

## **Literature Survey**

**Project Domain: Cloud Application Development**

**Project Name: Plasma Donor Application**

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### **Abstract:-**

Plasma is required for the treatment of people who are affected by Covid-19. Due to this issue, the number of plasma donors decreased as the need for plasma increased. Our plasma donor application's goal is to raise public knowledge of the advantages of plasma donation and to encourage people to donate plasma to approved plasma donor centers or hospitals where it is required. Secondly, we have a function that allows university or high school organizations that plan plasma donation camps to register for our application. We will provide them with direction and support so they may effectively plan camps and donate plasma to hospitals that need it for the patient.

### **Introduction:-**

Our plasma donation application aim is to raise public knowledge of the advantages of plasma donation and to encourage people to donate plasma to approved donor centers or hospitals where it is required. We have an admin who will be managing hospital / plasma donor centers details and plasma donors details and authorize them. The users registered in our application will be notified when there is a requirement of plasma in hospitals and guide the donor to the respective hospitals / plasma donor centers. So, that waiting time for the patients to get plasma gets reduced and can save the lives of the patients suffering from various diseases. We also initiated a program to support and guide students and various organizations, who are interested in organizing plasma donation camps and bringing awareness among the public can register in our application and we guide them to donate it to authorized hospitals and plasma donation centers.

## Literature Surveys:-

We have referred from researchers who have previously researched on this topic and literature surveys are,

1. <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1423-0410.2010.01360.x>
2. R. Kumar, R. Kumar and M. Tyagi, "Web Based Online Blood Donation System," 2021 3rd International Conference on Advances in Computing, Communication Control and Networking (ICAC3N), 2021, pp. 1630-1632, doi: 10.1109/ICAC3N53548.2021.9725558.
3. P. U. Pratyusha, K. Chaitanya, A. Saranam, K. Manideep and S. Kranthi, "Smart Intelligent Web based Online Blood Donation System," 2021 2nd International Conference on Smart Electronics and Communication (ICOSEC), 2021, pp. 1813-1819, doi: 10.1109/ICOSEC51865.2021.9591811.
4. M. Kaur et al., "A Web-based Blood Bank System for Managing Records of Donors and Receipts," 2022 International Conference on Computational Intelligence and Sustainable Engineering Solutions (CISES), 2022, pp. 459-464, doi: 10.1109/CISES54857.2022.9844389.
5. G. Dudani, Tanushree, K. Singh and A. Singh Chauhan, "A Systematic Review & Design of Web-Based Blood Management System," 2021 3rd International Conference on Advances in Computing, Communication Control and Networking (ICAC3N), 2021, pp. 1896-1900, doi: 10.1109/ICAC3N53548.2021.9725479.
6. R. S. Ali, T. F. Hafez, A. B. Ali and N. Abd-Elasabour, "Blood bag: A web application to manage all blood donation and transfusion processes," 2017 International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET), 2017, pp. 2125-2130, doi: 10.1109/WiSPNET.2017.8300136.
7. E. H. Kaplan, "Evaluating plasma holds in the presence of multiple infections," in Mathematical Medicine and Biology: A Journal of the IMA, vol. 18, no. 3, pp. 215-224, Sept. 2001, doi: 10.1093/imammb/18.3.215.
8. M. Arif, S. Sreevas, K. Nafseer and R. Rahul, "Automated online Blood bank database," 2012 Annual IEEE India Conference (INDICON), 2012, pp. 012-017, doi: 10.1109/INDCON.2012.6420581.

## **Conclusion:-**

As a result, plasma is the frequently overlooked component of blood. The function of the body depends on platelets, red blood cells, and white blood cells. But plasma also has a significant impact. The blood components are transported throughout the body by this fluid. The majority of your blood is plasma. It accounts for more than half (about 55%) of the entire material. Plasma is a pale yellow liquid that forms when the blood is separated from the rest of it. Salts, enzymes, and water are carried by plasma. Plasma's primary function is to transport proteins, hormones, and nutrients to the body's many organs. Additionally, plasma is where cells dump their waste. The plasma then aids in the body's elimination of this waste. The plasma then aids in the body's elimination of this waste. All components of the blood are also transported through your circulatory system by blood plasma. White blood cells, red blood cells, are returned to the donor via saline after plasma donation. Our project intends to increase public knowledge of plasma donation, help patients find the correct donor within a certain time frame, and save the lives of those suffering from various diseases.