

Project Design Phase-I
Problem -Solution Fit Template

Date	01 October 2022
Team ID	PNT2022TMID23085
Project Name	Project - Plasma Donor Application

PROBLEM -SOLUTION FIT TEMPLATE:

S.No.	Parameter	Description
0.	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.
1.	Customer segment	Think about donating plasma if you have type AB blood. Patients with any blood type can receive AB, the only universal plasma. As a result, type AB plasma transfusions can be administered right away without wasting valuable time checking the patient's blood type compatibility. Up to 13 times a year, these types of plasma donations can be made every 28 days.
2.	Problem/Pains	<ul style="list-style-type: none">● Donor finding is difficult● Difficult to match the donor with same blood group● Donor and staff safety● Convalescent plasma.

3.	Triggers to act	<ul style="list-style-type: none"> ● Some people may feel allergic reactions while donating plasma. The needles might trigger reactions in people. ● In rare cases, people can experience lung damage and also some difficulty in breathing. ● In certain cases when needles are not sterilized properly infections like HIV and hepatitis can affect a person. ● If the needle is injected into a person who already has a disease and then the non-sterilized needle is injected into another person the blood carries infections
4.	Emotions	Two prosocial emotions that are of particular relevance for the efficacy of an acceptance message are gratitude and guilt. Considering accepting a potential blood transfusion should engender feelings of gratitude towards others who have previously donated blood and enhance a desire to repay an imagined debt through donating blood . While guilt, as a reparative social emotion, encourages atonement and sustained long-term cooperation diseases .
5.	Available Solution	These applications won't offer a preference selection option for pregnant women or older individuals under the current systems. If that's the case, it's done manually, however with our project we're improving it automatically to make it .
6.	Customer Limitations	<ul style="list-style-type: none"> ● It cannot auto verify user genuineness. ● It requires an active internet connection. ● At times, donors may available at farthest distance consumes times to get connect with patient

7.	Behavior	<p>Check availability: Availability of blood in the blood banks can be checked.</p> <p>Request blood: Request for the required blood can be made to the blood banks</p> <p>Update: The hospital/blood bank can update the status of their blood inventory</p> <p>Nearby Blood banks: Nearest blood banks can be viewed using Google Maps</p>
8.	Channels of Behaviors	<p>Online: To instill a sense of enthusiasm and joy among our audience, we try to collaborate with various schools, universities, corporates, institutions and local communities all over India to organise informative Stalls, Competitions, Nukkad Nataks, Quizes, and interactive sessions (both online and offline) with experts where attendees can interact with us and their doubts are duly addressed. This ensures that the vision of blood donation spreads far and wide and people realize the significance of blood donation.</p> <p>Offline: WHO recommends that all activities related to blood collection, testing, processing, storage and distribution be coordinated at the national level through effective organization and integrated blood supply networks. The national blood system should be governed by national blood policy and legislative framework to promote uniform implementation of standards and consistency in the quality and safety of blood and blood products</p>
9.	Problem root/Causes	<p>More likely, blood transfusion mistakes occur when incorrect blood is given to a patient. For instance, a blood sample may be mislabeled. The incorrect patient name may be marked on a blood sample, for example. Errors may also occur when a blood sample is marked with the incorrect blood type (O-negative, etc.).</p>

10.	Our Solution	<p>We use priority selection algorithm, where admin can identify the priority tags first among all other tags in its range and other tags are identified after that. So, the priority tag can get service immediately after they are identified where the other tags wait in a queue and get service later (i.e first priority towards pregnant women and for older people)</p> <p>If possible maintain a tie-up with REDCROSS and spread awareness will provides an added advantage.</p>
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Project Design Phase-I
Proposed Solution Template

Date	24 September 2022
Team ID	PNT2022TMID23085
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	Our proposed system has the following idealation: <ul style="list-style-type: none">● Tracking time interval and Set donation reminder● GPS tracking nearby donors.● Age filtering in accordance to priority
3.	Novelty / Uniqueness	Using priority selection algorithm, admin can identify the priority tags first among all other tags in its range and other tags are identified after that. So, the priority tag can get service immediately after they are identified where the other tags wait in a queue and get service later. If possible maintain a tie-up with REDCROSS and spread awareness will provides an added advantage.

4.	Social Impact / Customer Satisfaction	Unlock reward badges will boost our customers to use this application widely that bridges the gap between blood donors and patients.
5.	Business Model (Revenue Model)	<p>There are many apps currently available in this regard</p> <p>But our solution,once developed well, has enough possibility to safeguard the plasma receiver from various diseases due to blood donation</p>
6.	Scalability of the Solution	Our proposed solution is very scalable is that in future there are lots of rooms for evolving our present model by adding data visualization using Artificial intelligence to enhance our system in upcoming years.