

**Project Design Phase-I**  
**Proposed Solution Template**

Date	01 October 2022
Team ID	PNT2022TMID06247
Project Name	Project – Plasma Donor Application
Maximum Marks	2 Marks

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Plasma is the clear, straw-coloured liquid portion of blood that remains after red blood cells, white blood cells, platelets and other cellular components are removed. It is the single largest component of human blood. It helps to maintain blood pressure and volume. Plasma carries electrolytes such as sodium and potassium to our muscles. Plasma helps to maintain a proper pH balance in the body, which supports cell function. The plasma is separated from the blood through the process of centrifugation and the rest of the blood is transferred back into your body thus avoiding any blood loss. This is a very significant way for you to help during Covid-19. Blood donated by people who have recovered from Covid-19 has antibodies to the virus that causes it. The donated blood is processed to remove blood cells, leaving behind liquid and antibodies. These can be given to people with Covid-19 to boost their ability to fight the virus. This is the brief introduction about the plasma. If the patient don't know about the plasma availability then it will leads to death. To avoid this situation the plasma donor application is here to helps the donor as well as the patient to check about the plasma availability. Saving the contributor data and telling about the ongoing givers would be some assistance as it can save time and assist the clients with finding the vital data about the contributors.
2.	Idea / Solution description	The proposed system gets a connection between the donor and the patient through an online application. The application helps the patient to raise an request for the plasma donation or other requirements.

		<p>The basic goal to create an application is that both the patient can keep in touch with the donor as well as to check the plasma availability. The proposed solution is as follows:</p> <ul style="list-style-type: none"> <li>▪ <b>User</b></li> <li>▪ <b>Admin</b></li> </ul> <p><b>User:</b></p> <p>If the user wants to donate or receive the plasma then he/she wants to register in the application.</p> <p>After the user registration he/she receives an registration email.</p> <p>After the user login he/she will redirected to the home page.</p> <p>There are two tabs named as whether the user is donor or receiver.</p> <p>If the user is donor then it will automatically redirected to the donor registration page.</p> <p>The donor can book their appointment through the registration page. The donor registration page contains the following details. The donor page consists of:</p> <ol style="list-style-type: none"> <li>1) <b>Name of the donor.</b></li> <li>2) <b>Age of the donor.</b></li> <li>3) <b>Donor Residential Address.</b></li> <li>4) <b>Donor mobile number.</b></li> <li>5) <b>Weight of the donor.</b></li> <li>6) <b>Height of the donor.</b></li> <li>7) <b>Eligible to donate the plasma certificate with the government seal.</b></li> <li>8) <b>Place nearest to the donor to donate the plasma.</b></li> <li>9) <b>Blood group of the donor.</b></li> <li>10) <b>Donor DOB.</b></li> <li>11) <b>Book Appointment.</b></li> </ol> <p>After entering all the details the donor can book their appointment. After booking the appointment the donor can receive an appointment email and place of the hospital email within 24 hours.</p> <p>During the time of the donation the test for the donor will be taken.</p> <p>If the user is receiver then it will automatically redirected to the receiver registration page.</p> <p>The receiver page consists of:</p> <ol style="list-style-type: none"> <li>1) <b>Name of the receiver.</b></li> <li>2) <b>Age of the receiver.</b></li> <li>3) <b>Receiver Residential Address.</b></li> <li>4) <b>Receiver mobile number.</b></li> </ol>
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		<p><b>5) Blood group of the receiver.</b></p> <p><b>6) Place nearest to the receiver to receive the plasma.</b></p> <p><b>7) Receiver DOB.</b></p> <p>After the receiver entering all the details the receiver can view the plasma availability and then he/she can contact the particular centre then he can receive the plasma from the centre.</p> <p><b>Admin:</b></p> <p>The admin can manage the details of both the donor and the receiver.</p> <p>Admin only can edit the request.</p> <p>Admin only can delete the request.</p> <p>Admin only can add the plasma saving centre that visible to the user.</p>
3.	Novelty / Uniqueness	<p>A User interface is simple for all the users to understand. The user can use this application anytime and anywhere. If the user needs the plasma immediately then the user can raise an request via this application. The user can directly contact with the donor and ask him to donate the plasma. Hospitals can also raise the request against the donor to donate the plasma. This application is user friendly. This application will helps to save lives of many peoples. In now-a-days all peoples have a mobile phones in their hand. So they can easily download and use the application.</p>
4.	Social Impact / Customer Satisfaction	<p>We are living in a modern world and everything can be accessed online. Even though there are many application there is no proper application for plasma donation . Many of them wish to donate blood and plasma but they are unaware about donation and how they can donate. This application provides opportunity to those who want to donate plasma. Donation of plasma are happening in many places many of them come forward to donate but it is not available at right time for use. Sometimes there is a shortage of plasma of particular type. Additional facilities that we need is to access the patients information quickly before plasma transfusion. To solve this issue software applications are employed with Cloud computing and Internet of Things tool which enable features such as information retrieval and continuous data tracking with analytics. This application avoids circulating of wrong information. A single platform for maintaining genuine information and increase the trust of participants involved</p>

		int his activity. It increases the number of donors.
5.	Business Model (Revenue Model)	This application is accessible by everyone . It is free. Because of the trouble in finding givers who match a specific blood bunch, this application empowers clients to enlist individuals who wish to give plasma and keep their data in a data set. Nowadays the need for plasma increases. Anyone with basic knowledge can access this app. This can be used anywhere anytime. Working with the government we can utilize an application to help those needing plasma.
6.	Scalability of the Solution	This application helps users to find plasma donors by sitting in home itself instead of searching donors everywhere. When there is a emergency then plasma request to send to everyone. Once the donor is ready to donate receiver is notified about donation. Receiver can contact the donor. With this app donor can know the eligibility to donate and making it easier to locate suitable donor at right time.