

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

Technical Architecture:

Date	21 October 2022
TeamID	PNT2022TMID50870
ProjectName	RetailStoreStockInventoryAnalytics
MaximumMarks	4 Marks

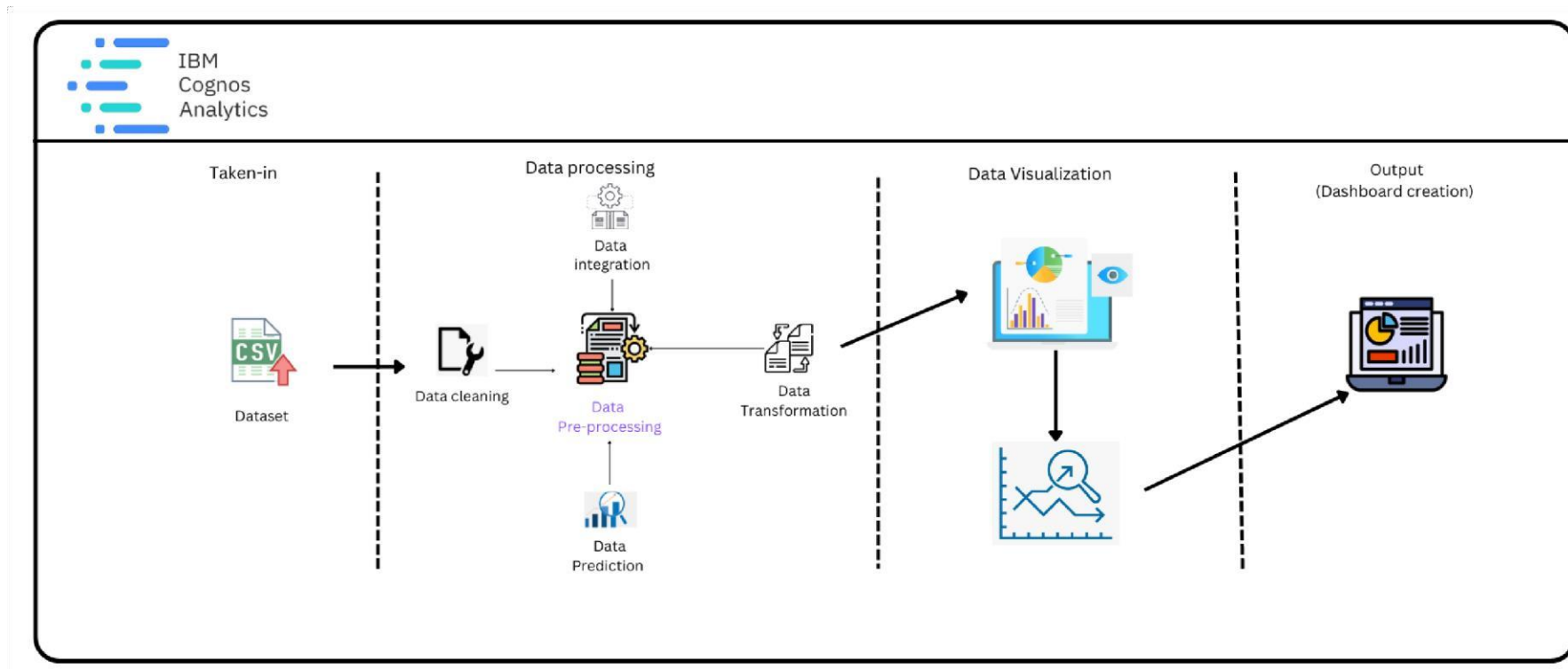


Table-1: Components& Technologies:

S.No	Component	Description	Technology
1.	UserInterface	Theuserinteractswith application usingWebUI	HTML,CSS,JavaScript
2.	DataProcessing	The datafromthedatasetispre-processed	IBMCognos Analytics
3.	CloudDatabase	Thecleandatasetis storedonIBMCloud	IBMCloud
4.	Datavisualization	The datais visualizedinto differentforms	IBMCognosAnalytics,Python
5.	Prediction	These Algorithm techniques are used to predict the proper way to make the stock in store.	MLalgorithms– LogisticRegression,LinearRegression,RandomForest,ABCTechniques.

Table-2: ApplicationCharacteristics:

S.No	Characteristics	Description	Technology
1.	Open-SourceFrameworks	Open-sourceframeworks used	IBMCognosAnalytics,Python
2.	SecurityImplementations	RequestauthenticationusingEncryptions	Encryptions
3.	ScalableArchitecture	Scalabilityconsistsof3-tiers	WebServer–HTML, CSS, Javascript Application Server – PythonDatabaseServer– IBMCloud
4.	Availability	The applicationisavailableforcloudusers	IBMCloudHosting
5.	Performance	The user can know how to maintain the inventory to increase profits.	ML algorithms