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

Date	18 October 2022
Team ID	PNT2022TMID42213
Project Name	Project - Plasma Donor Application
Maximum Marks	4 Marks

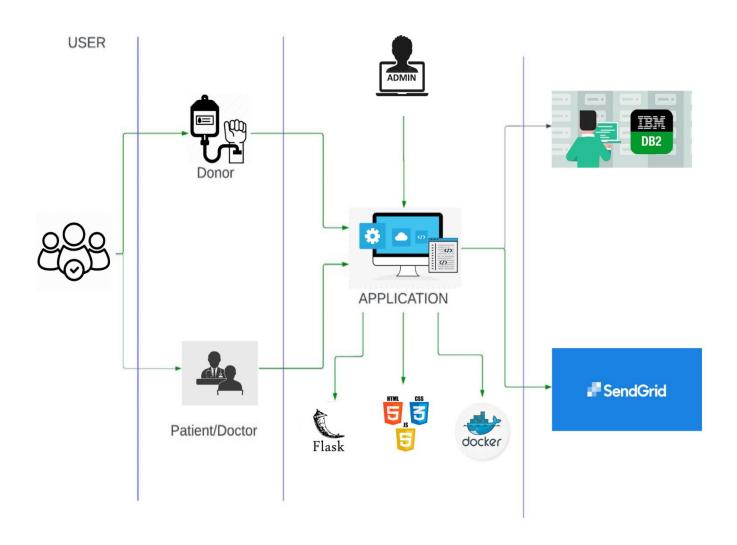


Table-1: Components & Technologies:

SNO	Component Description	Description	Technology
1	User Interface	The interaction between the user and application e.g., Web UI, Mobile App, Chatbot.	HTML, CSS, JavaScript/ Bootstrap etc.
2	Application Logic-1	Framework used for design the application.	Python, Python - Flask
3	Application Logic-2	Accessing the cloud and storing details of the users both donors and patients.	IBM Cloud, IBM DB2
4	Application Logic-3	Docker is an open-source platform for building, deploying, and managing containerized application	Docker
5	Database	Data Type, Configurations etc.	SQLite
6	Cloud Database	Database Service on Cloud	IBM Cloud and IBM DB2
7	File Storage	File storage requirements	IBM Block Storage or Storage Service or Local Filesystem

Table-2: Application Characteristics:

S.no	Characteristics	Description	Technology
1	Open-Source	Python – flask is an open-	Python – flask is an
	Framework	source framework used to	open-source
		develop the application.	framework used to develop the
			application.
2	Security	Container registry and	Container registry
	Implementation	Kubernetes Cluster are used	and Kubernetes
		for encryption of data.	Cluster
3	Scalable	Kubernetes Cluster allow	Kubernetes Cluster
	Architecture	containers to run across the	
		machines and environments.	
4	Availability	Kubernetes Cluster provides	Kubernetes Cluster
		all time availability.	
5	Performance	Docker improves the	Docker
		application performance.	