

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

Date	18 November 2022
Team ID	PNT2022TMID24120
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)	During the COVID 19 crisis, the requirement of plasma became a high priority and the donor count has become low. Saving the donor information and helping the needy by notifying the current donors list, would be a helping hand. In regard to the problem faced, an application is to be built which would take the donor details, store them and inform them upon a request.
2.	Idea / Solution description	<p>Our application will solve this problem and make things simpler and more effective at critical moments.</p> <ul style="list-style-type: none"><li>• Here both the donor and the user can register separately.</li><li>• Once registration is complete, the user can utilize this to request a blood type that's needed or to give plasma.</li><li>• It includes information about specifics about plasma donation camps.</li><li>• A home sample collection is another option available to customers.</li><li>• Statistics on overall donations and User experience is displayed.</li><li>• E-certificates will be provided for the donors.</li></ul>
3.	Novelty / Uniqueness	The availability of plasma will be shown to the user who has logged in as a recipient. If a user doesn't have a matching plasma based on their blood type, they can send a request for it. The app will automatically scan the available database of Users registered as donor to find a suitable match.

		<p>If a successful match is found then a chat box between the donor and recipient is established. Else the request stays in place in the database until a suitable voluntary donor is found in future. Voluntary donors can fill out an application form and make an appointment for plasma donation. Once they have finished their donation, they will be given their e-certification for plasma donation. These are the novel components present in this.</p>
4.	Social Impact / Customer Satisfaction	<p>This user-friendly modern web application will establish a new pathway between donor and recipient, with all services available instantly. Even with collecting all of the information such as the availability of resources, hospitals, and blood banks on an irregular basis, this application will have all of the data stored and will be displayed to the user as a statistical graph. The main issue with the current system is that the donor may not be available for the specific blood group, and facilities require immediate access to patient data before transferring plasma. Adding features such as collecting patient histories, updating the experience of previously donated personnel, and continuous data analysis will make it more efficient to use. Along with all these add-ons, this application will be built using a well-structured UI and mostly concentrated on the security side. On the security front, the application will notify both donors and recipients via messenger or email, and it will also help to eliminate spam messages. As a result, with all of the authenticated information, this platform will assist the public in donating or obtaining their plasma needs.</p>
5.	Business Model (Revenue Model)	<p>Plasma donors can access a free app. It is conveniently accessible and accessible to all. This programme enables users to register persons who want to donate plasma and keep their information in a database due to the difficulties in finding donors who match a specific blood group. It would be useful to retain donor information by alerting current</p>

		donors. During the COVID-19 crisis, there was a significant increase in plasma requirements, but there are not a lot of donors available. Finally, developing a collaborative application with government can help people who need plasma. An option to make Donations can be added. As a non-profit application, it relies on these donations to continue offering its service.
6.	Scalability of the Solution	<p>Scalability here aims at connecting the donors &amp; the patients by an online application. By using this application, the users can either raise a request for plasma donation or requirement.</p> <p>This system is used if anyone needs a Plasma Donor. This system comprises of Admin and User where both can request for a Plasma. In this system there is something called an active user, which means the user is an Active member of the App and has recovered from Covid19, only such people are recommended here for Plasma Donation. Both parties can Accept or Reject the request. User has to Upload a Covid Negative report to be able to Donate Plasma.</p>

COLLEGE: JEPPIAAR ENGINEERING COLLEGE

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