**Project Design Phase-I**

**Problem Solution Fit**

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| Date | 18 OCT 2022 |
| Team ID | PNT2022TMID47261 |
| Project Name | Plasma Donor Application Using Cloud Computing |
| Team Leader | Dhana Lakshmi R |
| Team Members | Aruna Dhas Y V  MadhupriyaSivakumar  Abinaya A |
| Maximum Marks | 2 Marks |

**SOLUTION FIT :**

During COVID 19 crisis the requirement for plasma increased drastically as there were no vaccinations found in order to treat the infected patients. In such situation it was very difficult to find the plasma donor, check whether the donor was infected previously and was recovered, and which donor is eligible to donate plasma was a challenging task. As the plasma therapy was one of the ways to treat the infected patients getting the donor details played a major role.

**There are some sources that provide an online platform for blood donation:**

**American Red Cross Blood Services**

The website is owned by American National Red Cross Society which is a well renowned organization for health services. This website can be used by individuals who are willing to donate blood. They conduct blood drives to collect blood from donors and distribute it to the needed blood banks. They collaborate with various events like Superbowl to avail offers to the people donating blood. This website also gives provision to the user to conduct blood drives and we can also register to be part of their activities as a volunteer. But they do not provide the option to perform an emergency blood request even though that is a vital part of the whole process.

**BLOOD BANK INDIA**

The website provides various facilities like searching availability of blood, donor registration, and requesting blood. Latest requests are shown when one opens the website, the recent donors are also referred. The website does not provide accurate location based search results and hence it will not be a reliable source in every scenario. There is no integration with blood banks. Any random user can obtain the contact details of donors without any steps of verification, and legitimacy of donors are not verified.

**e-RaktKosh**

e-RaktKosh is a Centralized Blood Bank Management System. It is an initiative of the Ministry of Health and Family Welfare. It provides details about blood banks all across the nation. The details include the availability of each blood group.But the information provided is not accurate. They also provide contact details and location information about blood banks.

**CONCLUSION**

Witnessing someone desperately searching for a plasma donor, when a particular blood group is unavailable in the blood bank and the donors in mind are out of reach, is a painful and helpless situation. Losing a life just because a donor was not available at the most needed moment is an unbearable experience. Our mission is, to fulfill every blood request in the country with a promising web portal and, try to motivate individuals who are willing to donate blood. Our idea of a cloud-based blood bank management system solves most of the key issues existing in this sector. Blood units may be present in the blood bank and the requester may not be aware of it, then it is of no use. Our system prevents such situations, as every requester will be able to know about the blood bank and blood units available nearby. The GPS technology will be used to make the nearby blood bank and donor location visible to the requestor. All the services are done by keeping in check the extreme privacy and security of the user information. By providing the public with a single platform for all blood related services and information, we hope that the people will develop confidence and trust to get involved in these blood services. More the people who participate and use the system, the more efficient the system becomes. The system creates a direct bridge between the donor and the recipient. The health sector will be definitely benefited by the services provided by the system as the patient's safety and life is considered valuable.