Project Design Phase-II
Technology Stack (Architecture & Stack)

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Technical Architecture:

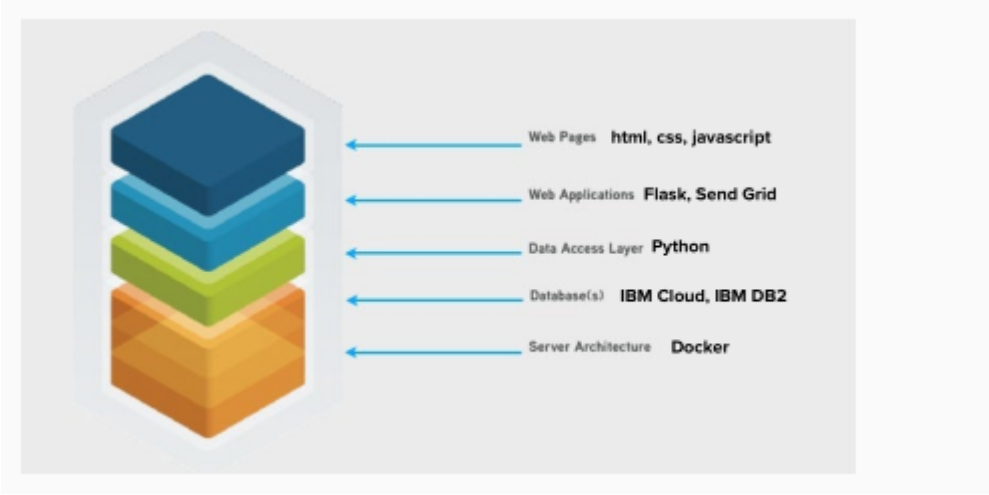

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Person can interact via using Web UI	HTML, CSS, JavaScript.
2.	Application Logic-1	Login using App	Flask and Python
3.	Application Logic-2	SOS Emergency Button	Flask and Python
4.	Application Logic-3	Checking Eligibility Criteria	Flask and Python, IBM DB2
5.	Database	Local databases used to store data	IBM Cloud
6.	Cloud Database	Database Service on Cloud	IBM DB2
7.	File Storage	File storage requirements :The submitted documents should not exceed 10 mb	IBM Cloud
8.	External API-1	Send mail to members for blood donation	Send Grid
9.	External API-2	Send SOS to nearby hospital	IBM Cloud
10.	Plasma Donation Model	To enable ease of access for people during donation of blood or emergency	Docker
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Kubernetes,IBM Container Registry.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology Used
1.	Open-Source Frameworks	Used to create backend for the website ; Used to create frontend for the website	Python Html,Css,Java Script
2.	Security Implementations	Data in Cloud is Secured; Website is encrypted using python	IBM Cloud Python
3.	Scalable Architecture	During peak times ,performance is not affected as it is a web application and stored in cloud	IBM Cloud
4.	Availability	It is a free software available available for every person who becomes a member in India	Play Store ,App store,Mac App Store,Windows Store
5.	Performance	Since the database is in the cloud ,the sheer amount of data won't affect the performance.	IBM Cloud