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

Date	14 October 2022	
Team ID PNT2022TMID21132		
Project Name	Project - Retail Store Stock Inventory Analytics	
Maximum Marks	Marks 4 Marks	

Technical Architecture:

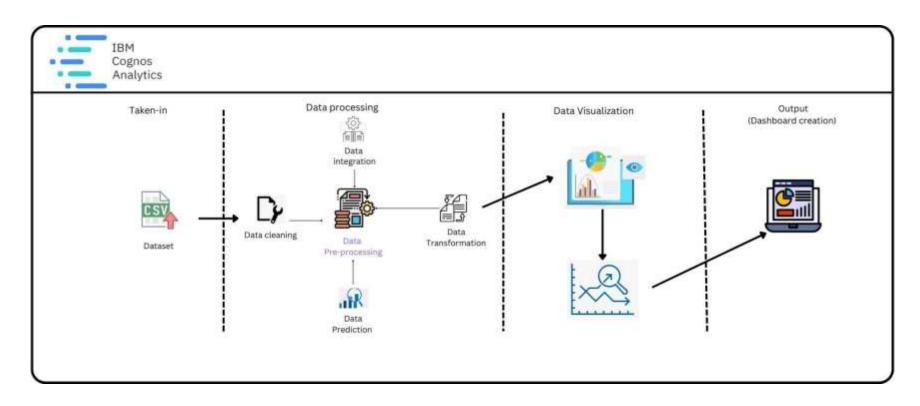


Table-1: Components & Technologies:

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 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

ſ	5.	Prediction	These Algorithm techniques are used to predict the	ML algorithms –Logistic Regression,
			proper way to make the stock in store.	Linear Regression, Random Forest, ABC
				Techniques.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Open-source frameworks used	IBM Cognos Analytics, Python
2.	Security Implementations	Request authentication using Encryptions	Encryptions
3.	Scalable 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