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

Date	15th October 2022
Team ID	PNT2022TMID08788
Project Name	Project - Cloud based Web Application for Inventory Management
Maximum Marks	4 Marks

Technical Architecture:

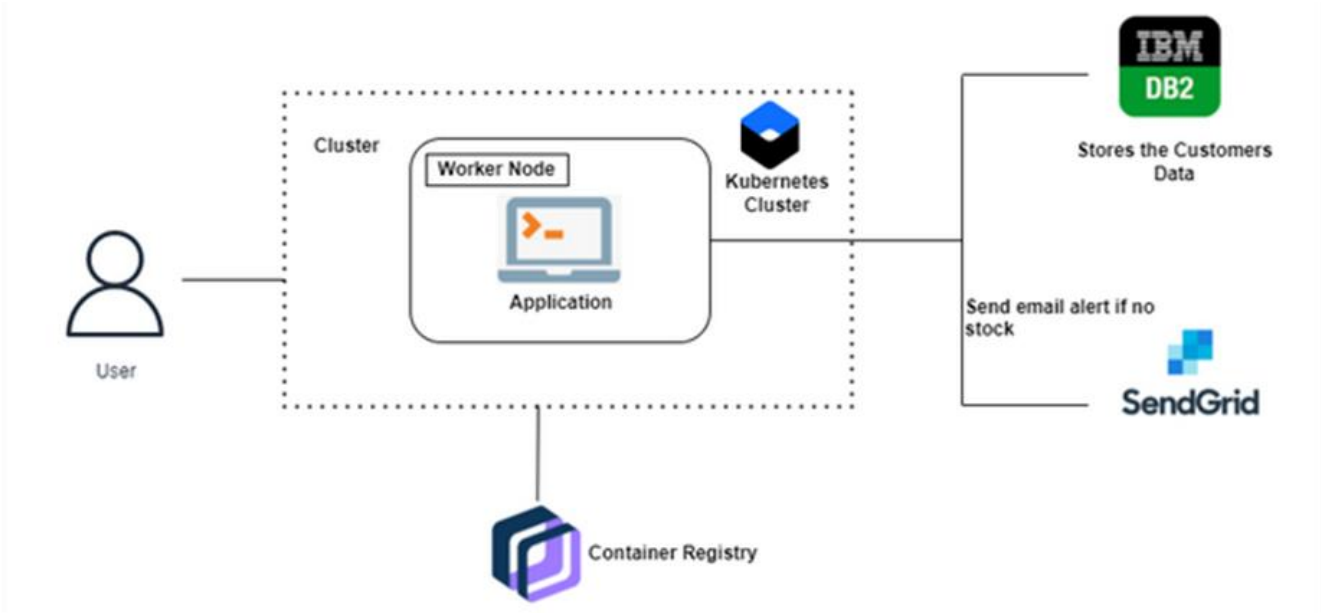

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The interaction between the user and application e.g., Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Framework used for designing the application.	Java / Python
3.	Application Logic-2	Accessing the cloud and storing the details of the users both Inventory and User.	IBM Watson STT service
4.	Application Logic-3	Logic for a process Docker is an open-source platform for building, deploying, and managing containerized applications in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used They make it easier for developers to store, manage and deploy container images. in the application	IBM Weather API, etc.
9.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Application Deployment on Local System / Cloud	Python - Flask
2.	Security Implementations	Container registry and Kubernetes Cluster are used for encryption of data.	Container registry and Kubernetes Cluster
3.	Scalable Architecture	Kubernetes Cluster allow containers to run across multiple machines and environments.	Kubernetes Cluster
4.	Availability	Kubernetes Cluster provides all time availability.	Kubernetes Cluster
5.	Performance	Docker improves the application performance.	Docker