

Project Design Phase-2

Technology Architecture (Architecture & Stack)

Date	15-October 2022
Team ID	PNT2022TMID00176
Project Name	Inventory Management System for Retailers
Maximum Marks	4

Technical Architecture:

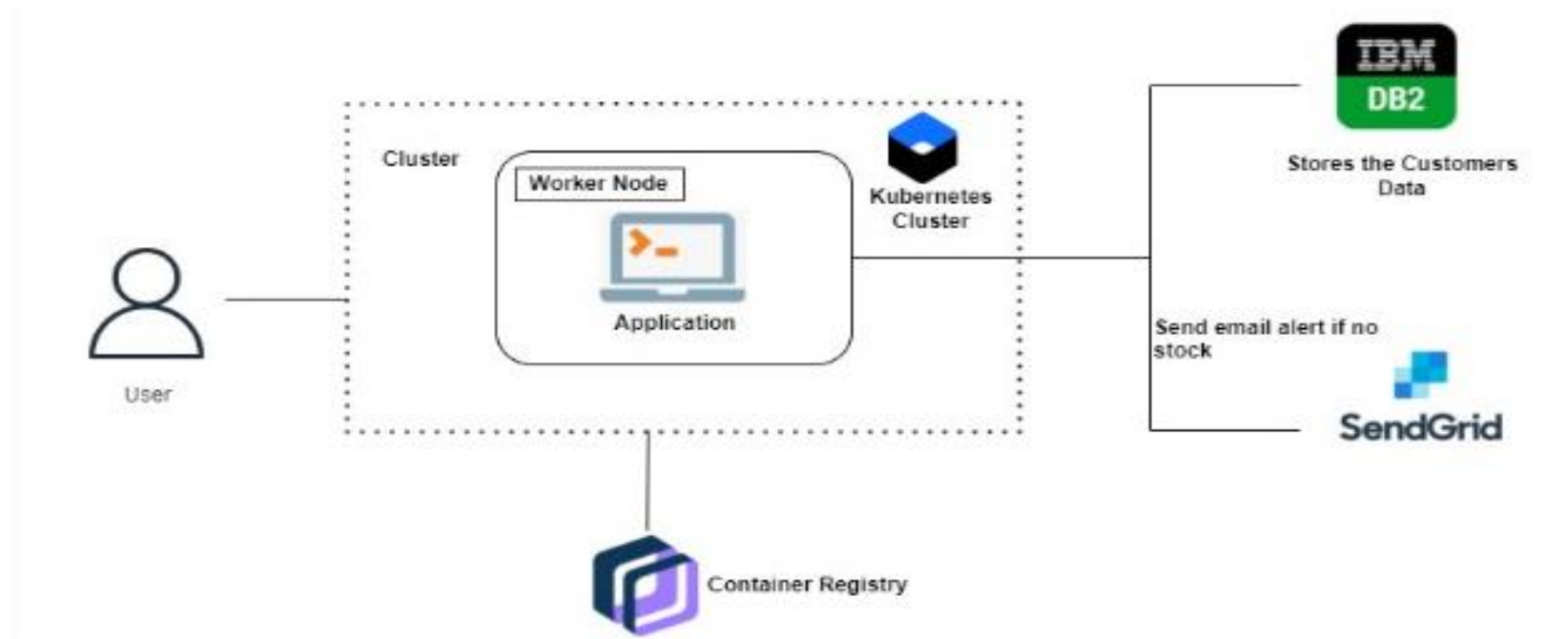


Table-1: Components and Technologies:

S. No	Component	Description	Technology
1.	User Interface	How user interacts with application, Ex. Mobile App, Chatbot	HTML, CSS, Python, MySQL, Flask
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	SendGrid
4.	Application Logic-3	Logic for a process in the application	IBM Watson Application
5.	Database	Data Type, Configuration etc.	MySQL
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloud
7.	File Storage	File storage requirements	IBM Object Storage

Table-2: Application characteristics:

S. No	Characteristics	Description	Technology
1.	Open-source frameworks	Microweb framework written in Python	Flask
2.	Security implementation	A set of cryptographic hash functions	SHA-256
3.	Scalable Architecture	Kubernetes is a open source container orchestration system for automating software deployment, scaling, and management.	Kubernetes
4.	Availability	To customize settings for the docker CLI. The configuration file uses JSON formatting.	Docker CLI
5.	Performance	The performance will be high because there will be no network traffics in the application	Kubernetes is cluster