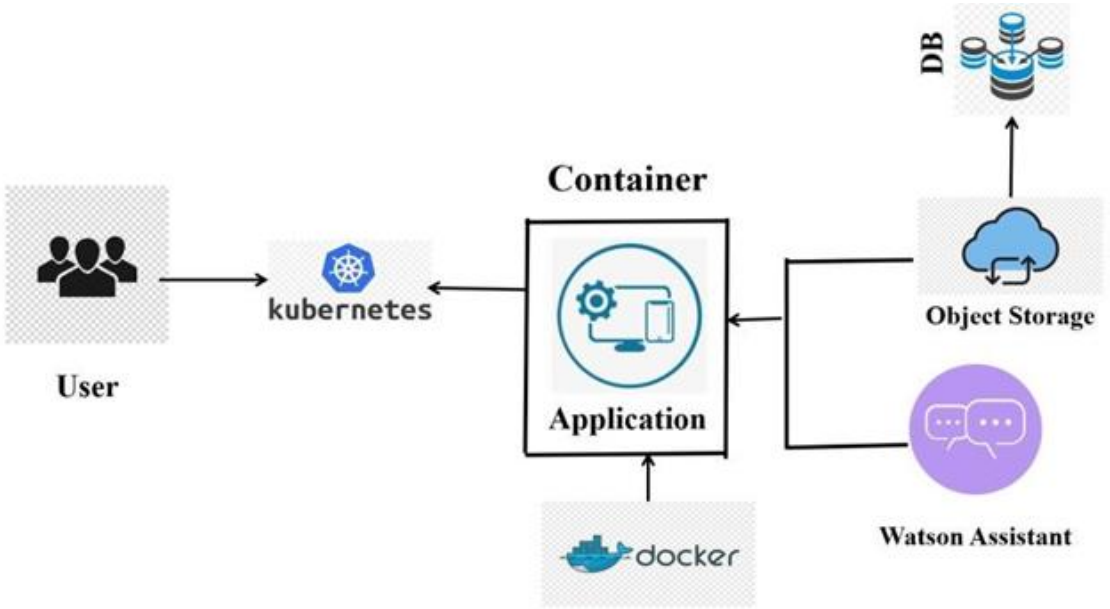
Project Design Phase-II
Technology Architecture

Date	27 October 2022
Team ID	PNT2022TMID41739
Project Name	Project - Smart Fashion Recommender Application
Maximum Marks	4 Marks

Technical Architecture:

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



Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	This platform is a web-based application that allows users to quickly utilise and understand the application.	HTML, CSS, JavaScript ,bootstrap.
2.	Application Logic-1	Recommender systems seek to provide consumers with personalized online product or service suggestions in order to solve the rising issue of online information overload and improve customer relationship management.	Python/JavaScript
3.	Chat-bot	On this platform, chat bots provide quick communication with customers. It is used to infer client preferences and provide visitors with customized experiences. E commerce chatbots may be programmed to: Assist a buyer in completing a transaction. The reasoning for a procedure in the application	IBM Watson Assistant
4.	Application Logic-2	A set of algorithms called as collaborative filtering provides multiple techniques for discovering comparable users or products, as well as numerous methods for determining ratings based on the ratings of comparable users. Depending on your choices, you may use a collaborative filtering technique.	Machine Learning

5.	Database	People's information, such as that of clients or users, is typically saved in databases. Databases, for instance, are used by social media platforms to store user data such as names, email addresses, and usage trends.	MySQL
6.	Cloud Database	IBM Db2 provides the capabilities required for developers, DBAs, and enterprise architects to perform real-time analytics and low-latency transactions for even the most demanding workloads.	IBM DB2
7.	File Storage	File storage, also known as file-level storage or filebased storage, is a hierarchical storage system used to organise and store data on a networkattached storage (NAS) device or on a computer hard drive.	IBM Block Storage
8.	External API-1	Docker, a software platform, makes it simple to design, test, and deploy applications. Docker packages software into standardised units called containers, which contain all of the required code, libraries, system tools, and runtime.	Docker
9.	External API-2	Kubernetes automates operational activities connected with container management and provides built-in commands for application deployment, update rollout, scaling up and down to fit changing requirements, monitoring, and more.	Kubernetes
10.	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.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask, a Python-based framework built on Werkzeug and Jinja2, is used to construct web applications. The Flask framework has advantages, such as a built-in development server and a rapid debugger.	Python Flask
2.	Security Implementations	Implement - After all of the planning, designing, and training is completed, the control owners may put the new processes in place and begin implementing the new controls during this phase.	SHA-256, RSA
3.	Scalable Architecture	Scaling design can involve a number of actions, ranging from ensuring uniformity through systems to spreading design thinking techniques across the Organisation and beyond.	SaaS
4.	Availability	The availability of software is the property of being available and ready to fulfil its job when needed. This wide perspective encompasses what is commonly referred to as dependability.	Cloud storage
5.	Performance	Design considerations for application performance (number of requests per second, use of cache, use of CDNs)	python