

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	15 October 2022
Team ID	PNT2022TMID32070
Project Name	Project -Retail stock inventory Analysis
Maximum Marks	4 Marks

Technical Architecture:

IBM COGNOS ANALYTICS



Table 1:**Component & Technologies:**

S.No	COMPONENT	DESCRIPTION	TECHNOLOGY
1.	User Interface	The user interacts with application using Web UI.	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	These Algorithm techniques are used to predict the proper way to make the stock in store.	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 used.	IBM Cognos Analytics, Python.
2	Security Implementations	Request authentication using Encryptions.	Encryptions
3.	Scalable Architecture	Scalability consists of 3-tiers.	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 can know how to maintain the inventory to increase profits.	ML algorithms