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

Date	06TH October 2022
Team ID	PNT2022TMID28446
Project Name	Smart Fashion Recommender Application
Maximum Marks	4 Marks

Technical Architecture:

User / Customer — Input — Login / Register — Smart Fashion Recommender Application — Search Product — ChatBot Response — Chatbot — Store Data — Cloudant DB — IBM Cloud Object Storage — ADMIN — Manage All Datas — Flask — IBM DB2 — kubernetes — Recommend Product
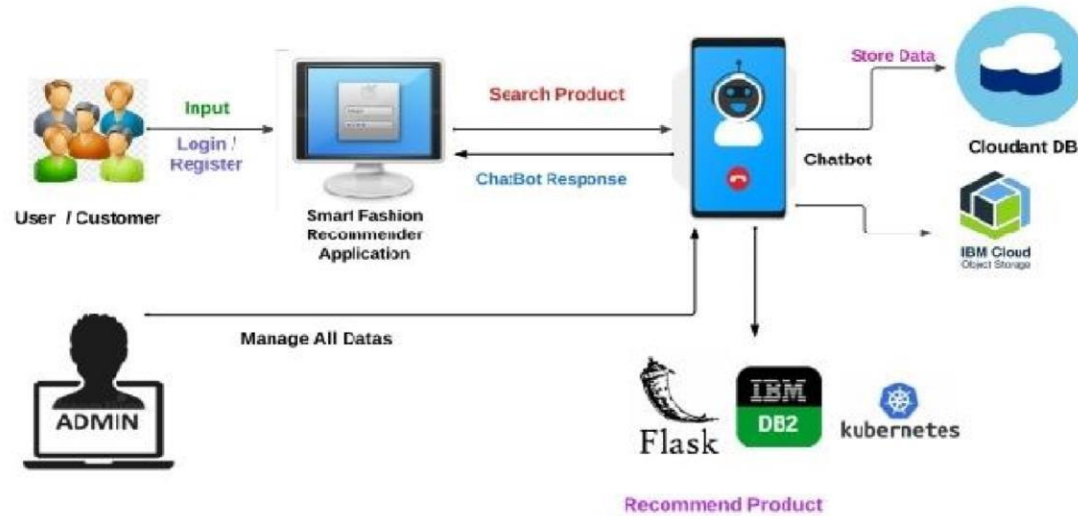
Table-1: Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	user interaction with application e.g. Web UI & Chatbot	HTML, CSS,Bootstrap JavaScript
2.	Application Logic	Logic for a process in the application	Python - Flask
3.	Email Service	For verify user and mail ads	SendGrid
4.	Chatbot	Get details from user and store	IBM Watson Assistant
5.	Cloud Database	Database Service on Cloud	IBM DB2
6.	Infrastructure (Server / Cloud)	Application Deployment on Cloud System	Docker, Cloud Foundry, Kubernetes, etc.

Table 2: Application Characteristics

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Used Web technologies	HTML , CSS , JS , Python , Flask
2.	Security Implementations	User verification through Email Service	Sendgrid
3.	Scalable Architecture	Run the app in Local and Cloud System	Docker and Kubernetes
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Docker , IBM Cloud
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	IBM Cloud , Kubernetes Cluster , Container Registry