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

Date	03 October 2022
Team ID	PNT2022TMID52442
Project Name	Retail store stock inventory
Maximum Marks	4 Marks

Technical Architecture:
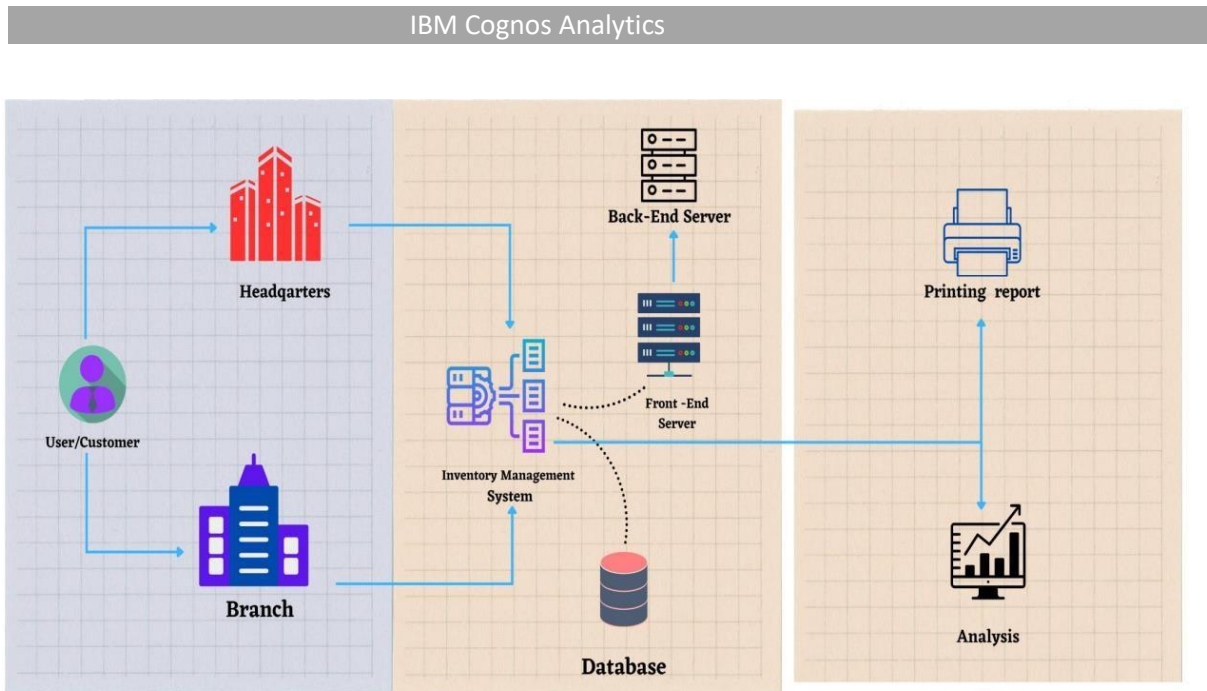
Table-1 : Components & Technologies:

S.NO	COMPONENT	DESCRIPTION	TECHNOLOGY
1	User Interface	The user interacts with application using Web UI	HTML, CSS, JavaScript
2	Data Processing	The data from the dataset is preprocessed	IBM Cognos Analytics
3	Cloud Database	The clean dataset is stored on IBM Cloud	IBM Cloud
4	Data visualization	The data is visualized into different forms	IBM Cognos Analytics, Python
5	Prediction	These Algorithm techniques are used to predict the proper way to make the stock in store.	ML algorithms – Logistic Regression, Linear Regression, Random Forest, ABC Techniques.

Table-2: Application Characteristics:

S.NO	CHARACTERISTICS	DESCRIPTION	TECHNOLOGY
1	Open-Source	Frameworks Opensource frameworks used	IBM Cognos Analytics, Python
2	Security	Implementations Request authentication using Encryptions	Encryptions.
3	Scalable Architecture	Architecture Scalability consists of 3-tiers	Web Server – HTML, CSS, Javascript Application Server – Python Database Server – IBM Cloud
4	Availability	The application is available for cloud users	IBM Cloud Hosting
5	Performance	The user can know how to maintain the inventory to increase profits.	ML algorithms