## Project Design Phase-I

## **Proposed Solution**

Date	28 September 2022
Project Name	Plasma Donor Application
Project Members	SA Madhulica, Arandeep Singh, Srivatsan S, Vaibhav Pandey
Project Mentors	Industry Mentor(s): Bharadwaj, Santoshi Faculty Mentor(s): Name: A. Beulah

## **Proposed Solution:**

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The current procedure of plasma donation is a cumbersome task. There is no proper set way of assisting the donor and no incentive for the same.  Also there is no proper control over the data that the user provides during the process. As a patient, it is a daunting task to find a matching donor and the whole procedure is looked over manually making it a very time consuming job.

2.	Idea / Solution description	The proposed method creates an application which aims to solve the aforementioned drawbacks.  The system works with the registration of a donor by providing the required details which gets stored in the database.
3.	Novelty / Uniqueness	There exist certain applications that allow users to donate and receive. But these applications exist as a standalone rather than in going hand-in-hand.  Our app not only solves this problem, but also makes the whole donation/reception procedure seamless for both parties.
4.	Social Impact / Customer Satisfaction	During COVID 19 crisis the requirement for plasma increased drastically. Considering the complex manufacturing process to fractionate plasma into the therapies patients rely on can take 7-12 months, any decline in donations is concerning.  The proposed app creates a way of easing the way traditional plasma donation system works and thus increase donations and awareness among the masses.
5.	Business Model (Revenue Model)	Key partners: The members of the team alongside SSN and IBM mentors will work towards the development of this application.

**Key resources:** The resources for the development are obtained using our personal equipment, various IDE, IBM's database and software, college systems etc.

**Activities:** The main activities include developing the application using Flask, interfacing it with IBM DB2, SendGrid, containerizing the application, and hosting it on the cloud.

Value Proposition: The users will be provided with a web application that has a friendly GUI and serves all the tasks of the application in a transparent manner. Security compliance will be strictly monitored to ensure that the user's data is safeguarded against any form of threats.

Cost Structure: Cost is levied due to the usage of proprietary software. However, IBM's software is provided to us due to the fortunate initiative. Other such software that are non-IBM may add on to the expenses if inevitable.

## **Revenue Streams:**

Patient registration fee, government funds, crowd funding etc.

**Customer Segments:** Students, Interested individuals, Family Members, Working Professionals

Customer Relationships: All the customer segments will be treated alike. Thus, all the users will be treated in a strictly professional manner, i.e every user will be treated in a fair manner, a prospective customer with no additional priorities etc.

		Channels: The application will be publicized through the usage of various social media platforms and through word of mouth. As users begin to use the application, ratings in Google, Play Store, and App Store would increase, resulting in a huge influx of customers.
6.	Scalability of the Solution	The application will be scalable based on the requirements of the future. For instance, the application could partner with Government Agencies and stand alone NGOs as an incentive to donate more. Similarly, the application could be made more advanced and modem by integrating a service bot that could aid aid users in customizing the app with ease.