

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

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| Date | 03 October 2022 |
| Team ID | PNT2022TMID05487 |
| Project Name | Project - Smart Fashion Recommender Application |
| Maximum Marks | 4 Marks |

Technical Architecture:

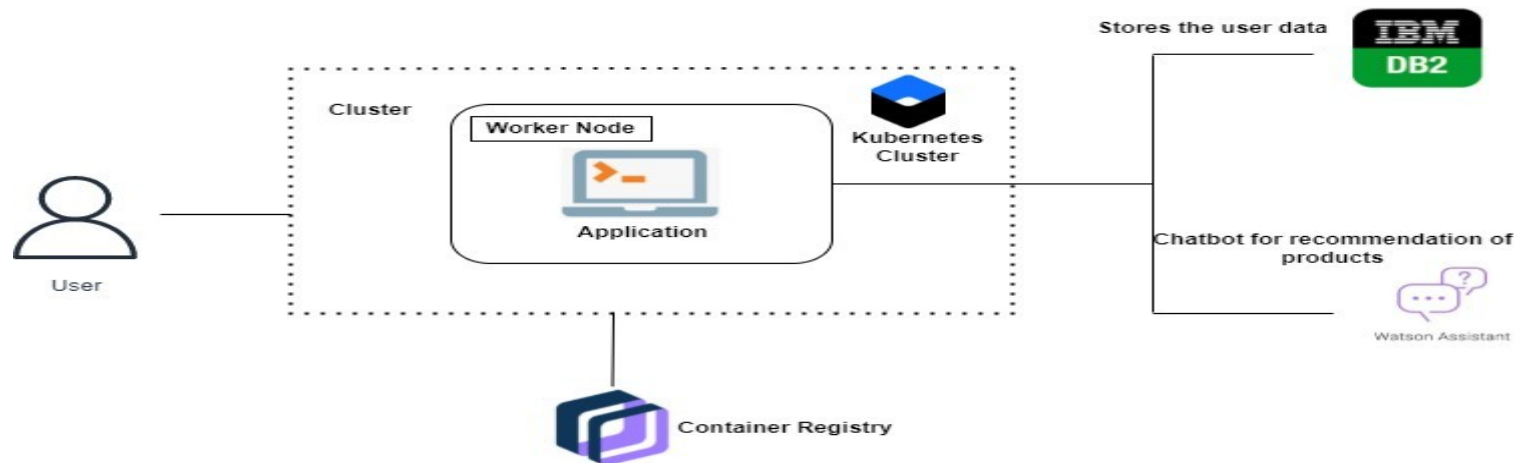


Table-1 : Components & Technologies:

| S.No | Component | Description | Technology |
|------|---------------------------------|---|--|
| 1. | User Interface | User Friendly Web Application and user interactive chatbot. | HTML, CSS, JavaScript ,Flask Web Framework. |
| 2. | Application Logic-1 | Used for Designing Web Pages using Flask Web Framework | Python |
| 3. | Application Logic-2 | Implementation of chatbot | IBM Watson Cloud Assistant |
| 4. | Application Logic-3 | Making of the chatbot a way more interactive with the customer | IBM Watson Assistant |
| 5. | Cloud Database | For storing user data and product details. | IBM DB2, IBM Cloudant etc. |
| 6. | File Storage | File storage requirements | IBM Block Storage or Other Storage Service or Local Filesystem |
| 7. | External API-1 | Issuing Notification to users regarding product details and mail services tracking. | Sendgrid services. |
| 8. | Infrastructure (Server / Cloud) | Application Deployment on Cloud environment which provides portability,scalability and reliability. | Kubernetes,Docker. |

Table-2: Application Characteristics:

| S.No | Characteristics | Description | Technology |
|------|--------------------------|---|---|
| 1. | Open-Source Frameworks | Lightweight,Easy to code,Many Designing Frameworks are available | Technology-Flask,Python Based Web Framework |
| 2. | Security Implementations | Validating User Data and performs authentication checkup. | e.g. AES-256 Encryptions for providing data security in database storage. |
| 3. | Scalable Architecture | For handling large amount of user's request and product information | Kubernetes,Docker. |
| 4. | Availability | Available and accessed anywhere through any devices and operates 24/7. | IBM Cloud |
| 5. | Performance | Handling Capacity is high it handles petabytes of data for storage (1000TB) | IBM Cloud Database. |