Project Design Phase-II
Solution Requirements (Functional & Non-functional)

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TEAM ID	PNT2022TMID47827
PROJECT NAME	Plasma Donor Application
MARKS	4Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	FunctionalRequirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Application Registration through Gmail Registration through LinkedIN Certain details must be submitted such as email address, password, and password confirmation.
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP The login screen is used to verify the identity of the user. The account can be accessed using the user's registered email address and password.
FR-3	User login	Login using Registered email Id Operator has registered then the software operator should be able to login to the web application. The login information will be stored on the database for future use.
FR-4	Searching/reporting requirements	Users can use the search bar to look up information about camps and other topics.

FR-5	User Plasma Request	Should be able to request plasma in an emergency situation,software operators need to define plasma group,location,require data,contact. The plasma request will be sent to the plasma bank and then Inventory to check the availability. Users can request to donate plasma by filling out the request form on the page. Once the request is submitted, they will notified through email.
FR-6	Plasma stock	Receiving the plasma request from the clinic the plasma stock in the plasma bank Inventory will be searched to match the requested plasma request. Thus match plasma units will be sent to the clinic.
FR-7	Statistical data	The availability of plasma is given in the page as stats, which will be helpful for the users.
FR-8	Certification	After the donor donates plasma, we will give them a digital certificate of appreciation and authentication.
FR-9	Distribution status/ View donation camps	If the distribution seems to be delayed then the clinic manager must be able to call the distribution person to get the update revise on the distribution. View the list of donation camps happening nearby.
FR-10	User Verification	User credentials are verified.
FR-11	Virtual Assistants(ChatBot)	A virtual assistant is a software agent that can carry out tasks or provide services on behalf of a person in response to commands or inquiries. When users enter their inquiries, the system will respond with pertinent information about plasma and details of plasma donation.
FR-12	Donor & Recipient Confirmation	Donor & Recipient are allocated to a certain time.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The cost of the plasma units are standardized. The user interface of the plasma donor system must be welldesigned and welcoming.
NFR-2	Security	The application prevents the donors and recipientsdata from being hijacked or misused. Data storage is required to have high security systems, just like it is by many other applications. Databases are able to keep all the donor information that is viewed by applications. It must be secured with email Id and password.
NFR-3	Reliability	The system has the ability to work all the times without failures apart from network failure. A donor can have the faith on the system. The authorities will keeps the privacy of all donors in a proper manner. The application works under specific need of plasma in required time.

NFR-4	Performance	The system is interactive and the delays involved are less. When connecting to the server the delay is based on the distance of the 2 systems and the configuration between them so there is high probability that there will be or not a successful connection in less than 20 seconds for the sake of good communication. The Plasma donor System must perform well in different scenarios. The system is interactive and delays involved are less.
		The application tries to provide quick responses tothe recipients.
NFR-5	Availability	The application runs properly and meets the user requirements. The system including the online and offline components should be available 24/7. The system should be available all times, meaning the user can access it using application. In case if a hardware failure or database corruption,a replacement page will shown. Also in case of a hardware failure or database corruption,backups of the database should be retrieved from the application data folder and saved by the administrator.

NFR-6	Scalability	The application should have the ability to handle growing numbers of users and load without compromising on performance and causing disruptions to user experience. The system offers the proper resources for issue solutions and is designed to protect sensitive information during all phases of operation In the application to handle an increase in workload without performancedegradation,or its ability to quickly enlarge. The solution must allow the hardware end of the deployed software services and components to be scaled horizontally as well as vertically.