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

Date	15 October 2022
Team ID	PNT2022TMID09334
Project Name	RETAIL STORE STOCK INVENTORY ANALYTICS
Maximum Marks	4 Marks

Technical Architecture:
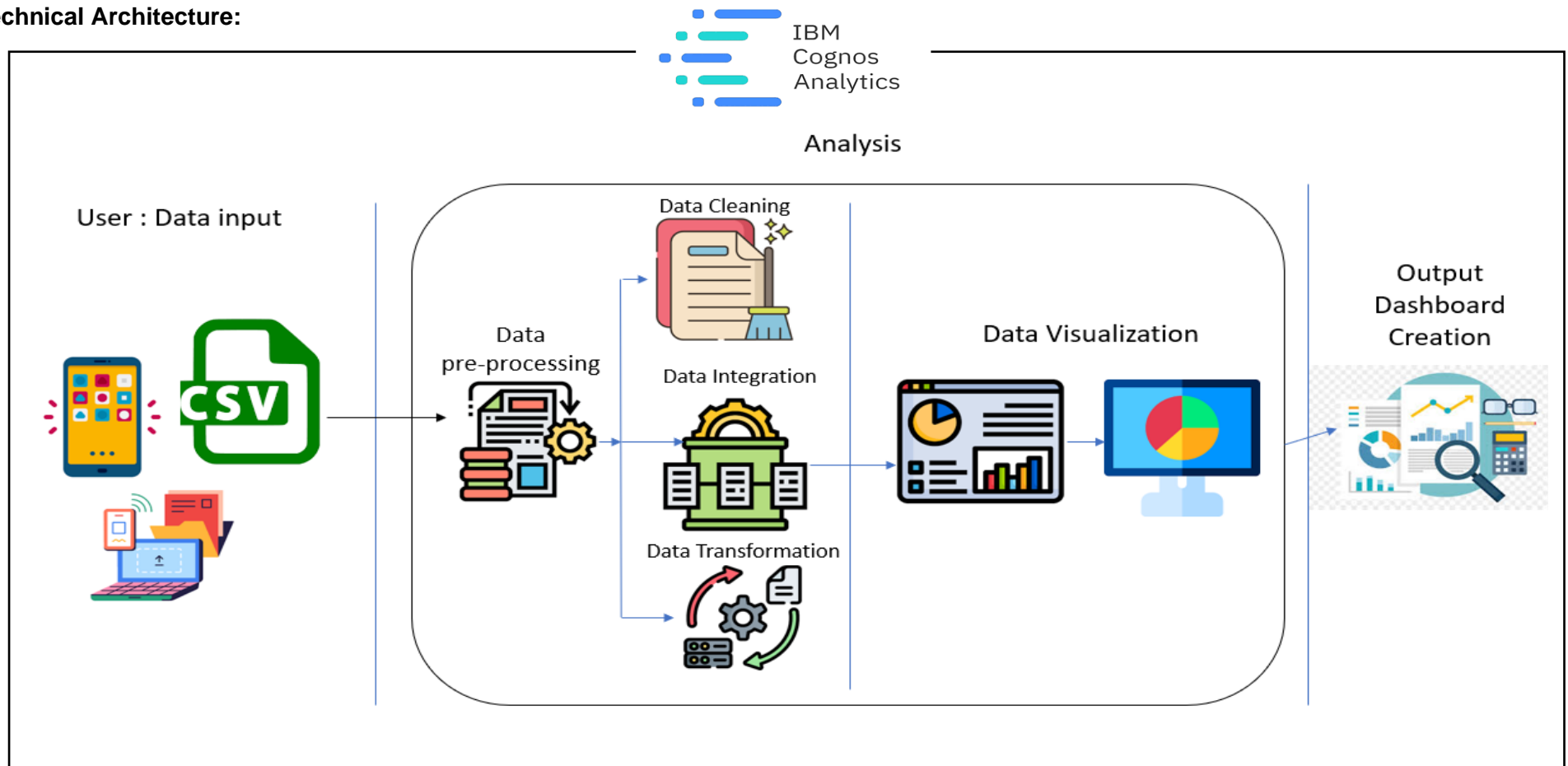
Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Using Web UI, the user engages with the programme.	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	The best strategy to create the goods in the store is predicted using the 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	utilised open-source frameworks	IBM Cognos Analytics, Python
2.	Security Implementations	use of encryptions while requesting authentication	Encryptions
3.	Scalable Architecture	Three tiers make up scalability.	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 might be knowledgeable about maintaining inventory to boost revenues. | ML algorithms |