Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID29976
Project Name	Project – 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

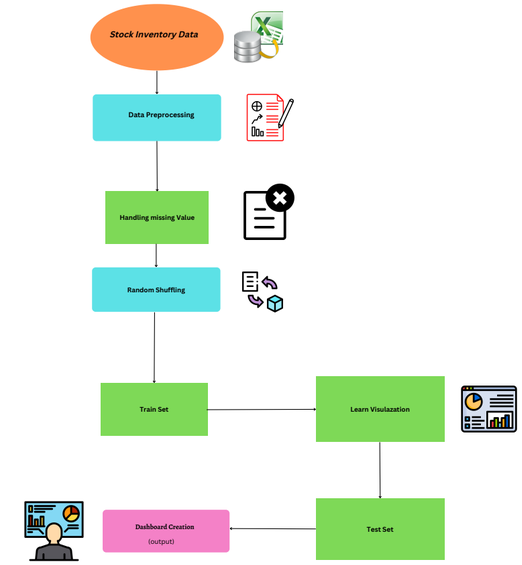

Table-1 : Components & Technologies

S.No	Component	Description	Technology
1	User Interface	User can interacts with application using web based user interface	HTML, CSS, JavaScript ; React Js
2	Application Logic-1	To manipulate analyze and for work with complex process in the application	Python
3	Application Logic-2	For exhibit analytics process in the application	IBM Watson Assistant
4	Application Logic-3	Build conversational interface process in the application	IBM Watson Assistant
5	Database	Data Type, Configurations etc.	MySQL.
6	Cloud Database	Database Service on Cloud	IBM DB2, IBMCloudant etc.
7	File Storage	File storage requirements	IBM Block Storage or Local Filesystem
8	External API-1	Provide better user experience while utilizing the retail stores and check availability of products and automate process of refilling products when go out of stock	IBM API Connect
9	Machine Learning Model	For different ways of analyzing the products	Linear regression,multiple regression, knearest neighbor
10	Infrastructure (Cloud)	Application Deployment on Cloud Cloud Server Configuration : ibm	Local, Cloud Foundry.
11	Integration platform	Interconnects various internal systems with each other as well as with external partner systems through B2B	IBM Integration Toolkit

Table-2: Application Characteristics:

S.No	Characteristics	Characteristics	Technology
1	Open-Source Frameworks	Inventory accounting,and management practices	Python,REST API
2	Scalable Architecture	Achieve presentation,application and user interface	React js, Python
3	Security Implementations	Customer and administrator registration authentication and resource authorization	Javascript
4	Availability	This application is availability to all users at everywhere	IBM cloud hosting
5	Performance	The user can know how to maintain the inventory to increase point of sales	Ml algorithms