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

Date	16 October 2022
Team ID	PNT2022TMID43829
Project Name	Smart Fashion Recommender Application
Maximum Marks	4 Marks

Technical Architecture:

**Smart Fashion Recommender Application**
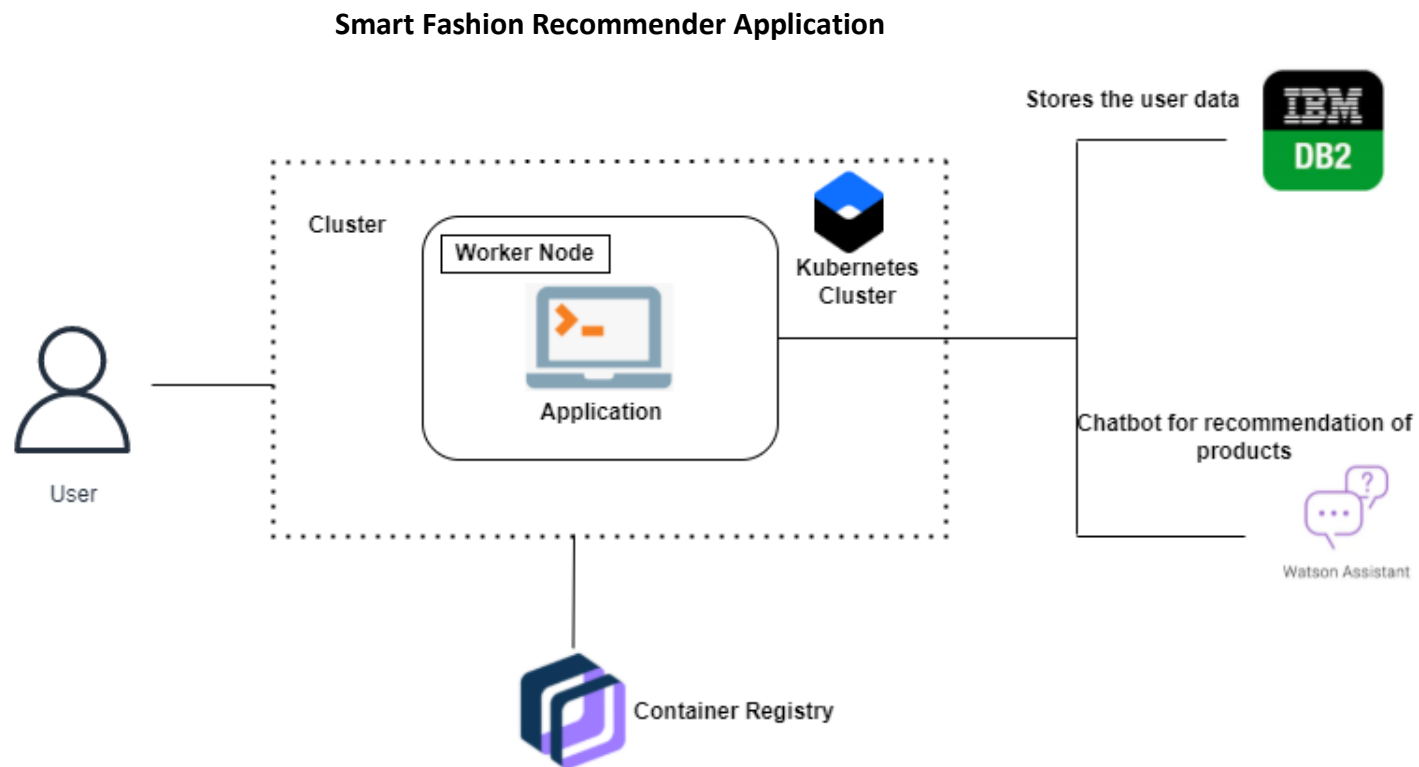
CHAT-BOT Technical Architecture
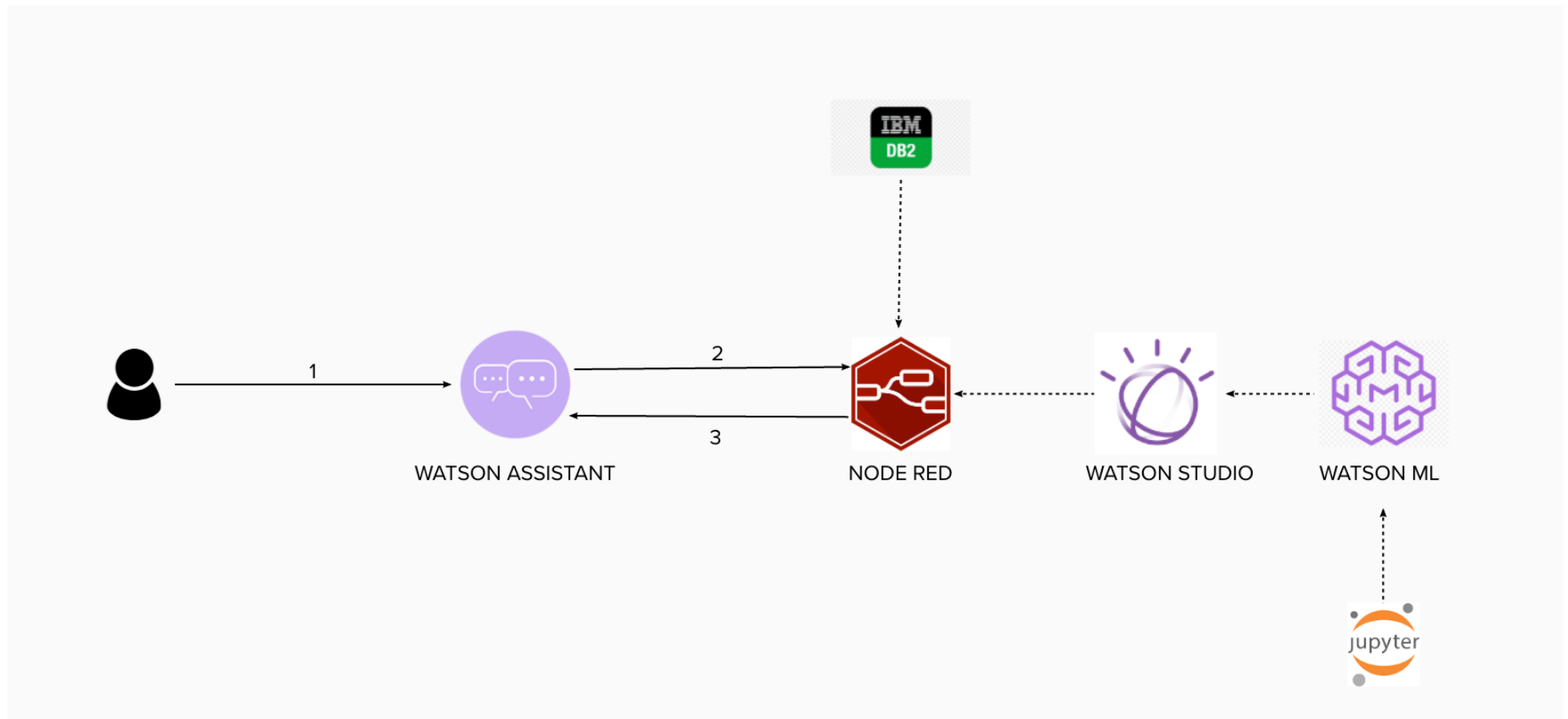
Table-1 : Components & Technologies:

S.No	Component	Technology	Description
1.	User Interface	HTML, CSS, Bootstrap Java Script.	User interaction with application e.g – Web UI & Chatbot.
2.	Application Logic-1	Java python	The application will have the login/sign up page, where user can login into the main dashboard or they can register into the application,
3.	Application Logic-2	IBM Watson STT services	The application contains a Chat-bot where the user is need to give their details like • Gender • Age • Type of product These were they wish to buy using Watson assistant through chat-bot.
4.	Application Logic-3	IBM Watson Assistant	User will get the recommendations based on their interests, can get the about the offers, discount and chat-bot will send notification to customer, if the order is conformed.
5.	Database	MySQL, NoSQL.	Customer details and order are stored in the database and whenever we can fetch and retrieve data from database.
6.	Cloud Database	IBM DB2, IBM Cloudant	With use of the database service on cloud, user can access all the data 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 storied in IBM Block Storage as the data kept inside are highly secure.
8.	Infrastructure (Server / Cloud)	Local, Cloud Foundry, Kubernetes, etc.	Chat-bot with update services can be deployed in an IBM cloud by using Watson assistant.

Table-2: Application Characteristics:

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