LITERATURE SURVEY

1.1 TITLE - MANAGEMENT OF BLOOD DONATION APPLICATION SYSTEM

AUTHOR- Ms.Seda Bas,Ms. Giuliana Carello ,Ms.Ettore Lanzarone ,Ms. Zeynep ocak ,Mr. Semih yalcndag.

DESCRIPTION :

Applying optimization methods to healthcare management and logistics is a developing research area with numerous studies. Specifically, facility location, staff rostering, patient allocation, and medical supply transportation are the main themes analysed. Optimization approaches have been developed for several healthcare related problems, ranging from the resource management in hospitals to the delivery of care services in a territory. However, optimization approaches can also improve other services in the health system that have been only marginally addressed, yet. One of them is the Blood Donation (BD) system, aiming at providing an adequate supply of blood to Transfusion Centres (TCs) and hospitals. Blood is necessary for several treatments and surgeries, and still a limited resource. The need for blood is about ten million units per year in the USA, 2.1in Italy and 2 in Turkey; moreover, people still die in some countries because of inadequate supply of blood products (World Health Organization 2014). Hence, BD plays a fundamental role in healthcare systems, aiming at guaranteeing an adequate blood availability to meet the demand and save lives.

1.2 TITLE- Developing a plasma donor application

AUTHOR- Ms. Aishwarya R Gowri

DESCRIPTION :

A plasma is a liquid portion of the blood, over 55% of human blood is plasma. Plasma is used to treat various infectious diseases and it is one of the oldest methods known as plasma therapy. Plasma therapy is a process where blood is donated by recovered patients in order to establish antibodies that fights the

infection. In this project plasma donor application is being developed by using AWS services. The services used are AWS Lambda, API gateway, DynamoDB, AWS Elastic Compute Cloud with the help of these AWS services, it eliminates the need of configuring the servers and reduces the infrastructural costs associated with it and helps to achieve serverless computing. For instance, during COVID 19 crisis the requirement for plasma increased drastically as there were no vaccination found in order to treat the infected patients, with plasma therapy the recovery rates where high but the donor count was very low and in such situations it was very important to get the information about the plasma donors. Saving the donor information and notifying about the current donors would be a helping hand as it can save time and help the users to track down the necessary information about the donors.

1.3 TITLE- A Smart Application on Cloud Based Blood Bank

AUTHOR- Ms. Bidisha Pyne, Swarnendu Kundu, Siva Shanmuga and N. Ch. S. N. Iyengar.

DESCRIPTION :

Blood donation is considered as the noble help toward mankind yet the major challenge is to find the exact blood group at the required time. This application mainly aims to solve this problem by tracking these donors with the help of cloud. The system is designed such that any person willing and eligible to donate blood or even any other organ has to register via this application. All this donor information is kept safely in the cloud. The admin can validate or update this information accordingly in the cloud and even sends an alert to the donors in case the matched donor is found. The use of cloud makes this system much better than other e-blood bank, not only it store data in a cost effective way but it also seamless access to this electronic records of donors and patient makes the system more transparent. All these advantages of cloud make this project all the more important than any other e-blood bank system.

1.4 **TITLE**- Determinants of plasma donation

AUTHOR- Ms. Antoine Beurel, Bruno Danic , Florence Terrade, Lebaudy.

DESCRIPTION :

The major contribution of Human Sciences in the understanding of the whole blood donation behavior has been through the study of individuals' motivations and deterrents to donate. However, if whole blood donation has been very widely studied in the last sixty years, we still know very little about plasma donation in voluntary non-remunerated environments. Yet, the need for plasma-derived products has been strongly increasing for some years, and blood collection agencies have to adapt if they want to meet this demand. This article aims to review the main motivations and deterrents to whole blood donation, and to compare them with those that we already know concerning plasma donation. Current evidence shows similarities between both behaviors, but also differences that indicate a need for further research regarding plasma donation.

1.5 TITLE- Blood Bank Management System using Android App

AUTHOR- Ma.Emir ,Aidan ,Michella,Ms.Swapna

DESCRIPTION :

Blood is one of the most important for our body. There is an expectation that the blood will always be there when it is really needed. We proposed a technique of Blood Bank system using Android application in which blood donor and blood bank and blood donation event data will be managed online. In this application the administrator added the whole information about blood bank related to donor and stock of blood. Also user can quickly check for blood banks of nearby area in emergency situation. The main aim of our project is to bring blood bank, voluntary blood donors and those in need of blood on to a common platform. A blood bank database is created by collection of detail through app. If donor is willing to blood, he can easily find out registered blood bank through our app. Also using app user will get information of blood donation event organized by blood bank. The objective of our project is to reduce manual work of blood bank and

give user information about nearest blood bank and available stock of blood to handle emergency situation.

1.6 TITLE- Instant Plasma Doner Recipient Connector Android App

AUTHOR- Vaibhav Thakare1 , Amol Vishe2 , Kunal Shete3Prof. Ankit Sanghavi4

DESCRIPTION :

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.