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

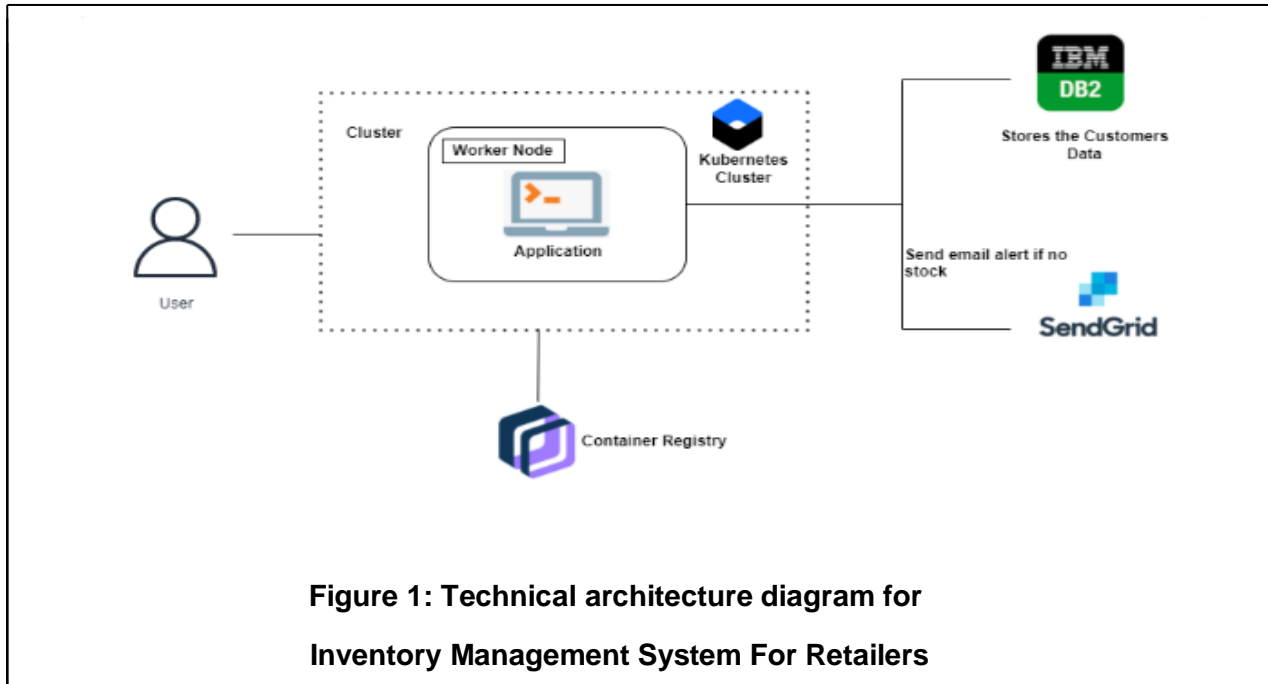| Date	03 October 2022
Team ID	PNT2022TMID03839
Project Name	Inventory Management System For Retailers
Maximum Marks	4 Marks

Technical Architecture:

Figure 1: Technical architecture diagram for

Inventory Management System For Retailers

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic	Logic for a process in the application	Java / Python
3.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
4.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
5.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
6.	External API	Purpose of External API used in the application	IBM Weather API, etc.
7.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	React JS/Flask
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	IBM Cloud Security
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Cloud storage
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Python-Flask
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Key Performance Indicator(KPI)