

Project Design Phase-I
Proposed Solution Template

Date	18 October 2022
Team ID	PNT2022TMID47261
Project Name	Project – Plasma Donor Application Using Cloud Computing
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement	<p>People who need plasma are increasing day by day. People who have diseases like plasma deficiency, need a supply of plasma to sustain their life and there is not enough, plasma available for them. It is not that people do not want to donate plasma, but because they have no idea where they can donate or are unaware of plasma donation. It is important for the people who are excited to donate, but yet are very busy, to be sure where and when they can donate and therefore, we are designing a system which contains all the information regarding plasma donation camps ongoing in a particular area so that people who want to donate plasma will get information regarding these camps. Our System is a mobile application which aims to serve as a communication tool between Plasma Donation camp organizers and plasma donors. To become a member of the system, donors need to create their profile by providing the information like name, plasma group, email address, password, and exact location from “Google Map”. In order to find out the exact location of a donor, Google Map is integrated with this application. The mobile application always keeps updating the location of a donor. As a result, the system can automatically keep showing the nearby Plasma Donation Camps to the registered donor wherever they go, and donors can easily get the idea of nearby plasma donation camps. Also, users can get information regarding the type of plasma which is available and information of past as well as future events.</p>
2.	Idea / Solution description	<p>The conventional time-consuming process of plasma services can be eliminated by maintaining the minimum units of each plasma group in the plasma bank, consistently. To achieve this, our web page maintains a database to store the details of donors who are active and quickly respond to the plasma requests the requestor is an individual, the system has to verify the request to ensure that the requestor is genuine. When an individual login to the system, his name and contact information are mandatory. and we use OTP verification to authenticate the request. In order to validate the request, the individual has to submit a valid doctor certificate. The doctor certificate can be verified by either the administrator or a</p>

		verified donor. If the user tries to misuse the system or provide fake documents the individual will be temporarily blocked with prior warning.
3.	Novelty	It is considered unique due to its cloud computing based web application is to help satisfy a plasma request made from anywhere and anytime, by maintaining all information pertaining to the plasma donors and different plasma groups available in each plasma bank. This system provides transparency in this field, ie, makes the process of obtaining plasma from a plasma bank, corruption free and makes plasma bank management effective. The system intends to make the plasma search process much more efficient and quick. Therefore, no permanent registration to the website is needed for the requestor, they are only required to provide their basic details and contact information for verification.
4.	Social Impact	The majority of effects elicited by plasma donation on plasma donors were positive (i.e. feelings of satisfaction, greater alertness, increased wellbeing, etc.). The positive effects did not differ from the negative regarding time of onset, yet their duration was reported to be significantly longer. There was no association between frequency of occurrence of positive effects and the number of plasma donations, indicating that there is no 'addictive' relationship between donors and plasma donations. The findings in this study of high frequency of occurrence of positive long-lasting effects elicited in plasma donors by plasma donation may be of great importance for the recruitment of new plasma donors as it may make plasma donation less frightening and perhaps even attractive.
5.	Business Model (Revenue Model)	<pre> graph TD START([START]) --> BB[BLOOD BANK (Database of donor)] BB -- "(Request with the details of blood)" --> DL[Donor List] DL --> L1[List 1 (Duration > 90)] DL --> L2[List 2 (Eligible donors)] L2 --> R[Receiver] R -- "(Contact to the receiver)" --> BB R --> N90[Next 90 days not eligible for donation] </pre>
6.	Scalability of the Solution	<p>I. It will overcome the traditional manual system and therefore fewer human errors.</p> <p>II. one can easily get the information regarding plasma donation events in their surroundings.</p> <p>III. App manages all the records regarding how much plasma and what type of plasma is collected in a certain event.</p> <p>IV. Donor can easily get access to his/her account with a single click.</p>

