood transfusions are an important part of health care. It helps to save annual living standards for each program and emergency. In addition, it greatly improves the expectation and excellent health of patients with a number of critical and ongoing conditions. A blood transfusion helps to donate blood. Over the next five to ten years, blood transfusions are very important in dealing with adult depression. In addition, in the case of surgery or medical treatment, medical personnel request that the loved ones donate blood or that the family be required to know about the donor whose blood type is appropriate for the affected person. This emergency raises many difficult situations trying to find sponsors. The new strategies must meet the needs of the community. Android Smartphone blood donation app is a complete android-based blood donation tool that stores the information of blood donor volunteers. In an emergency, the request can send a message to all eligible donors to donate, as well as records from the blood center and clinic. Use cloud hosting infrastructure to store application data anywhere and at all times. And it is a voluntary blood donation as a requesting applicant which is the highest quality of what we have submitted. The applicant can forward the message to registered users with the required emergency blood mark, and the message will be transmitted to all voluntary blood donors. When a volunteer confirms a donation, he is recognized as a donor. Our software supports the collection of blood donations and ensures careful management of emergencies. The software

system allows the applicant to deliver a specific message within the blood donation website and update the recipient who is inclined to donate the requested blood at the same time. We also create app provider profiles to evaluate our applications, update them to help improve timely access to statistics and immediate response to emergencies.

Blood donation to 1% of the population can meet the demand for blood in India. The percentage of voluntary blood donors in India is 80.5%. India has a share of 6.82million. (NACO, 2016). A blood cell can be helpful in finding a stable supply of blood and blood products. The discovery of such blood cells can help to respond better and faster. It can be used to reach donors who have difficulty accessing a suitable blood donation center and who have time constraints.

The seeker will have a list of options and allow the hospital to choose from based on what the patient wants. The app notifies other nearby users of a personal request request or donor request when registering an application. The website was built using firebase to store the history of the provider and the recipient.

## III.EXISTING SYSTEM

The existing system of blood bank and organ system contains a lot of manual labor due to its long-term storage and hardcopy retention. Tracking and maintaining the site has become increasingly difficult as data is stored in person. It was time consuming. Storing large amounts of blood or body parts and daily activities without any computer also poses a challenge. In an existing system, it has a lot of storage loss power. The user, whether donor or seeker, should contact the organization, whenever there are any changes or updates to his or her profile.

## IV.PROPOSED MODEL

This Android app helps to close the gap between the seeker and the provider. An application that supports current and easy-to-use technology. It consumes less time and provides faster results compared to the previous system. Easily download the latest updates and alerts. This system makes overall project management much easier and more flexible. This application was created with the help of Java and a website firewall. The operation of the system will mainly involve the following characters.

1. The seeker / patient.
2. Provider / Ordinary People.

To fix an existing system error, delete processes that cause data duplication, make roaming sequences correct. Provide auditing information at various levels and indicate current work status depending on organization / auditor or date. Creating a strong password system.

**a) Terms:**

- Simplify the process of donating and accepting blood.
- Improving existing system.
- Develop a comprehensive plan.
- For easy access

**b) Width:**

- Make sure all blood transfusions are included
- Include all blood banks in the city.
- Make sure the system is simple and easy to use.

**Performance**

An organ / blood seeker uses the application to make an organ / blood donor proposal application, and the application is distributed to the app to users and blood banks and organs and hospitals. The requester may register as an applicant / provider based on his / her need. Details will be displayed if the organ / blood details are the same as the donor / blood details. If the details are the same, sponsors will find a hospital location for the patient to be kept under an authorized physician.

**Feasibility study**

**Technical Performance**

The technical problem that is often raised during the investigation phase includes

The following:

1. Is the necessary technology available to carry out the proposed project?
2. Does the proposed equipment have the technical ability to capture the data required for use
3. the new system?
4. That the proposed system will provide adequate answers to the questions, regardless of the number
5. or user area?
6. Can the system be improved if it is upgraded?
7. Are there technical guarantees for accuracy, reliability, easy access and data security?

Previously there was no plan to address the requirements of 'Secure Infrastructure Operations System. The current system built is technically feasible. It is a web-based user interface on performance testing in NIC-CSD. So it provides easy access to users. The purpose of a website is to create, create and maintain workflow between different sources businesses to assist

all affected users with their various skills or roles. Permission to users will be provided based on specified categories. Therefore, it provides technology guarantee of accuracy, reliability and safety.

The software and complex requirements for the development of this project are not many are already available in-house at NIC or are available free of charge as an open source. The project work is done with the latest materials and available software technologies. The required bandwidth is available to provide a quick response to users regardless of the number of users using the system.

**Possible Performance**

The proposed projects are beneficial only if they are not converted into the information system. That will meet the operational needs of the organization. Possible functional features of the project should be considered as an integral part of project implementation. Some of Key issues raised to assess the feasibility of the project include the following:

1. Is there adequate management support from users?
2. Will the system be used and operational properly if it is developed and implemented?
3. Will there be any objection from the user that would undermine any potential benefits of the application?

This system is intended to be compatible with the issues listed above. Previously, Management issues and user needs are addressed. There is therefore no question against users who might underestimate the potential benefits of the app. A well-designed design will ensure the proper use of computer resources and can help improve working conditions.

**Economic viability**

The system can be technically developed and the one that will be used once installed should still be a good business investment. In economic practice, the cost of development in creation the system is tested with the final benefit derived from new systems. Finance the benefits should be equal to or exceed the cost.

The system is economically viable. It does not need any additional hardware software. As the interface of this program is developed using existing resources Technology is available at NIC, There are general costs and economic feasibility certain.

## V.FUTURE SCOPE

Some of the future plans that can be made for this program are:

● Provide a convenient location for nearby blood donors, hospitals, and blood banks anywhere and anytime so that they can communicate easily.

● Provide this system with GPS, which can help blood seekers to search for hospitals, blood donors, and blood banks near the place where the blood request is made so as to avoid wasting their time.

## VI.CONCLUSION

The proposed app provides an Android-based application that is very useful for Emergency Services i.e., during blood donation, implantation, etc. this method offers a very powerful thank you for contacting blood donors. This program provides powerful information on touching blood banks. It is also good to keep records such as stock, blood requirements, etc. It is easy to keep records on the Registered Provider Website. It also provides us with information about the latest technologies used in building an android-based system.

BBMS is a management system designed to manage blood banking at HSNZ. BBMS is designed to meet the needs of HSNZ users. This is to ensure that blood stock management is efficient, systematic and meets the needs of users.. In the next section we will upgrade to the mobile version of BBMS modified based on Android OS. The modified version will include the health profile history you are monitoring.

Donating blood is a form of community responsibility where a person can voluntarily donate blood through our program. This program ensures the protection of the recipient and the privacy of the donor using the J48 decision tree algorithm used in WEKA. The authorized user will look for a few blood donors in his or her area, and send, message, and call them. In addition, we checked our stadium with a few people. Applications with a better solution remove the obstacle to supplying current blood. This app is mind-built and seeks to ensure that the donor donates blood to the community. This model has been simplified so that anyone can download and maintain their account.

The Blood Point will break the blood business chain and help the poor find a free donor. This project will help new blood banks to improve their services and improve from standard to easy-to-use components.

A total of 982 different respondents worldwide of different age groups and previous supplier information were assessed. Among respondents, 87.3% were able to access smart phones. E-mail is selected at 62.1% as the current preferred method when contacted by the blood center, followed by messages (10.1%). The app features that most respondents desired were the ability to request appointments 24/7 (76.8%) and to accept appointments immediately (81.3%). Many were concerned about receiving too many warnings or messages (64.1%) or inadequate protection of personal information (53.5%). Overall, 67.7% of respondents indicated that they may have used a mobile blood donation app. Opportunities did not vary significantly by gender or nationality, and the impact of the level of education was limited. Donors currently making donations over the phone or website can use such an app. However, donors older than 45 are less likely to have smaller donors ($p = 0.001$), and donors with more than five lifetime contributions are more likely to have regular donors using such an application ($p = 0.02$).

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