PLASMA DONOR APPLICATION

Literature Survey

| S NO | TITLE | Authors | Abstract | Drawbacks |
|---------|--|---|--|--|
| 1 | Instant Plasma Donor Recipient Connector Web Application | Ripathi S Kumar V Prabhakar A | One way in which we can help the COVID 19 affected people is by donating Plasma from recovered patients. With no approved antiviral treatment plan for the deadly COVID-19 infection, plasma therapy is an experimental approach to treat COVID positive patients and help them recover faster. The therapy considered to be safe and promising. If a particular person is fully recovered from COVID 19 he/she is applicable to donate their plasma. In the proposed system, donors who need to donate plasma can donate by uploading covid-19 certificate and blood bank can view donors and can raise requests to donors and the hospital can register/login and can search for plasma, they can raise requests to blood bank and can get the plasma. | Tedious work. Expensive. Requires more man power. Time Consuming. |
| 2 | Plasma Donation Website using MERN stack | Neha Soni , Software Engineering Intern at FICO Technical Blogger | The person who wants to donate his/her plasma needs to register in our application providing required information which are name, age, blood group, phone number, and location, etc. Patients who need plasma can also fill the form to request the plasma. | • Internet: It would require an internet connection for the working of the website. Auto- Verification: It cannot |

| | | | Detients can dimently call the device | automatically |
|---|-------------------|----------------|---------------------------------------|------------------|
| | | | Patients can directly call the donor | automatically |
| | | | by taking his/her contact number | verify the |
| | | | from the application. The user can | genuine users. |
| | | | also view the total active cases, | |
| | | | recovered cases, vaccine centres in | |
| | | | their area, hospital location, and | |
| | | | helpline number. | |
| 3 | Developing a | Aishwarya R | A plasma is a liquid portion of the | • It cannot auto |
| | plasma donor | Gowri | blood, over 55% of human blood is | verify use: |
| | application using | | plasma. Plasma is used to treat | genuineness. |
| | Function-as-a- | | various infectious diseases and it is | • It requires ar |
| | service in AWS | | one of the oldest methods known as | active interne |
| | | | plasma therapy. Plasma therapy is a | connection. |
| | | | 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. | |
| | | | Situations like if the donor count is | |
| | | | very low, it is 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. | |
| 4 | Plasma Donation | Jenny Shersten | Motivation for further plasma | • Internet |
| ľ | | Johny Bhersten | collection from donors for | Connection is |
| | App | | | |
| | | | <u> </u> | mandatory |
| | | | communication with | • Reports are no |
| | | | them. For both groups - always up- | verified |

| | | | to-date information and the ability to follow statistics and data in the city and in the country | |
|---|--|--|---|---|
| 5 | Plasma-Donor-App | Dheeraj Kotwani Pragathi Verma Sitam Sardar Vatsal Kesarwani Nakul Sharma Nuh Koca Harsh Rajgor | An Open-Source App which fills the gap between the patients and the Plasma Donors. | No search filter available Cannot login through Chrome |
| 6 | Blood bag: A web application to manage all blood donation and transfusion processes. | Ali, R. S., Hafez T. F., Ali, A. B. Abd-Alsabour, N. | This aims to help users fulfill their needs for a safe and reliable blood group by searching for and locating a specific blood group and plasma donor. The paper illustrates the . Hence, we proposed the Blood Bag web-based application that is connected to a centralized database using SQL to gather and organize the data from all blood banks and blood donation campaigns. The proposed application organizes and controls the whole critical processes related to blood donation, testing and storage of blood bags, and delivering it to the patient. The application is developed using C#. | Major UI Improvements Uses Donation Camps and is not instant access |
| 7 | Nearest Blood & Plasma Donor Finding: A Machine Learning Approach | Nayan Das, MD. Asif Iqbal | This paper details the dangers of not finding a suitable donor and the impact such a reliable can create. The purpose is to build a platform with clustering algorithms which will jointly help to provide the quickest solution to find blood or plasma donor. The paper uses Machine learning techniques and makes use of existing API's for faster data retrieval. Closest blood or plasma donors of the same group in a particular area can be explored within less time and efficiently | High Computational Requirements Depends on API's for database updation |