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

Date	15 th October 2022
Team ID	PNT2022TMID08162
Project Name	Project – SMART FASIHON RECOMMENDER APPLCATION
Maximum Marks	4 Marks

Technical Architecture:

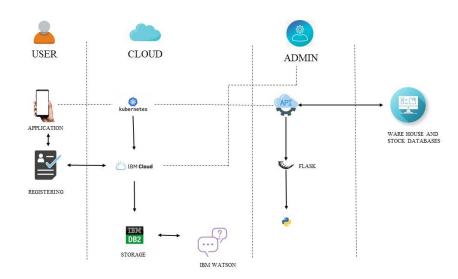


Table-1: Components & Technologies:

S No	Component	Description	Technology
1.	User Interface	User access to the application through the mobile application.	HTML, CSS, JavaScript, Flask
2.	Application Logic-1	Creating an application interface	Python & Flask
3.	Application Logic-2	Creating an AI assistant that gives Personal recommendations on user choice and help for easier booking of product.	IBM Watson Assistance
4.	Application Logic-3	Sending notifications to the user when the price drops of items in Wishlist.	SendGrid services
5.	Cloud Database	DB2 product is extended with the support of Object-Oriented features and non-relational structures with XML	IBM DB2 & Mango DB
6.	File Storage	Files are stored in the local storage and stored in the cloud.	IBM Block Storage or Other Storage Service or Local Filesystem
7.	External API-1	Use this REST API to manage supply chain & logistics management, warehouse, order management.	IBM REST API
8.	External API-2	Use this API to return information that sellers can use to configure promoted listings as campaigns	Recommendation API

9.	Deep Learning Model	Creating an algorithm to do things like identifying the objects in an image for easier navigation of desired product.	Object Recognition Model, CNN etc.
10.	Infrastructure (Cloud)	IBM Cloud App Configuration is a centralized feature-management and configuration service on IBM Cloud.	IBM Cloud Foundry & Kubernetes

Table 2: Application Characteristics:

S No	Characteristics	Description	Technology
1.	Open-Source Frameworks	There are no open-source frameworks in this application.	Python
2.	Security Implementations	Blockchain technology is used for Security implementation its private framework protects all data.	Blockchain
3.	Scalable Architecture	Users are provided with Real-Time Customer Services to get proper guidance, accurate result on the search and to monitor user preferences.	IBM Cloud

4.	Availability	Product recommendations, Trail products, Analyse the past behaviour of customers & suggestions are made, Providing customers with accurate shipping and tracking information.	IBM Watson Assistant, Collaborative filtering algorithm.
5.	Performance	The inventory management software is used to update daily Stocks and shows the day-to-day updates of the products.	Inventory management software