LITERATURE SURVEY

DOMAIN: Cloud Application Development

PROJECT: Plasma Donor Application

TEAM LEAD: Ramya N

TEAM MEMBERS: Nandhini L, Sharath Kumar R, Sarika P.

ABSTRACT:

During the COVID19 crisis, the requirement for plasma became high and the donor count became very less. Plasma donation is one of the scientific ways in which we can help reduce mortality or help people affected by COVID19 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 recover faster. 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.

INTRODUCTION:

The main goal of our project is to design a user-friendly web application that is like a scientific vehicle from which we 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 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.

LITERATURE SURVEY:

Several experiments have been carried out over the years by different groups of researchers. Here are some of the following groups:

- 1.Denuis O'Neil (1999). "Blood component" Archived from the original on June 5, 2013. Normally, a certain amount of human body weight comes from blood. For adults, it is 4-6 litres of blood. This essential liquid plays an important role in transporting oxygen and nutrients to cells and removing carbon dioxide, ammonia and other waste products. Blood is a very common tissue composed of over 4000 different types of components.
- 2. Ways to keep your plasma healthy, Original Archived November 1, 2013, Accessed November 11, 2011. Plasma donation is one of the most accepted practices for saving lives, While earning a few dollars. The whole process can take some time, but it's well worth it once you experience it a few times. Accepting money in exchange for plasma is welcome. It's a move when you feel like you're not just a hero, but you're adding value to yourself. The term "healthy" does not mean only in the absence of disease. It also means that you are healthy enough.
- **3.** Ripathis S, Kumar V, Prabhakar A, Joshi S, Agarwal A (2015). "Microscale Passive Plasma Separation: A Review of Design Principles and Microdevices," J. Micromech Micro 25 (8): 083001; Plasma separation is of great importance in the fields of diagnosis and healthcare. Due to the lagging transition to microscale, these recent trends are a rapid shift towards shrinking complex macro processes.
- **4.**Kalpana DeviGuntoju, Tejaswini Jalli, Sreeja Uppala, Sanjay Mallisettiinstant plasma donor recipient connector web application 2022. **JOURNAL:** International Research Journal of Modernization in Engineering Technology and Science.

5.M Sai Tarun, Ravi Kishan,Shaik AzaadSuraz Basha,Shaik RajAhammad, UChandrasekhar,Neha BaggaBlood BankManagement System2021. Journal of Emerging Technologies and Innovative Research.

6.Nayan Das, MDAsif Iqbal Nearest Blood Plasma Donor Finding: A Machine Learning Approach 2020 23rd International Conference on Computer and Information Technology.

7.Ms. PradnyaJagtap,Ms.MonikaMandale,Ms.Prachi Mhaske,Ms.SonaliVidhate,Mr. S.S. Patil Implementation of blood donation application using android smartphone 2018 Open access International journal of science & engineering.

CONCLUSION:

Plasma is a liquid portion of blood; it is a mixture of water, proteins and salts. Antibodies are proteins made by the body in response to an infection. People fully rescued from COVID19 are encouraged to donate plasma, which can help to increase the lifespan of other patients because their plasma contains antigens which helps the affected person to recover faster. These immunoglobulin give your immune system a way to fight the virus when you are sick, so your plasma can be used to help others fight off illness. Individuals must fully resolve symptoms for at least 14 days prior are eligible to donate. Thus, this application will act as a connecting bridge between donor and recipient.