PLASMA DONOR APPLICATION

Project Title: Plasma donor Application

Domain: Cloud Application Development

Team ID: PNT2022TMID26437

Team Members:

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Introduction :

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. Only a small percentage of persons in the United States who are eligible to donate blood or source plasma do so. What matters is that we encourage all kinds of donation from people who are qualified so that they can provide life-saving blood and plasma to those in need. Plasma donation necessitates a time commitment for each donation as well as a frequency commitment. Donating source plasma typically takes between one and three hours, and plasma can be donated twice in seven days. Donating whole blood takes less time—under 30 minutes—and donors donate less frequently—no more than once every eight weeks. The programs may fit into a donor's life differently at different stages in the donor's life, but they are all equally crucial in assisting in the fulfillment of a vital medical need.

Existing System :

The traditional methods of finding plasma, one has to find out for oneself by looking at hospital records and contacting donors have been recovered, sometimes may not be available at home and move to other places. In this type of scenario, the health of those who are sick becomes disastrous. Therefore, it is not considered a rapid process to find plasma. The main purpose of the proposed system, the donor who wants to donate plasma can simply upload their covid19 traced certificate and can donate the plasma to the blood bank, the blood bank can apply for the donor and once the donor has accepted the request, the blood bank can add the units they need and the hospital can also send the request to the blood bank that urgently needs the plasma for the patient and can take the plasma from the blood bank

The world is suffering from the COVID 19 crisis and no vaccine has been found yet.. But there is another scientific way in which we can help reduce mortality or help people affected by COVID19 by donating plasma from recovered patients. In the absence of an approved antiviral treatment plan for a fatal COVID19 infection, plasma therapy is an experimental approach to treat COVID19-positive patients and help them faster recovery. Therapy is considered competent. In the recommendation system, the donor who wants to donate plasma can donate by uploading their COVID19 certificate and the blood bank can see the donors who have uploaded the certificate and they can make a request to the donor and the hospital can register/login and search for the necessary things. plasma from a blood bank and they can request a blood bank and obtain plasma from the blood bank. The main goal of the project is to design a user-friendly web application that is like a scientific vehicle from which can help reduce mortality or help those affected by COVID19 by donating plasma from patients who have recovered without approved antiretroviral therapy planning for a deadly COVID19 infection, plasma therapy is an experimental approach to treat those COVID-positive patients and help them recover faster. Therapy, which is considered reliable and safe.

If a particular person has fully recovered from COVID19, they are eligible to donate their plasma. As we all know, the traditional methods of finding plasma, one has to find out for oneself by looking at hospital records and contacting donors have been recovered, sometimes may not be available at home and move to other places. In this type of scenario, the health of those who are sick

becomes disastrous. Therefore, it is not considered a rapid process to find plasma. The main purpose of the proposed system, the donor who wants to donate plasma can simply upload their covid-19 traced certificate and can donate the plasma to the blood bank, the blood bank can apply for the donor and once the donor has accepted the request, the blood bank can add the units they need and the hospital can also send the request to the blood bank that urgently needs the plasma for the patient and can take the plasma from the blood bank.

Rishab Chakrabarti , Prof. S. M. Chitalkar:

"Lifesaver E-Blood Donation App Using Cloud", 2020: Reduction in the errors of blood bank using most eligible donor method. Direct Communication Between donor and the person in need of blood During the Emergency situation. However, this paper has the drawback that the user-provided information is still unconfirmed.

A.Meiyappan, K. Loga Vignesh, R. Prasanna, T. Sakthivel-

"D'WORLD: Blood Donation App Using Android", 2019: When the giver gives the blood, it will naturally evacuate the contributor detail for next three months. It additionally confirms with the Department of Health and Welfare to guarantee the benefactor medical case history. However, this has the drawback that in order to utilize this program, the user must have a device running the Android operating system and a live internet connection.

P. C. P. C. A. V. I. M. Yan –

"Building a chatbot with serverless computing" IBM Watson research center, 2016: Author conducted a survey of existing serverless platform in this paper from source projects, industry, academia, use cases, and key characteristics and has described the challenges and the open problems associated with it. Authors work presented a hands-on experience of serverless technologies using different services from different cloud provides such as Amazon, Google, IBM, Microsoft Azure.

Sultan Turhan –

"An Android Application for Volunteer Blood Donors", 2015: This application helps health care centers to provide the blood as quick as possible when their stocks are insufficient. The application sends periodically actual location information of available donors to main system and the blood requests to the

donors. However, this has the drawback that, in the event that blood supplies are inadequate, the only source of blood supply will be the voluntary blood donations made by visitors to the health center.

Catassi, C. A., Petersen, E. L –

"The Blood Inventory Control System Helping Blood Bank Management Through Computerized Inventory Control", Transfusion, Vol. 7, No. 60, 196: In this article, Catassi and Petersen described computerized blood bank inventory. The purpose is to control the distribution of blood bank and hospital. It is possible to monitor daily blood status.