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

| Date          | 3 November2022                                  |
|---------------|---|
| Team ID       | PNT2022TMID28891                                |
| Project Name  | Project - Smart Fashion Recommender Application |
| Maximum Marks | 4 Marks   |

## **Technical Architecture:**

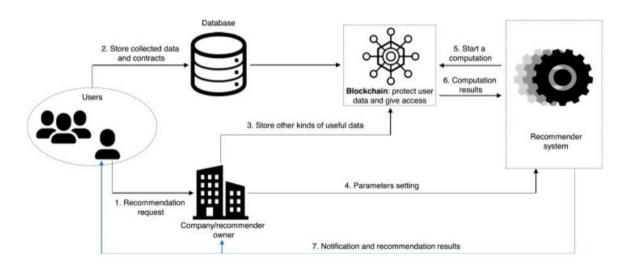


Table-1: Components & Technologies:

| S.No | Component           | Description   | Technology                          |
|------|---------------------|---|-------------------------------------|
| 1.   | User Interface      | How user interacts with application e.g. Web UI, Mobile App, Chatbot etc. | HTML, CSS,<br>JavaScript,Flask etc. |
| 2.   | Application Logic-1 | Logic for a process in the application                                    | Python                              |
| 3.   | Application Logic-2 | Logic for a process in the application                                    | IBM Watson STT service              |
| 4.   | Application Logic-3 | Logic for a process in the application                                    | IBM Watson Assistant                |
| 5.   | Database            | Data Type, Configurations etc.  | MySQL, NoSQL, etc.                  |
| 6.   | Cloud Database      | Database Service on Cloud   | IBM DB2, IBM Cloudant etc.          |
| 7.   | File Storage        | File storage requirements   | IBM Block Storage                   |
| 8.   | External API-1      | Purpose of External API used in the application                           | IBM Weather API, etc.               |

| 9.  | External API-2                  | Purpose of External API used in the application   | Aadhar API, etc.                          |
|-----|---------------------------------|---|---|
| 10. | Machine Learning Model          | Purpose of Machine Learning Model   | Object Recognition Model, etc.            |
| 11. | Infrastructure (Server / Cloud) | Application Deployment on Local<br>System / Cloud<br>Local Server Configuration:<br>Cloud Server Configuration: | Local, Cloud Foundry,<br>Kubernetes, etc. |

## **Table-2: Application Characteristics:**

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