

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

Date	23 September 2022
Team ID	PNT2022TMID36609
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>An application called Plasma Donor will answer our problem statement and make things simpler and more effective at critical moments.</p> <ul style="list-style-type: none"><li>• Both the donor and the user register all pertinent data.</li><li>• Once registration is complete, an email will be sent.</li><li>• The user can utilise this to request a blood type that's needed or to give plasma.</li><li>• Statistics are displayed and updated often for different blood types.</li><li>• It includes information on the locations of the events as well as specifics about plasma donation camps.</li><li>• A home sample collection is another option available to customers.</li><li>• E-certificates are available.</li></ul>
3.	Novelty / Uniqueness	The statistics for the blood group availability data for plasma donation will be displayed using a user-friendly graphic format. If a user is unsure whether plasma is available close by, they can send a request for it. Users will soon receive an email notification whether plasma is hard to come by or is more widely available. People can make an appointment after filling

		<p>out our application for plasma donors and if they want to donate plasma. Once they have finished their session on time, 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>Digital health services are readily available and can be quickly obtained online where we live in the modern era. Despite the seeming availability of resources, hospitals and blood banks occasionally experience shortages of vital supplies, such as certain blood types.</p> <p>For instance, blood transfusions save 4.5 million lives yearly in the United States, where a request for blood donation is made roughly every two seconds. The lack of specific blood types is among the biggest problems that healthcare facilities encounter. Another issue is that before starting patient blood transfer, facilities need immediate access to patient data. The availability of collected blood types with patient histories, as well as their knowledge base, is crucial when taking such difficulties into account. Modern software applications are used in conjunction with Machine Learning, Cloud Computing, and Internet of Things (IoT) tools to address these problems. These tools make it possible for features like significant information retrieval, ongoing data tracking with analytics, and Cloud-powered search engines.</p> <p>Along with all the features it offers, this application also aids in the elimination of spam emails and messages that circulate about emergencies involving phoney or already resolved blood. The public is more likely to join in these activities and donate blood if there is a single platform for all legitimate blood-related activities and information.</p>
5.	Business Model (Revenue Model)	<p>There is a free application available for plasma donors. It is easily accessible and available to everyone. 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. Saving the donor information would help by alerting the present</p>

		donors to the need. During the COVID 19 crisis, there was a large surge in the need for plasma, however there aren't many donors available. Finally, developing an app in collaboration with the government can help those in need of plasma.
6.	Scalability of the Solution	<b>In simple terms, scalability is Utilizing temporal and/or location data, this software helps users locate the closest blood donation facility, determine their eligibility to donate blood, receive notifications when an urgent blood donation call comes in, and schedule a convenient appointment. The donor's present location, blood type, and the time of their most recent gift, among other information, will all be taken from a current donor profile. By ingeniously informing the appropriate donors of the need for blood donations, it will be simpler to find a nearby acceptable donor at the appropriate moment.</b>

COLLEGE : ST. PETER'S COLLEGE OF ENGINEERING AND TECHNOLOGY

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