

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

Team ID	PNT2022TMID00387
Project Name	Retail Store Stock Inventory Analytics
Maximum Marks	4 Marks

Technical Architecture:

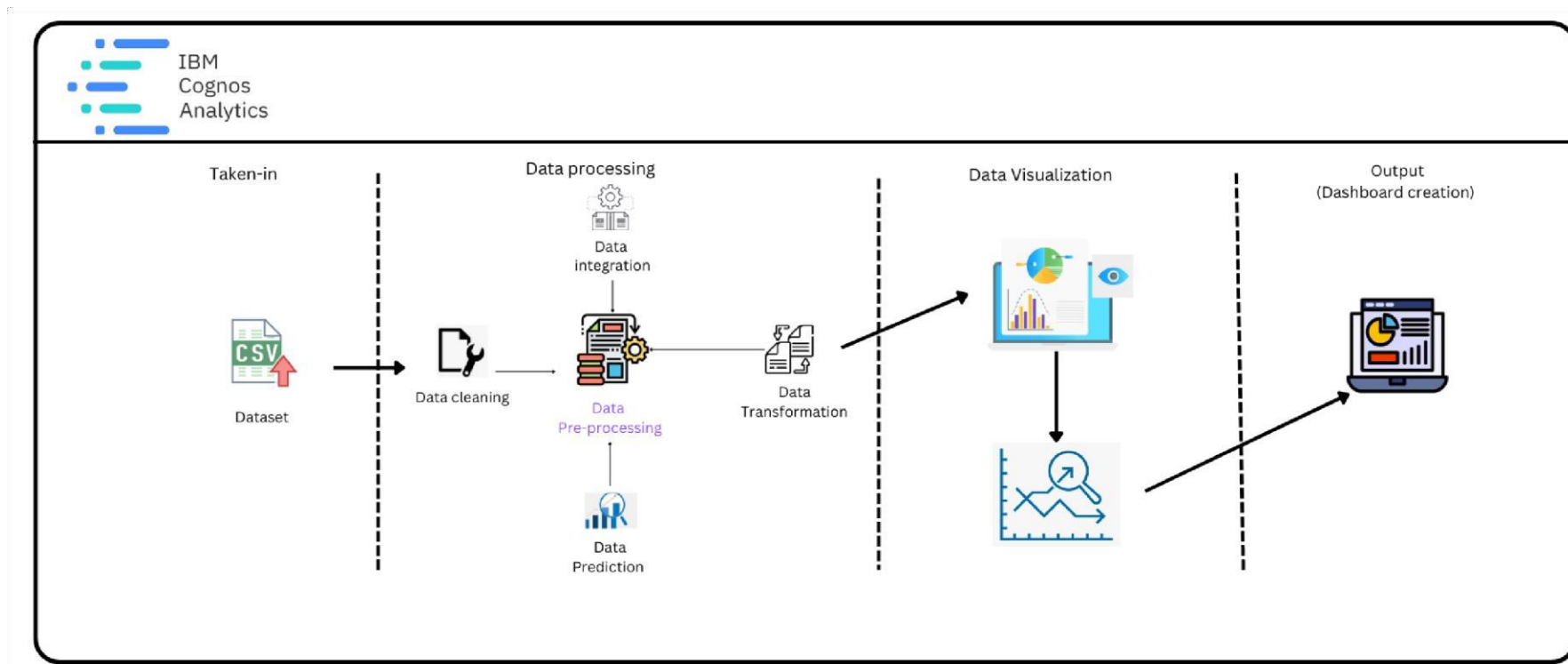


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interacts with application using Web UI	HTML, CSS, JavaScript
2.	Data Processing	The dataset's data has undergone pre-processing.	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	The best strategy to create the goods in the store is predicted using these algorithmic strategies.	ML algorithms –Logistic Regression, 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	use encryptions while requesting authentication	Encryptions
3.	Scalable Architecture	Scalability consists of 3-tiers	Web Server – HTML, CSS, Javascript Application Server – Python Database Server – IBM Cloud
4.	Availability	Users of the cloud can access the application.	IBM Cloud Hosting
5.	Performance	The user might be knowledgeable about maintaining inventory to boost revenues.	ML algorithms