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

Team ID	PNT2022TMID18287
Project Name	Retail Store Stock Inventory Analytics

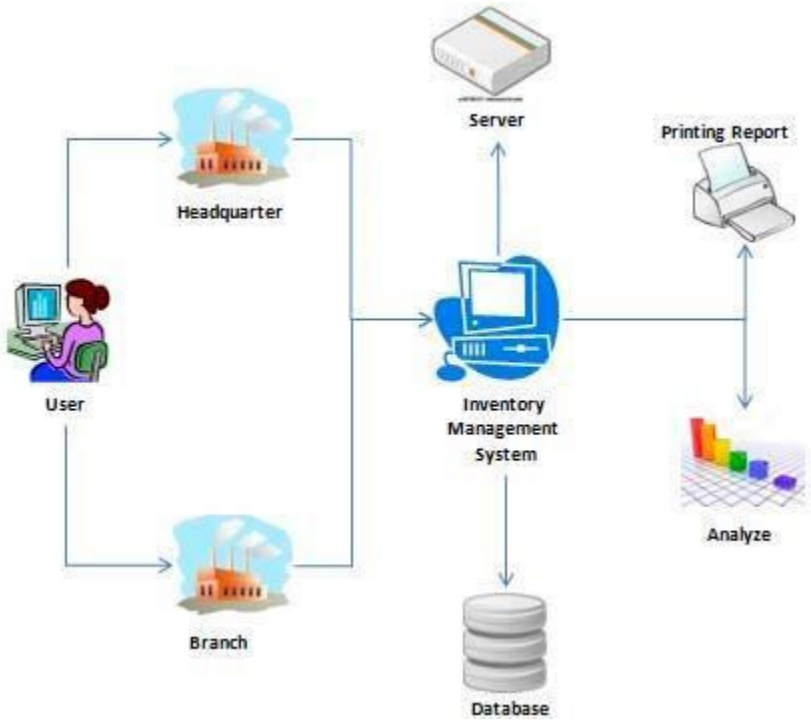

Table-1: Components & Technologies:

S. No	Component	Description	Technology
1.	Frontend - Dashboard	User Interacts with the application	HTML, CSS & JavaScript
2.	Backend - Database	Database Service on Cloud	IBM cloud
3.	Application Logic	Logic for the process in the application	Python
4.	File Storage	Storage of file requirements	IBM object Storage
5.	Infrastructure (Server/Cloud)	Application deployment on cloud	IBM Cloud, Kubernetes
6.	Notification system	Sends email to alert retailer for critical stock	SendGrid
7.	Data Visualization	The data is visualized into different forms	IBM Cognos Analytics, Python

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source framework	Open-Source framework used	IBM Cognos Analytics
2.	Security Implementation	Request authentication using encryption	Encryption techniques
3.	Scalable Architecture	3-tier Architecture	Web server – HTML, CSS, JavaScript Application Server – Python Database Server- IBM Cloud
4.	Availability	This application is available for cloud users	IBM Cloud hosting
5.	Performance	The user can know how to maintain the inventory to increase profits	Machine Learning Algorithms