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

Date	07NOVEMBER2022
Team ID	PNT2022TMID30355
Project Name	Smart Fashion Recommender System
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

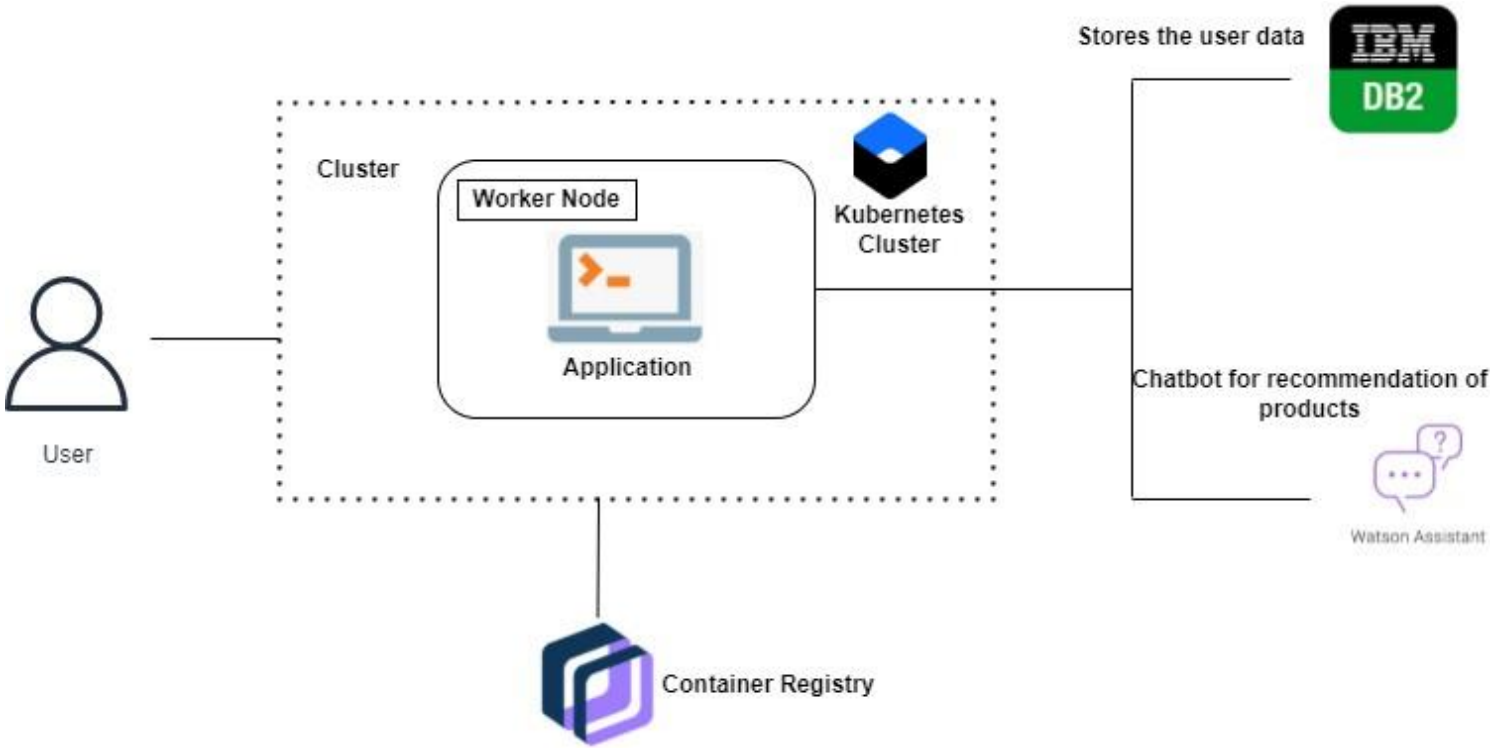

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The User interact with the application through WEB UI.	HTML, CSS, JavaScript, tailwind, Bootstrap
2.	Application Logic-1	Logic for a process in the application	Python (Flask Framework)
3.	Application Logic-2	Logic for a process in the application	IBM Cloud Object model and Container Registry
4.	Application Logic-3	Logic for processing the Chatbot services	IBM Watson Assistant
5.	Database	Relational Database	MySQL
6.	Cloud Database	Database Service	IBM DB2
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	Google and Facebook Log in API interface.
9.	External API-2	Purpose of External API used in the application	Product Price API
10.	Machine Learning Model	Purpose of Machine Learning Model	Recommendation System through Chatbot.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration	Kubernetes and docker

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	open-source frameworks used	Flask, tailwind, and bootstrap
2.	Security Implementations	all the security / access controls implemented, use of firewalls	SHA-256, AES encryption standard used here.

S.No	Characteristics	Description	Technology
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Stateless Architecture used here. In order to make stateless architecture we can do with the help of postgresql
4.	Availability	Justify the availability of application	Load balancers formed through many servers
5.	Performance	Design consideration for the performance of the application	For increasing the performance , we have to use the Content delivery network for static files and cache for efficiency.