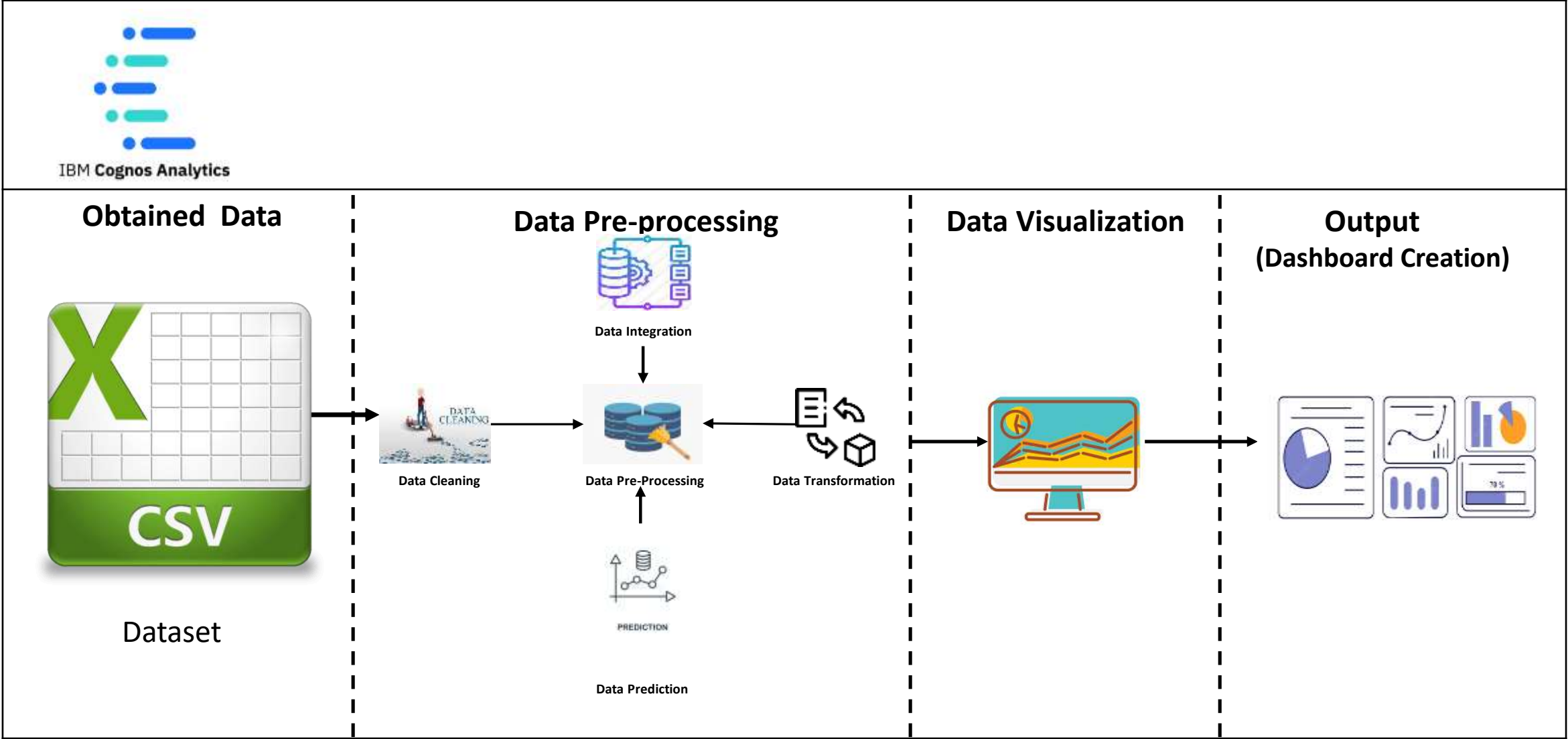


Project Design Phase II

Technology Stack (Architecture & Stack)

DATE	15/10/2022
Team ID	PNT2022TMID33075
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 the application through the user interface.	HTML, CSS, JavaScript
2.	Data Processing	The data is made readily usable by pre-processing the data.	IBM Cognos Analytics
3.	Cloud Database	The processed data is stored in the IBM cloud.	IBM Cloud
4.	Data visualization	The data is visualized for easy understanding of the data.	IBM Cognos Analytics, Python
5.	Prediction	This technique is used to predict future supply and demand using the pre-processed data.	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 are used to complete the project.	IBM Cognos Analytics, Python
2.	Security Implementations	Request authentication using Encryptions.	Encryptions
3.	Scalable Architecture	3-tires of scalability.	Web Server – HTML, CSS, JavaScript Application Server – Python Database Server – IBM Cloud
4.	Availability	Easily available for the customer through cloud.	IBM Cloud Hosting
5.	Performance	The software helps the user know how to maintain their inventory to increase their profits.	ML algorithms