PROJECT DESIGN PHASE-II

TECHNOLOGY STACK (ARCHITECTURE & STACK)

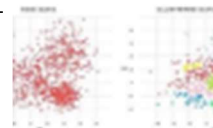| Date	19 October 2022
Team ID	PNT2022TMID04961
Project Name	Retail Store Stock Inventory Analytics
Maximum marks	4 marks

Technical architecture:
Taken-in

Data set

Date Integration

Data Pre-   processing

Data Cleaning Data Transformation

Data Processing Data Prediction

Data Visualization

Output (Dashboard Creation)

Table 1-Components and technologies:

S.no	Components	Description	Technologies
1.	User interface	The user interacts with application using web UI	HTML, CSS, JavaScript
2.	Data Processing	The data from the data set is preprocessed	IBM Cognos Analytics
3.	Cloud Database	The clean data set is stored in 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 theproper way to make the stock in store	ML algorithms Logistics Regressions, Linear Regressions, Random forest, ABC techniques

Table 2- Applications Characteristics:

S.no	Characteristics	Description	Technology
1.	Open source framework	Open source framework is 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