

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

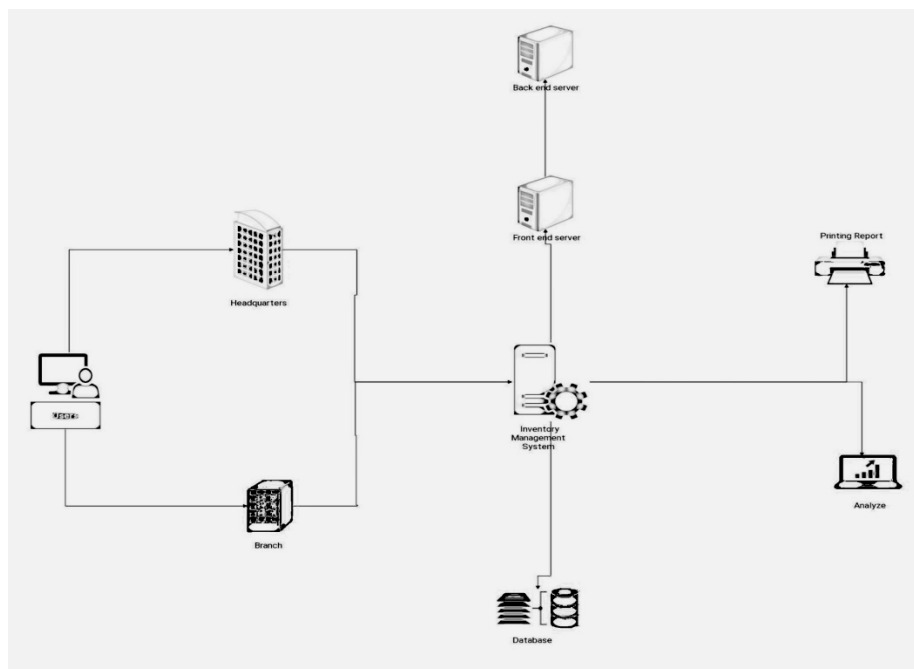
Date	16 October 2022
Team ID	PNT2022TMID29793
Project Name	Inventory Management System For Retailers
Maximum Marks	4 Marks

Technical Architecture:

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

Example: Inventory Management System For Retailers

Reference: <https://images.app.goo.gl/br7iFqAxm1FRBGxy9>



Guidelines:

1. Create a Centralized Record of All Products.
2. Identify Stock Location.
3. Do Regular and Accurate Stock Counts.
4. Automatic stock alerts.
5. User and inventory activity tracking.

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Track your Stock levels at all times.	IBM DB2
2.	Application Logic-1	User and inventory activity tracking.	Python
3.	Application Logic-2	Inventory report creation.	IBM Watson STT service
4.	Application Logic-3	Automatic stock alerts.	IBM Watson Assistant
5.	Database	Present Data.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	Dashboard.	IBM Cognitive Analysis.
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Table Cloud Server Configuration : IBM CLOUD	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Software with a source code that anyone can inspect, modify or enhance.	Descriptive, Diagnostic, Predictive, and Prescriptive.
2.	Security Implementations	Including administrative controls, physical security, logical control, organizational standards	Firewalls. Authentication and authorization. Encryption .
3.	Scalable Architecture	The ability of a hardware/software parallel system to exploit increasing computing resources effectively in the analysis of (very) large datasets.	A package delivery system
4.	Availability	Data is updated in real-time throughout every computing system connected to the network. This process provides greater clarity on actual	Real-time data management

S.No	Characteristics	Description	Technology
		inventory levels and customer sales order history.	
5.	Performance	creating systems to log products, receive them into inventory, track changes when sales occur, manage the flow of goods from purchasing to final sale and check stock counts.	Inventory management.

References:

<https://www.netsuite.com/portal/resource/articles/inventory-management/retail-inventory-management.shtml>

https://www.researchgate.net/publication/352235223_Inventory_management_for_retail_companies_A_literature_review_and_current_trendshtt

<https://itsourcecode.com/fyp/inventory-management-system-project-report-documentation-pdf/>