

## **IDEATION PHASE**

### **LITERATURE SURVEY**

#### **1.INSTANT PLASMA DONOR RECIPIENT CONNECTOR ANDROID APP**

**AUTHOR:** Kalpana Devi Guntoju, Tejaswini Jalli, Sreeja Uppala, Sanjay Malliseti.

**YEAR:**2022

This plasma therapy is an experimental approach to treat corona-positive patients and help them recover. This plasma therapy is considered to be safe & promising. A person who has recovered from Covid can donate his/her plasma to a person who is infected with the coronavirus. This system proposed here aims at connecting the donors & the patients by an online application. By using this application, the users can either raise a request for plasma donation or requirement. This system is used if anyone needs a Plasma Donor. This system comprises of Admin and User where both can request for a Plasma. In this system there is something called an active user, which means the user is an Active member of the App and has recovered from Covid 19, only such people are recommended here for Plasma Donation. Both parties can Accept or Reject the request. User has to Upload a Covid Negative report to be able to Donate Plasma.

#### **2. BLOOD BANK MANAGEMENT SYSTEM**

**AUTHOR:** Prof. Diksha Bhave, Shweta Badhe, Siddhi Jain, Aaditya Kasibhotla

**YEAR:**2019

Blood is present in every human but sometimes they need it from outer sources and if they don't get that in time then it may cost a life. To overcome this problem blood bank management systems are introduced. These systems store data of blood donors and as well as blood stored different blood banks and hospitals. So that whenever blood is required they can get access to blood easily. In blood bank management systems there is a database which have all information of blood donors and blood banks so whenever any receiver wants blood then the system checks all compatible blood availability in the database and works according to that. This is a example of a normal blood bank management system. This just shows working of a normal system but many researchers made many advancement in their own systems to make this process more easy and more efficient.

### **3. IMPLEMENTATION OF BLOOD DONATION APPLICATION USING ANDROID SMARTPHONE**

**AUTHOR:** Ms. Pradnya Jagtap, Ms. Monika Mandale, Ms. Prachi Mhaske, Ms. Sonali Vidhate, Mr. S. S. Patil

**YEAR:** 2018

Blood Donation System is an android based system that is designed to store, process, retrieve and analyze information concerned with the administrative and inventory management within a blood bank. This project aims at maintaining all the information pertaining to blood donors, different blood groups available in each blood bank and helps them to manage in a better way. Aim is to provide transparency in this field, make the process of obtaining blood from a blood bank hassle free and corruption free and make the system of blood bank management effective document is a template.

The sole purpose of this project is to develop a computer system that will link all donors, control a blood transfusion service and create a database to hold data on stocks of blood in each area. Furthermore, people will be able to see which patients need blood supplies via the android application

### **4. A GEO-LOCATION BASED MOBILE SERVICE THAT DYNAMICALLY LOCATES AND NOTIFIES THE NEAREST BLOOD DONORS FOR BLOOD DONATION DURING MEDICAL EMERGENCIES**

**AUTHOR:** Saurin Parikh, Preeti Kathiria, Yashesh Vaghela, Harit Shah, Darshan Dholakiya

**YEAR:** 2014

The proposed system helps a patient's relative or hospital's officer to locate nearby volunteers and forward the request for help. The person has to just enter the type of blood group needed in the Citizen's mobile application (CMA) and the system will find the nearest volunteers having the specified blood group and sends the notifications to the Volunteers' Mobile application (VMA); notifying the need of blood donation. The System sends notification to only nearest volunteers by SMS. The volunteer's acknowledgement for the help request is informed to the requestor. The periodic geo-location updates of the volunteer's mobile device; helps the system to find the nearest volunteers at the time of need. The system comprises of client and server application wherein client includes applications like Citizen Mobile Application (CMA), Volunteer Mobile Application and web client. The VMA is responsible to send Location updates of the Volunteer, it fetches the distress call from control server; on arrival of distress call SMS, it sends help confirmation notifications to the control server. The CMA is used by the

citizens to send distress call for blood requirement and receives confirmations. The control server records the last geographic location of the volunteer, receives distress calls, searches nearest blood donors and forwards help handling confirmation.

## **5. ENHANCED MOBILE APPLICATION DEVELOPMENT FOR PLASMA, MOTHER'S MILK AND BLOOD BANKS**

**AUTHOR:** Dr. S. Brindha, Ms. D. Priya, Mr. S. Ajith Kannan, Mr.D. Joyal Victor,Mr. R.Gunachandran

**YEAR:**2021

Though there are many android applications available for blood donation and blood bank management, they have not included any provision for Plasma donation. The existing system for Mother's milk donation is only based on What's app. These groups are limited to 100 members only. It is very difficult for the coordinator to add or remove users of various groups and manage other resources. Thus, this system suffers scalability and security issues. Hence, we propose an enhanced mobile application for Plasma, Mother's milk and Blood banks to administrate their users and resources easily and enhance security for information stored on the databases.

## **6. NEAREST BLOOD & PLASMA DONOR FINDING: A MACHINE LEARNING APPROACH**

**AUTHOR:** Nayan Das, MD Asif Iqbal

**YEAR:**2020

Many organizations help blood donors donate blood and plasma via many applications and online social groups. But this application and online social groups remain analog, and we need the quickest solution in this regard. In regular blood donation applications and social groups, people share their needs for blood and get some information lately that can be less useful in an emergency condition. To build a platform between blood donor and receiver.

To implement a hybrid approach of K-Means and Ag-glomerative clustering algorithm. To find the nearest blood donor in a specific region in the shortest possible time. Different methods have been used to solve this problem. This time, we have tried another way, a clustering approach, to solve the problem by grouping every user into small groups. This unsupervised machine learning approach is much faster and effective.

## **7. BLOODR: BLOOD DONOR AND REQUESTER MOBILE APPLICATION**

**AUTHOR:** Vamsi Krishna Tatikonda, Hosam El-Ocla

**YEAR:**2017

BLOODR application provides a reliable platform to connect local blood donors with patients. BLOODR creates a communication channel through authenticated clinics whenever a patient needs blood donation. It is a useful tool to find compatible blood donors who can receive blood request posts in their local area. Clinics can use this web application to maintain the blood donation activity. We show screenshots for the BLOODR application for different types of users including requester, donor, and administrator. Various features of the application are described and their needs of use are analyzed. If a patient needs a blood at a clinic, blood donors in vicinity can be contacted through using a clinic management service provided in this application. Registered donors will get notification for the blood requests only if their blood group is compatible with the requested blood type and in the same city/region. Then matching blood donors can go to the requesting clinic and donate.

## **8. A WEB-BASED BLOOD DONATION AND MEDICAL MONITORING SYSTEM INTEGRATING CLOUD SERVICES AND MOBILE APPLICATION**

**AUTHOR:** Moh. Nabil, R. Ihab, H. El Masry, S. Said

**YEAR:**2020

A Web-Based Blood Donation and medical monitoring system was proposed based on cloud and mobile platforms. The proposed mobile platform utilizes a smart phone android application to allow users to access system functionality easily. The proposed system facilitates communication between patients, blood donors, medical experts and blood banks to ease process of medical observation and blood donation. The proposed system also has a database which saves blood donors, patients and blood banks information. The system developed was hosted on cloud utilizing various cloud hosting features such as high reliability, availability, scalability and data security. It integrates the electronic medical records and blood information scattered among different blood banks to improve blood donation service quality. This paper was also concerned with system performance measures and ability of developed system to serve multiple users at the same time using various performance measurement tools. The developed system builds on current existing system by utilizing cloud hosting features, system performance improvements and providing users with various statistics. The proposed system solved many of challenges faced by previous models, providing fast and good utilization of donation quality of service. The developed system can be improved by using user's current location to show patients nearest medical center or blood banks in case of emergency

## REFERENCES:

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