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

Date	03 October 2022
Team ID	PNT2022TMID17806
Project Name	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 table 1 & table 2

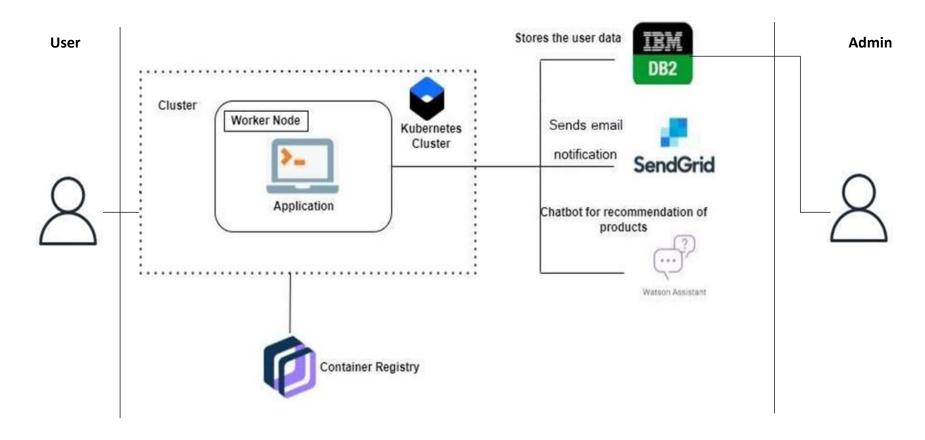


Table-1: Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	The user and admin have individual logins containing add products and view products UI.	HTML, CSS, JavaScript, Flask, Bootstrap
2.	Application Logic-1	Admin can add manage the products and the customers can view those products.	Python, JavaScript
3.	Application Logic-2	A chatbot is used in website which helps the user in recommendation of products.	IBM Watson Assistant
4.	Database (Cloud)	Data about the list of user login and passwords and product details are stored.	IBM DB2
6.	File Storage	File storage requirements for images and buckets.	IBM Object Storage
7.	Mailing APIs	To send emails from the application to the customers about the orders.	SendGrid
8.	Cloud Infrastructure	Application Deployment on Cloud	Docker, Kubernetes, IBM Cloud

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask is an open-source web framework. The web application is built using Flask	Flask
2.	Security Implementations	Kubernetes-native security provides richer insights by tying into Kubernetes' declarative data to discover vulnerabilities in Kubernetes as well as containers.	Kubernetes, Containers
3.	Scalable Architecture	Handles large number users on demand with increased security	Container registry, Kubernetes
4.	Availability	The application can be accessed at any time due to cloud database.	Docker, IBM Cloud
5.	Performance	Handles many numbers of user's requests without ambiguity	Docker, Kubernetes