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

Date	15th October 2022
Team ID	PNT2022TMID12670
Project Name	Inventory Management System for Retailers

Technical Architecture:

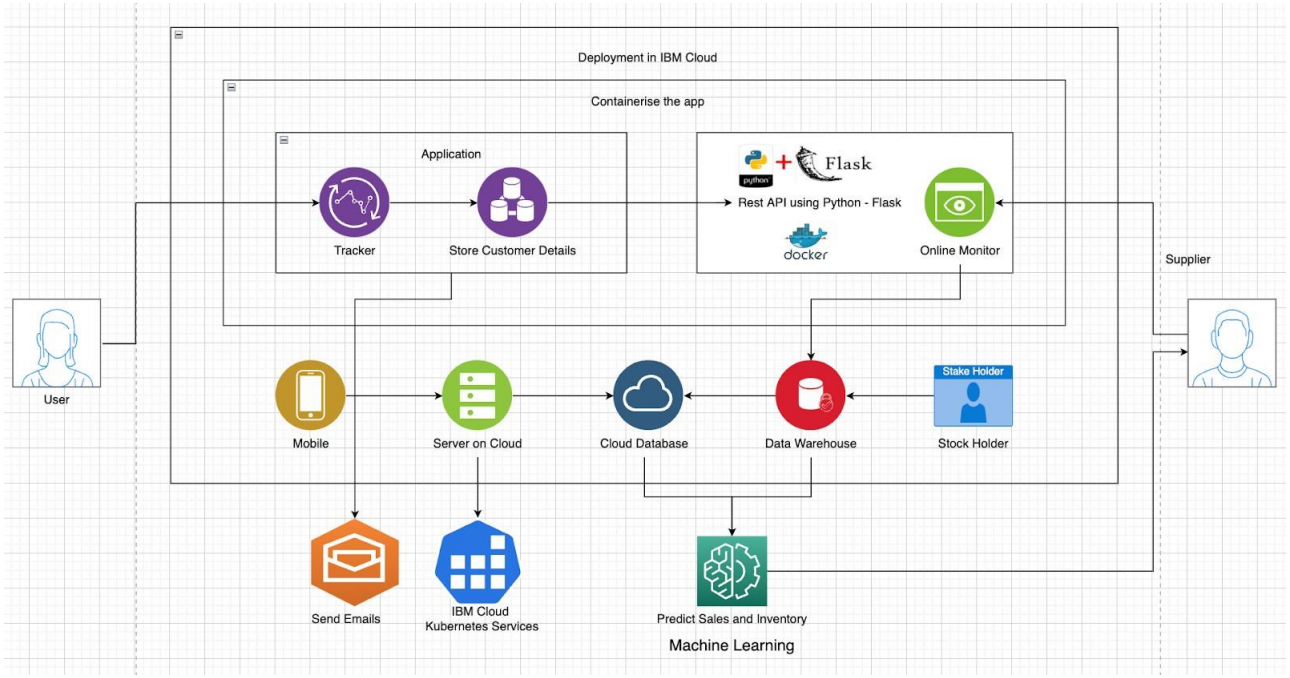

Table-1:

Components & Technologies:

S.No.	Component	Description	Technology
1.	User Interface	How the user interacts with the application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic	The logic for a process in the application	Python-Flask
3.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
4.	Cloud Database	Database Service on Cloud	IBM DB2
5.	File Storage	File storage requirements	IBM Cloud Object Storage
6.	App Container	Contain the whole application in a single container	Docker Container / IBM Container Registry
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration:	Local, Cloud Foundry, Kubernetes, etc.
8.	Send Mails	Sending emails when the stocks are less in the Inventory	IBM SendGrid

Table-2:
Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	The web technologies listed are open source	HTML, CSS, JS, Bootstrap, Flask
2.	Security Implementations	User login and authentication are done to provide secure access. The latest updated versions of the tool are used.	IBM Cloud Security, cookies.
3.	Availability	The system availability is high, we make sure the unwanted DB access is minimized through SQL and code optimization.	IBM DB2, IBM Container registry
4.	Scalable Architecture	Scalable cloud architecture is made possible through virtualization.	Docker, Kubernetes
5.	Performance	We provide fast access times and response times. Deployment is easy and fast by containerization	Flask, Docker, DB2