# 

# LITERATURE SURVEY OF PLASMA DONOR APPLICATION

**Team Leader:**

Manjula G

**Team Members:**

Padma priya C

Sanghavi G

Snekha B

**Paper Title:** Real-time cloud system for managing blood units and

convalescent plasma for COVID-19 patients

**Author(s):** Dhuha Basheer Abdullah, Mohammed Dherar Younus

**Published on:** 2021

# Abstract:

In health care systems, blood management services are essential to saving lives. In such systems, when a unit of blood is required, if the system is not able to provide it on time, sometimes this may lead to patient death, especially in critical cases. Unfortunately, even if the required blood unit is available within the system, contradictions may occur and the required blood unit may not be allocated to critical cases on time, due to the allocation of these units to lower priority cases or due to the isolated operate of blood banks within these systems. So, to overcome these obstacles, we proposed a real-time system on a cloud, to managing blood units within the whole health care system. This system will allocate blood units depends on the deadline and the severity of the case that needs blood, in addition to the types, quantities, and position of available blood units. Where, this system eliminated the need for human intervention in managing blood units, in addition to offering the ability to easily develop the system to deal with new urgent requirements, which need new methods of managing blood units; as is happening today with the COVID-19 epidemic. This system increases the performance, transparency, reliability, and accuracy of blood unit management operations while reducing the required cost and effort.

**Paper Title:** A Framework For A Smart Social blood donation System Based on Mobile Cloud computing

**Author(s):** Almetwally M. Mostafa, Ahmed E. Youssef , GamalAlshorbagy

**Published on:** 2014

**Abstract:**

Blood Donation and Blood Transfusion Services (BTS) are crucial for saving people’s lives. Recently, worldwide efforts have been undertaken to utilize social media and smartphone applications to make the blood donation process more convenient, offer additional services, and create communities around blood donation centers. Blood banks suffer frequent shortage of blood; hence, advertisements are frequently seen on social networks urging healthy individuals to donate blood for patients who urgently require blood transfusion. The blood donation process usually consumes a lot of time and effort from both donors and medical staff since there is no concrete information system that allows donors and blood donation centers communicate efficiently and coordinate with each other to minimize time and effort required for blood donation process. Moreover, most blood banks work in isolation and are not integrated with other blood donation centers and health organizations which affect the blood donation and blood transfusion services’ quality. This work aims at developing a Blood Donation System (BDS) based on the cutting-edge information technologies of cloud computing and mobile computing. The proposed system facilitates communication between blood donorsand blood donation centers and integrates the blood information

dispersed among different blood donation centers and health organizations across a country. Stakeholders will be able to use the BDS as an application installed on their smartphones to help them complete the blood donation process with minimal effort and time. This application helps people receive notifications on urgent blood donation calls, know their eligibility to give blood, search for the nearest blood center, and reserve a convenient appointment using temporal and/or spatial information. It also helps establish a blood donation community through social networks such as Facebook and Twitter

**Paper Title:** Lifesaver E-Blood Donation App Using Cloud

**Author(s):** Rishab Chakrabarti, Asha Darade , Neha Jadhav ,

Prof. S.M. Chitalkar

**Published on:** 2022

# Abstract:

E-health provides a new method for using health resources. In proposed system the aim is to provide a direct call routing technique using Asterisk hardware. A blood bank database is created by collection of details from various sources like Blood banks, NSS, NGO's, hospitals and through web interface. The data collected will be maintained in a central server. This central server will be associated with a Toll-free number that can be used to connect to it. An algorithm will be defined based on the various parameters that need to be accounted for, before blood transfer is done. The willingness of donor and the closeness of the donor to the place from where the call is coming are also accounted for in defining this algorithm. Based on the algorithm the most eligible donor is found out. From the server the call from the required person is routed to the eligible donor's number. All information about the donors and blood bank is stored on the cloud. As per blood requirement, user can quickly get notification from blood bank within the radius of 5-10km. If requested blood group is available in the blood bank then it will send positive reply message to the users. If requested stock is not available in the blood bank then blood bank send notification to all donors. If anyone is able to donate then he will reply to blood bank. This is how the proposed system will work.

# Paper Title: A Secure Cloud Computing Based Framework for the Blood bank

# Author(s): Shreyas Anil Chaudhari, Shrutika Subhash Walekar , Khushboo Ashok Ruparel , Vrushali Milind Pandagale

# Published on: 2018

# Abstract:

A blood Bank can be defined as a bank or storage place where blood is collected, preserved and used whenever needed or demanded. Everyone is aware that the traditional blood bank management system includes paperwork. Its way of working is not efficient enough at the time of emergency situations. The main aim of creating cloud-based blood bank system is to make the blood available on time to the people, even in emergency situations. With the help of this project, the user can be able to view information about every entity related to blood bank i.e. hospitals, donors, a location of another blood bank etc. The security factor is maintained properly. Every time the new user accesses the system as a donor, he/she has to register himself/herself and provide a proof of their identity like license or government document on which the blood group of the person is mentioned. This project will consist of the android application which can be used in the smart phones; it will contain all the information of the donor and nearby hospitals. The application will also contain a GPS (Global Positioning System) system to track the location of the nearby blood banks or hospitals. Every registered user will get the notification regarding health checkup drives, blood donation camps in particular area etc. As the person did not need to go out far, for the search of the blood banks and hospitals, this application helps to save the time to a great extent. This also helps in correct and quick decision making.

**Paper Title:** Cloud based online Blood Bank System using Android Mobile Application

**Author(s):** Kishoree Borse, Dipti Jadhav, Nita Asawale, Vinayak Chintalwar Prof. Pranav Shiram

**Published on:** 2017

# Abstract:

Blood is an important constituent of human body. Timely availability of quality blood is a crucial requirement for sustaining the healthcare services. In the hospital, in most of the cases, when blood is required, could not be provided on time causing unpleasant things. Though donor is available in the hospital, patient is unaware of it, and so is donor. To resolve this, a communication between hospital, blood bank, donor, and receptor is important. The proposed system provides solution to this problem. The system will make sure that in case of need, the blood will be made available to the patient. There will be web portal as well as android app to make this communication faster. It aims to create an e-Information about the donor and organization that are related to donating the blood. The Methodology used to build this system uses GPS. The Proposed system will be used in Blood banks, Hospitals, for Donors and Requesters whoever registers to the system