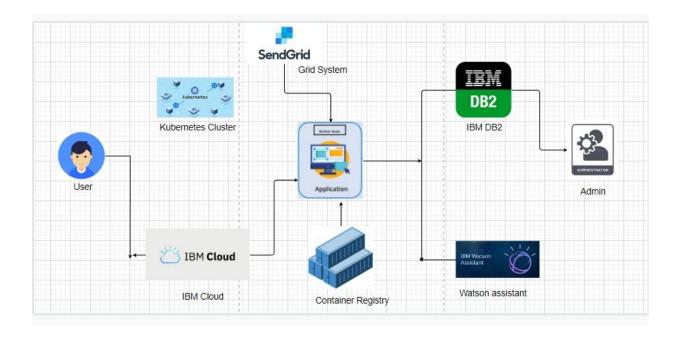
Project Design Phase-II Technology Stack (Architecture & Stack)

| Date | 17 October 2022 |
|---------------|----------------------------------|
| Team ID | PNT2022TMID17457 |
| Project Name | Smart fashion recommender system |
| Maximum Marks | 4 Marks |

Technical Architecture:



| S.N o | Component | Description | Technology |
|----------|---------------------|---|---|
| 1. | User Interface | user interacts with application e.g. Web UI, Mobile App, Chatbot etc. | HTML, CSS, JavaScript / Angular Js / React Js etc. |
| 2. | Requests | How web application communicates with server | Javascript / Python |
| 3. | Application Logic-2 | The application includes login where user can login with their credentials and also supports registration where new users can be added. | Python |

| 4. | Watson chatbot | The application includes a chatbot which helps the user in recommendation of products. | IBM Watson Assistant |
|----|------------------------------------|---|---|
| 5. | IBM cloud DB2 | Details of customers and products are stored. Data types are String, Numeric, Date, time, and timestamp distinct types. Act_sortmem_limit, auto_del_rec_obj, auto_maint Configuration | MySQL, NoSQL, etc. |
| 6. | Cloud Db2 | A fully managed cloud database with AI capabilities that keep our website running 24*7 | IBM DB2, IBM Cloudant etc. |
| 7. | Kubernetes | Manage the complete process in the stable state If any software crash it automatically restart the work | Kubernetes |
| 8. | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration: | Local, Cloud Foundry, Kubernetes, etc. |

Table-2: Application Characteristics:

| S.N o | Characteristics | Description | Technology |
|----------|--------------------------|---|------------------------------------|
| 1. | Open-Source Frameworks | Cloud Stack, Eucalyptus. Open Nebula, App Scale, Docker | Docker |
| 2. | Security Implementations | Authentication and password management Accountability to authorize and monitor the use anonymous accounts and to remove | Encryptions, Secured Authorization |
| 3. | Scalable Architecture | Handles large number users on demand | Container registry, Kubernetes |
| 4. | Availability | The application can be accessed at any time. The administrator needs to look up the stock availability in the database | Docker |
| 5. | Performance | Speed up the webpage Site optimization based on data analysis. | Kubernetes |