**Project Design Phase-I**

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| Date | 24 September 2022 |
| Team ID | PNT2022TMID34537 |
| Project Name | Plasma Donor Application |
| Maximum Marks | 2 Marks |

**Proposed Solution**

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| **S. No.** | **Parameter** | **Description** |
| 1. | Problem Statement  (Problem to be solved) | Many major medical conditions are treated by plasma. For this reason, blood drives are held to solicit donations of plasma and blood. One of the most well-known techniques known as plasma treatment, plasma is used to cure various incurable diseases. As there were no vaccines available to treat the infected patients during the Covid-19 emergency, the need for plasma increased dramatically. Plasma therapy had a high probability of recovery but a very low donor count, therefore it was crucial to learn more about the donors in these circumstances. It would be helpful to save the contributor information and let clients know about the recurring donors because it can help them find the crucial information more quickly. |
| 2. | Idea / Solution description | This system's goal is to use an online application to link donors and patients. Users of this application may post requests for plasma donations or requests for services. The fundamental solution is to establish a centralised system to keep track of  current and previous Plasma Donation Events. The recommendation solution is as follows;    Application contains **two roles**:  **1)Admin**     * Admin can login using their credentials. * Admin can edit the request. * Admin can delete the request. * Admin can add volunteers.   **2)User:**   * If the user wants to donate or receive, they have to   register with their personal details.   * After successful registration of user. * A successful registration email is sent to the user. |
|  |  | * If the user is donor, then he/she will fill the donation interest form which includes their Name, blood group details, location, last time donated date, phone number, email id. After filling the donation form, he/she will be redirected to page in which he/she can download the e-certificate. * If the user is receiver, then he/she can see the list of donors available and they can raise their request and contact donor directly. |
| 3. | Novelty / Uniqueness | Users can easily grasp a user interface. The application is available anytime, anywhere. The user can use this application to raise a request and directly contact the donor to ask them to donate the plasma if they urgently need it for their treatment but the plasma is not available in the nearby hospitals. Hospitals may also put out a call for donors. Someone who wishes to donate blood and plasma but is unsure how to do so uses this programme, which is easy to use and will help save many lives. Nowadays, a lot of them have smartphones on which they can download this programme and use it to save lives. |
| 4. | Social Impact / Customer Satisfaction | Everything is accessible online because we live in a modern age. Despite the fact that there are numerous applications, there is no official form for donating plasma. Although many of them would like to donate blood and plasma, they are not aware of the process or how to contribute. The ability to give plasma is made available through this application. Plasma donations are being made everywhere, and although many people step forward to do so, the plasma is not always ready for use. There may occasionally be a shortage of a particular type of plasma. Prior to plasma transfusion, we require additional facilities that provide quick access to patient information. Software applications are used in conjunction with cloud computing and Internet of Things tools to address this problem and offer capabilities like information retrieval and ongoing data tracking with analytics. This programme prevents the spread of false information. a centralised location to save accurate information and boost participants' faith in the activity. It boosts the quantity of donors. |
| 5. | Business Model (Revenue Model) | Everyone has access to this programme. This programme allows users to add people who want to donate plasma and store their data in a data set. It is free because it is difficult to identify donors who match a particular blood group. The need for plasma is rising today. Anyone with a basic understanding can use this software. This can be applied at anytime, anywhere. Working with the government, we can develop a programme to assist people in need of plasma. |
| 6. | Scalability of the Solution | Instead of scouring the entire world for plasma donors, this programme enables users to find donors while sitting at home. When there is an emergency, plasma requests that everyone sends a message. When a donor is prepared to donate, the recipient is informed. Receiver may get in touch with the donor. This software helps donors find potential donors quickly and easily by letting them know if they are eligible to donate. |