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

| Date | 18 October 2022 |
|---------------|--------------------------|
| Team ID | PNT2022TMID27128 |
| Project Name | Plasma Donor Application |
| Maximum Marks | 4 Marks |

Technical Architecture:

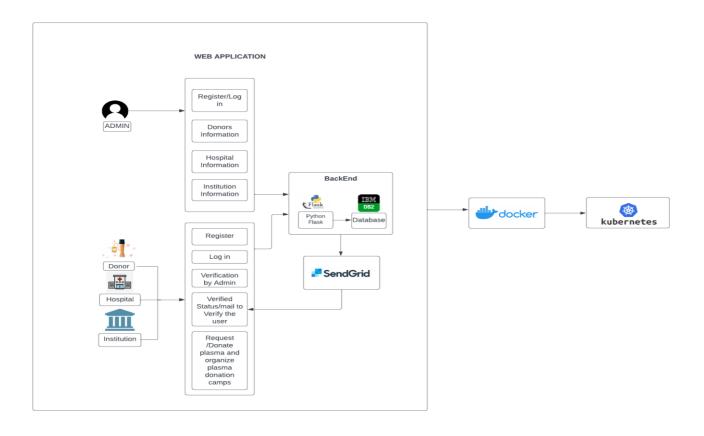


Table-1 : Components & Technologies:

| S.No | Component | Description | Technology |
|------|---------------------------------|---|----------------------|
| 1. | User Interface | User interface design to make user interact with application. | HTML,CSS, bootstrap |
| 2. | Application Logic-1 | Users log in and register to the application. | Python Flask |
| 3. | Application Logic-2 | User Registration is verified by Admin and Email verification is sent to user. | Send Grid |
| 4. | Application Logic -3 | To make interactive conversion for users to clear the doubts. | IBM Watson Assistant |
| 5. | Database | To store and retrieve the data | IBM DB2 Database |
| 6. | Infrastructure (Server / Cloud) | Helping to orchestrate different types of containers and deploying them to clusters | Kubernetes |

Table-2: Application Characteristics

| SI. No | Characteristics | Description | Technology |
|-----------|------------------------------------|---|------------|
| 1. | Open-Source Frameworks | To build a light weight application | Flask |
| 2. | To send Emails without mail server | To send email verification and configuration mail | Send Grid |
| 3. | Availability | Runs everywhere and user friendly | Docker |

| 4. | Performance | Orchestrate containerized application to run the | Kubernetes |
|----|-------------|--|------------|
| | | cluster of hosts | |