

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

Date	15 October 2022
Team ID	PNT2022TMID37679
Project Name	Retail Store Stock Inventory Analysis
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

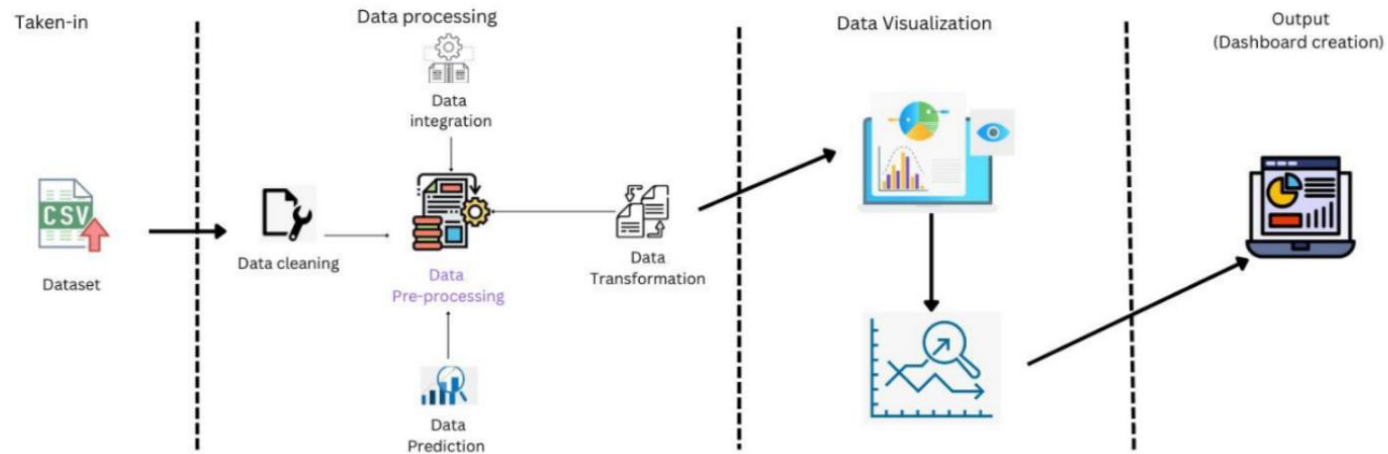


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Understanding the dataset	Understanding the logic and pre-requirements of the dataset	IBM Cognos Analytics.
3.	Loading the Dataset	Loading the dataset in the Internet	IBM Cognos Analytics.
4.	Preparing the Dataset	Preparing the dataset using the given datasets and add two calculations	IBM Watson Assistant
5.	Cloud Database	Database Service on Cloud	IBM DB2
6.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
7.	Machine Learning Model	Purpose of Machine Learning Model	Linear Regression Model, KNN-Classifiers etc.,

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	IBM Cognos Analytics, Python
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	Standard Encryption
3.	Scalable Architecture	3 – tier, Micro-services	HTML, CSS, JavaScript/ React Js Python, DB2
4.	Availability	Justify the availability of application	Not available for all users only authorized persons will have access.
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	ML Algorithms.

