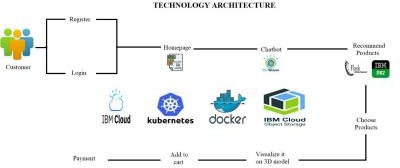
# Project Design Phase-II Technology Stack (Architecture & Stack)

|  |  |
| --- | --- |
| Date | 24 October 2022 |
| Team ID | PNT2022TMID01380 |
| Project Name | SMART FASHION RECOMMENDER APPLICATION |
| Maximum Marks | 4 Marks |

**Diagram - Architecture :**



# Way Chatbot:

**FLASK IBM CLOUD IBM DB2 KUBERNETES DOCKER**

# Table-1 : Components & Technologies:

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Component** | **Technology** | **Description** |
| 1. | User Interface | HTML, CSS, JavaScript / Angular Js / React Js. | User can interact with the application through Chatbot for good Human-computer interface. |
| 2. | Application Logic-1 | Java Python | The application will have the login/sign up page where the user can login into the main dashboard or they can register into the application. |
| 3. | Application Logic-2 | IBM Watson STT service | The application contains a Chatbot where the user needs to give their details like   * gender, * age * type of product   these were they wish to buy using Watson assistant through chatbot. |
| 4. | Application Logic-3 | IBM Watson Assistant | User’s will get the recommendations based on their interests, can get the details about offers, discounts and chatbot will send a notification to customers if the order is confirmed. |
| 5. | Database | MySQL, NoSQL, | Customer’s details and order are stored in the database and whenever we can be fetch and retrieve data from database. |
| 6. | Cloud Database | IBM DB2, IBM Cloudant | With use of Database Service on Cloud, user can access all the data stored in the cloud over a network from any device and user’s data are stored in a well secure manner. |
| 7. | File Storage | IBM Block Storage or Other Storage Service or Local Filesystem | Previously ordered product details and other customer details can be stored in the IBM Block Storage as the data kept inside are highly protected. |

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| --- | --- | --- | --- |
| 8. | Infrastructure (Server / Cloud) | Local, Cloud Foundry, Kubernetes, Docker | Chatbot with updated services can be deployed in an IBM cloud by using Watson assistant. |

**Table-2: Application Characteristics:**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Characteristics** | **Technology** | **Description** |
| 1. | Open-Source Frameworks | Python - Flask | * Flask is a web framework in Python is used in the implementation of smart fashion recommender application. |
| 2. | Security Implementations | Container Registry, Kubernetes Cluster. | * This application uses Container Registry in IBM cloud so that the user details are kept as more secure and confidential. • User have to confirm the login while logging in to avoid any misuse of the credentials. |
| 3. | Scalable Architecture | Container Registry, Kubernetes Cluster. | * The Smart Fashion Recommender Application is more useful whenever user’s make online purchase and it’s demand increase at festival season’s to know about the available offers and discounts. |
| 4. | Availability | Docker, Kubernetes Cluster. | * Docker helps to improve the network management so that the application can be accessed at anytime. |
| 5. | Performance | Docker, Kubernetes Cluster. | * The performance of this application is high. * efficient as the network traffic can be easily managed. |