

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID43303
Project Name	Inventory Management System for Retailers
Maximum Marks	4 Marks

Technical Architecture:

Inventory Management System for Retailers to facilitate efficient management of stocks.

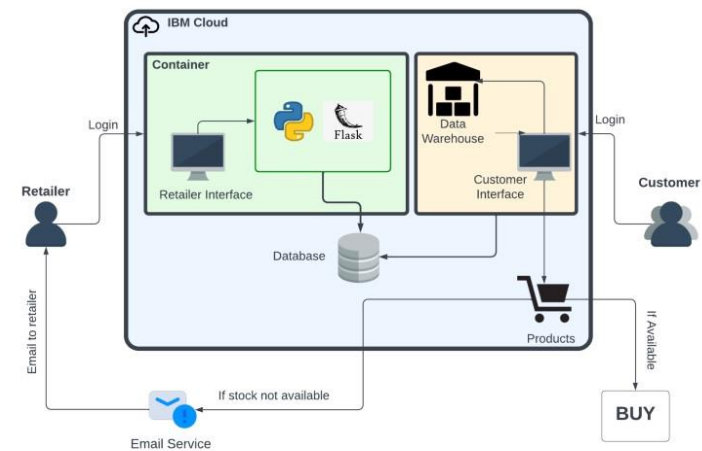
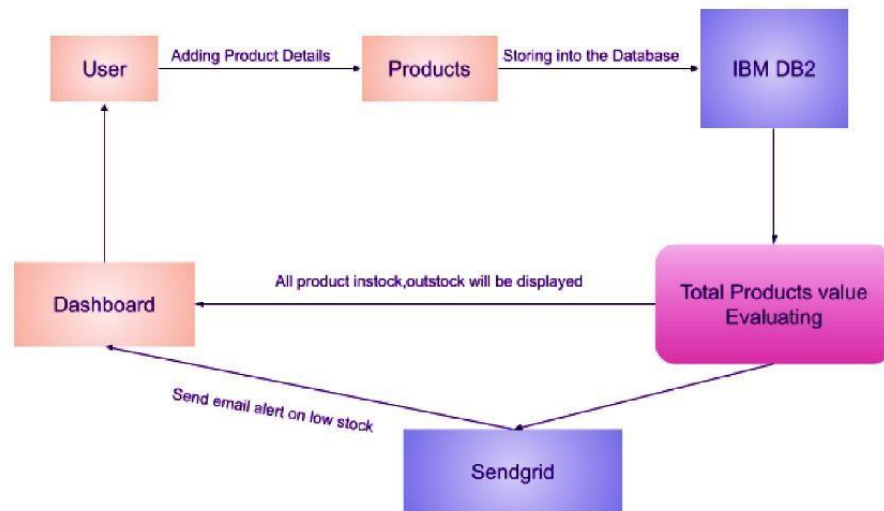


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g., Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript
2.	Application Logic-1	General purpose language	Python
3.	Application Logic-2	Containerization of platform	Docker
4.	Application Logic-3	Micro web framework	Flask
5.	Database	Data Type, Configurations etc.	MySQL
6.	Cloud Database	Database Service on Cloud	IBM DB2
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
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	HTML, CSS, JavaScript, Python	Web Design

2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	Authentication and authorization using password and usernames.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	3-tier architecture-User, Retailer, Cloud Service

References:

- <https://c4model.com/>
- <https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/> <https://www.ibm.com/cloud/architecture>
<https://aws.amazon.com/architecture>
- <https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>