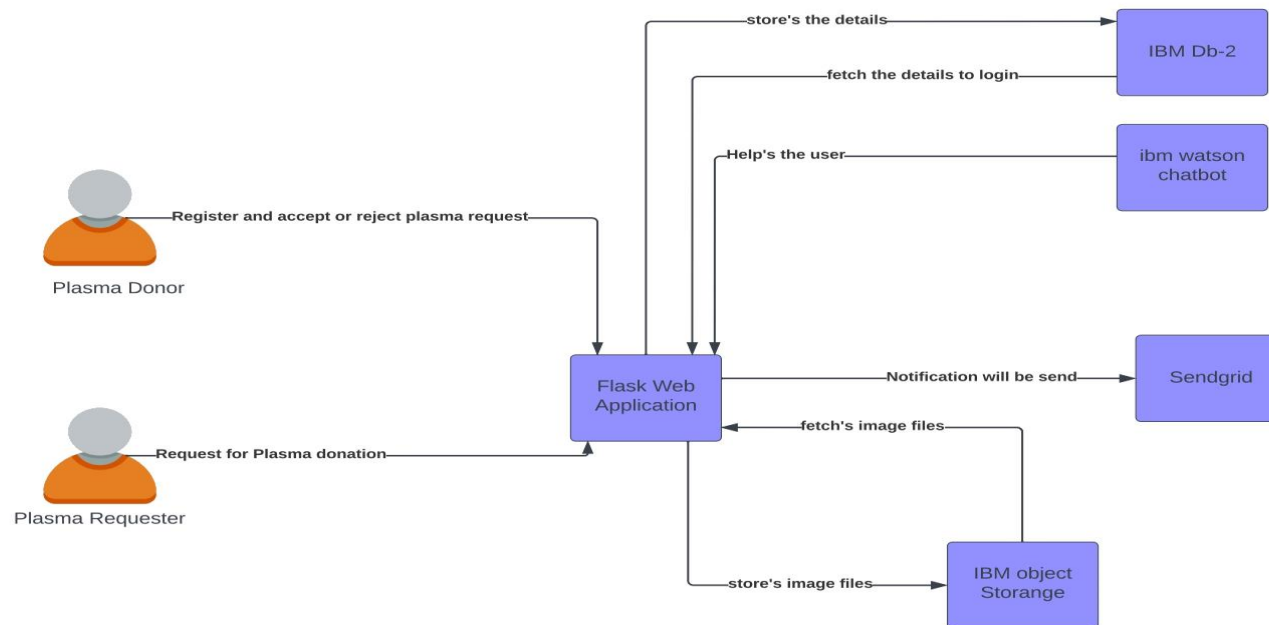


## Project Design Phase-II Technology Stack (Architecture & Stack)

|               |                                    |
|---------------|------------------------------------|
| Date          | 03 October 2022                    |
| Team ID       | PNT2022TMID51754                   |
| Project Name  | Project – Plasma Donor Application |
| Maximum Marks | 4 Marks                            |

### Technical Architecture:

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



**Table-1 : Components & Technologies:**

| S.No | Component                       | Description   | Technology                          |
|------|---------------------------------|---|-------------------------------------|
| 1.   | User Interface                  | How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.                                     | HTML, CSS, JavaScript, Python Flask |
| 2.   | Application Logic-1             | Logic for a process in the application  | HTML, CSS, JavaScript, Python Flask |
| 3.   | Database                        | Data Type, Configurations etc.  | MYSQL                               |
| 4.   | Cloud Database                  | Database Service on Cloud   | IBM DB2, IBM Cloudant               |
| 5.   | File Storage                    | File storage requirements   | IBM Object Storage                  |
| 6.   | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud<br>Local Server Configuration:<br>Cloud Server Configuration : | Cloud Foundry, Kubernetes           |

**Table-2: Application Characteristics:**

| S.No | Characteristics          | Description   | Technology        |
|------|--------------------------|---|-------------------|
| 1.   | Open-Source Frameworks   | List the open-source frameworks used  | Bootstrap, Flask  |
| 2.   | Security Implementations | List all the security / access controls implemented, use of firewalls etc.  | Encryptions       |
| 3.   | Scalable Architecture    | Justify the scalability of architecture (3 – tier, Micro-services)  | Docker            |
| 4.   | Availability             | Justify the availability of application (e.g. use of load balancers, distributed servers etc.)                            | IBM load Balancer |
| 5.   | Performance              | Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc. | kubernetes        |