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

Date	03 October 2022
Team ID	PNT2022TMID05551
Project Name	Retail store stock inventory
Maximum Marks	4 Marks

Technical Architecture:

IBM Cognos Analytics

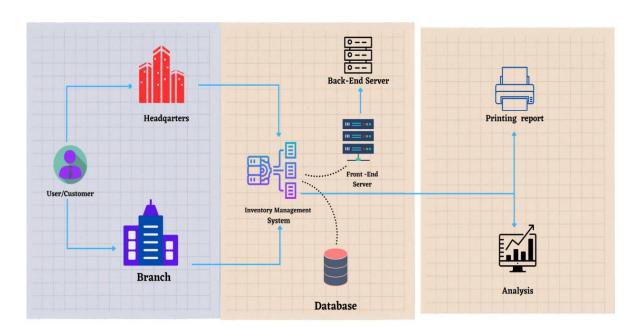


Table-1 : Components & Technologies:

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 pre- processed	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 Open-	IBM Cognos Analytics,
		source frameworks	Python
		used	
2	Security	Implementations	Encryptions.
		Request	
		authentication using	
		Encryptions	
3	Scalable Architecture	Architecture	Web Server – HTML,
		Scalability consists of	CSS, Javascript
		3-tiers	Application Server –
			Python Database
			Server – IBM Cloud
4	Availability	The application is	IBM Cloud Hosting
		available for cloud	
		users	
5	Performance	The user can know	ML algorithms
		how to maintain the	
		inventory to increase	
		profits.	