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

Date	19 October 2022	
Team ID	PNT2022TMID03825	
Project Name	Project - Inventory Management For Retailers	
Maximum Marks	4 Marks	

Technical Architecture:

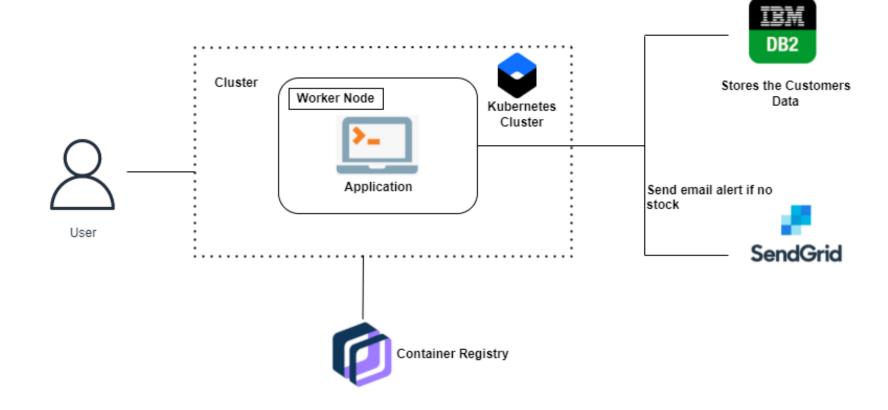


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript, React Js
2.	Application Logic - 1	Alert retailers in case of low stock	Python - Flask, Sen
3.	Application Logic - 2	Chatbot for CRM	IBM Watson Assistant
4.	Cloud Database	Database Service on Cloud	IBM DB2
5.	File Storage	File storage requirements	IBM Object Storage
6.	Infrastructure (Server / Cloud)	Cloud Server Configuration	Local, Cloud Foundry, Kubernetes.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Used open-source frameworks for styling webpage and building web application	Python flask, Bootstrap
2.	Security Implementations	To keep user data secure, verify ownership of the website, prevent attackers from creating a fake version of the site, and convey trust to users.	SSL, IBM Cloud security
3.	Scalable Architecture	3 – tier architecture MVC	Web server - HTML, CSS, JS Application server - Python Flask, Docker, Container Registry Database server - IBM DB2
4.	Availability	To evenly distribute network traffic to prevent failure caused by overloading a particular resource	IBM Load Balancer
5.	Performance	Use of local machine Cache memory	IBM Cloud, CDN