

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

Date	03October 2022
Team ID	PNT2022TMID20685
Project Name	Project: Inventory Management System for Retailers
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

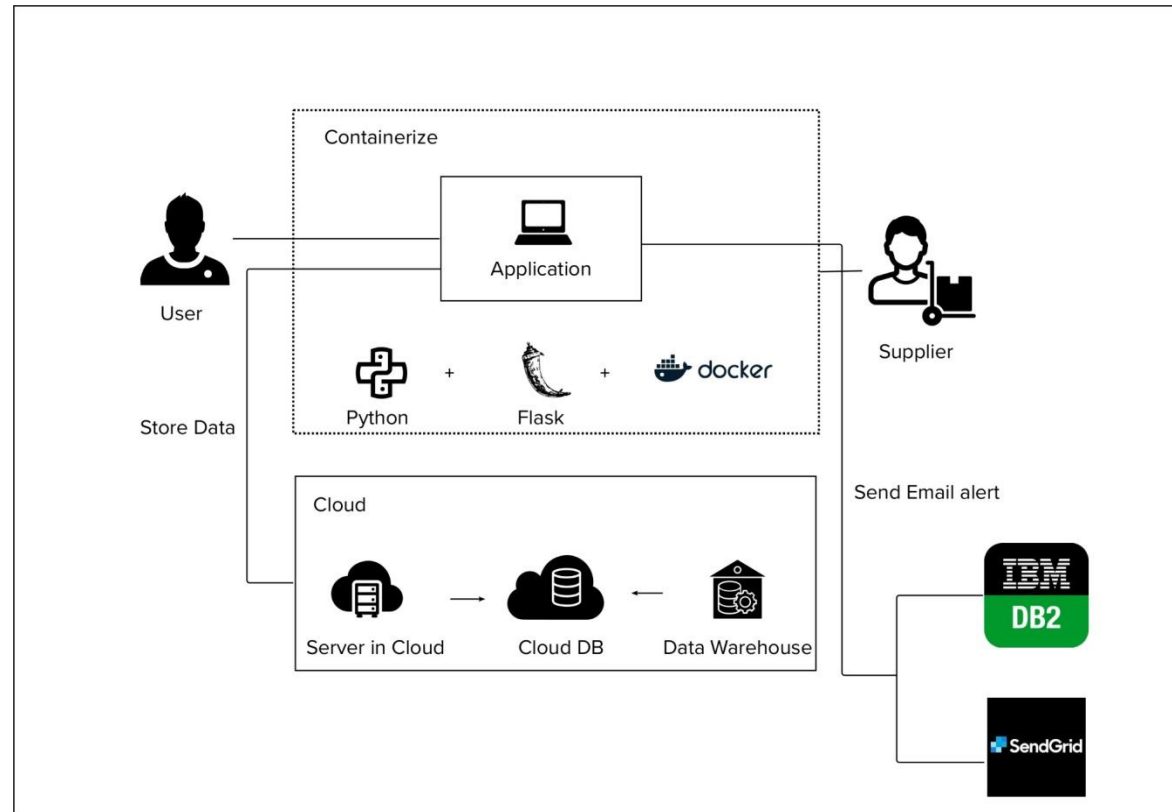


Table - 1 : Components & Technologies:

S .No	Component	Description	Technology
1.	User Interface	User interacts with application by using Web UI, Mobile App, Chabot etc.	HTML, CSS, JavaScript / Python flask/ IBM Cloud
2.	Calculating Product Count	By entering barcode details into the application	Barcode Scanner

3.	Alert and notification	Alerting the retailers regarding the low stock count of the product	Send Grid
4.	Database	Data Type, Configurations.	MySQL, NoSQL, etc.
5.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloud ant etc.
6.	Chat	Chat with Watson assistant	IBM Watson Assistant
7.	File Storage	File storage requirements	IBM Object Storage.
8.	Infrastructure	Cloud Server Configuration :	Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S .No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Styling our page, Python flask micro Framework	Python Flask, Bootstrap.
2.	Security Implementations	For securing our cloud data.	SSL Certificates
3.	Scalable Architecture	Three – tier architecture (MVC)	Technology used are Web server – HTML, CSS, Java Script Application Server – Python Flask Docker Database Server – IBM DB2

S .No	Characteristics	Description	Technology
4.	Availability	Availability of application	Technology used is IBM Load Balancer
5.	Performance	2 requests per seconds, Use of Local Machine Cache Memory	Technology used is IBM Cloud, CDN