

## Project Design Phase-I Proposed Solution Template

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| Date          | 16 .10.2022                        |
| Team ID       | PNT2022TMID20238                   |
| 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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| 1.    | Problem Statement (Problem to be solved) | Many major medical conditions are treated by plasma. 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              | <p>This system's goal is to use a web application to link donors and patients. Patient of this application may post requests for plasma donations or requests. The fundamental solution is to establish a centralised system in that an admin will keep track of current and previous Plasma Donation Events and also keep track of the location of the donor's plasma using Google Map. The recommended solution is as follows: Application contains three roles:</p> <ul style="list-style-type: none"><li>i) Admin</li><li>ii) Patient</li><li>iii) Donor</li></ul> <p>Admin :</p> <ul style="list-style-type: none"><li>• Admin can login using their credentials.</li><li>• Admin can view the request.</li><li>• Admin can delete the request.</li><li>• Admin can add volunteers.</li></ul> <p>Patient :</p> |

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|    |                      | <ul style="list-style-type: none"> <li>• If the patient is new ,Patient must register first and then login</li> <li>• The patient can request specific blood type and quantity</li> <li>• Patient can view the accepted status by donor</li> <li>• Patient can contact the donor directly</li> </ul> <p>Donor:</p> <ul style="list-style-type: none"> <li>• If the donor is new he/she must register first and then login to the page</li> <li>• Upload vaccination certificates</li> <li>• View blood request</li> <li>• Accept/reject blood request</li> <li>• View the previous donation status</li> <li>• View blood donation campaigns posted by registered blood banks</li> <li>• Download E-certificate after donation</li> </ul> <p>Blood bank:</p> <ul style="list-style-type: none"> <li>• Hospitals and blood bank centres can Login /Register</li> <li>• Patients can find donor's personal details.</li> <li>• View blood type and quantity stored.</li> <li>• Track blood Storage</li> </ul> |
| 3. | Novelty / Uniqueness | <p>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 app, which is easy to use and will help save many lives. Nowadays, a lot of them have smartphones on which they can download this app and use it to save lives.</p>                                                                                                                                                                                                                                                                                                                                                                                |

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| 4. | Social Impact / Customer Satisfaction | <p>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 tools to address this problem and offer capabilities like information retrieval and ongoing data tracking with analytics. A centralized location to save accurate information and boost participants' faith in the activity. It boosts the quantity of donors.</p> |
| 5. | Business Model (Revenue Model)        | <p>To build an android application that will help people to get blood in emergency situations like natural disasters using features like geo-tagging. To motivate people for blood donation and to help patients receive blood in emergency situations, we have designed an application to overcome all the problems which the current offline as well as online systems face. If in emergency a patient requires blood, using this application we'll not just be able to contact Blood Bank and Hospitals but can also seek help from individual registered Donors</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 6. | Scalability of the Solution           | <p>Instead of scouring the entire world for plasma donors, this APP 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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |