

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

Technical Architecture:

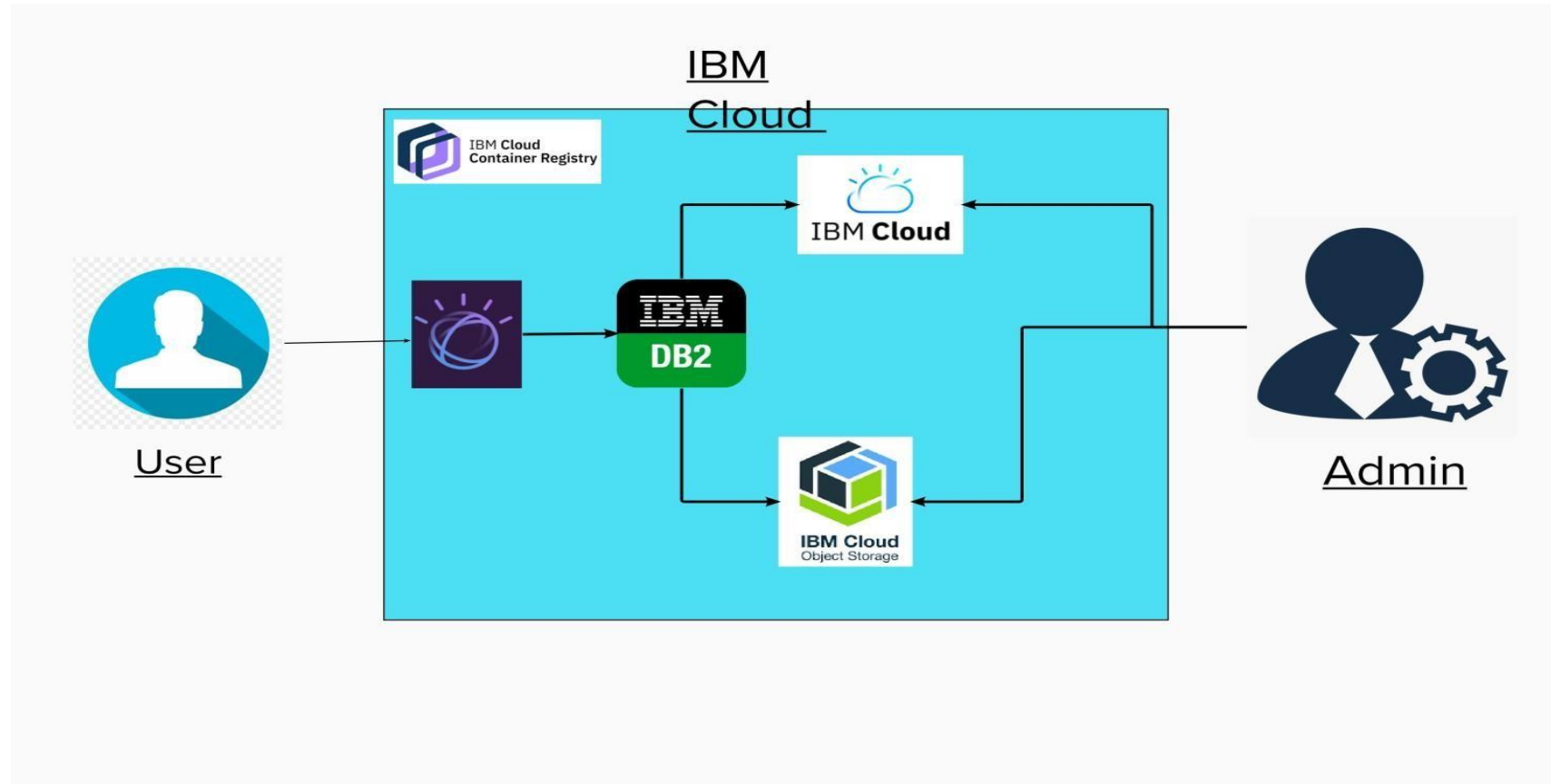


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User can interact with the application through Chatbot.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	The application will have the login/sign up page where the user can login into the main dashboard, or they can register into the application	Java / Python
3.	Application Logic-2	The application contains a Chatbot where the user needs to give their details like gender, age and type of product they wish to buy.	IBM Watson STT service
4.	Application Logic-3	User's will get the recommendations based on their interests, can get the details about offers, discounts and chatbot will send a notification to customers if the order is confirmed.	IBM Watson Assistant
5.	Database	Customer details and orders are stored in the database.	MySQL, NoSQL, etc.
6.	Cloud Database	With use of Database Service on Cloud, user can access all the data stored in the cloud over a network from any device and user's data are stored in a well secure manner.	IBM DB2, IBM Cloudant etc.
7.	File Storage	Previously ordered product details and other customer details can be stored in the IBM Block Storage as the data kept inside are highly protected.	IBM Block Storage or Other Storage Service or Local Filesystem
8.	Infrastructure (Cloud)	Chatbot with updated services can be deployed in an IBM cloud by using watson assistant.	Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask, a web framework in 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 the user details are kept as more secure and confidential. Users have to confirm the login while logging in to avoid any misuse of the credentials.	Container Registry, Kubernetes Cluster
3.	Scalable Architecture	The smart fashion recommender application is more useful whenever user's make online purchase and its demand increase at festival seasons to know about the available offers and discounts.	Container Registry, Kubernetes Cluster
4.	Availability	Docker helps to improve the network management so that the application can be accessed at any time.	Docker, Kubernetes Cluster
5.	Performance	The performance of this application is high and efficient as the network traffic can be easily managed.	Docker, Kubernetes Cluster