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

Date	03October 2022
Team ID	PNT2022TMID49375
Project Name	Project – Global Sales Data Analytics
Maximum Marks	4 Marks

Technical Architecture:

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

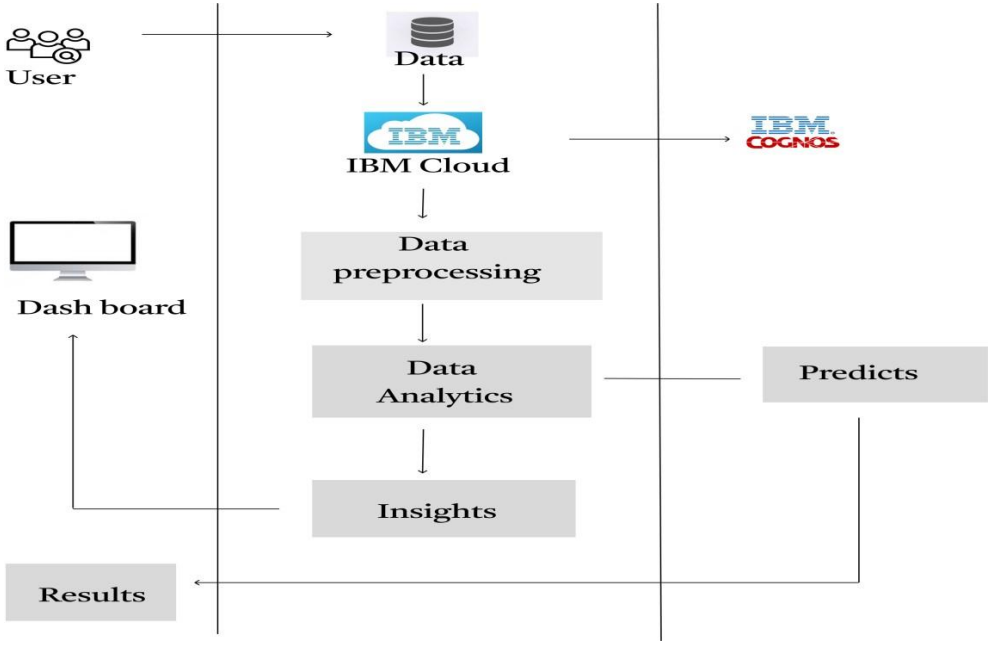

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application like Web UI	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Data will be uploaded to IBM cloud	IBM Cloud
3.	Application Logic-2	Data uploaded to cognos analytics tool	IBM Cognos Analytics
4.	Application Logic-3	Dashboards with Pre-trained outputs	IBM Cognos Analytics
5.	Database	Cloud	MySQL
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	Customer sales data	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Data analysis on user data	IBM Cognos Analytics
9.	External API-2	Machine Learning Models for predictions	Jupyter Notebook
10.	Machine Learning Model	Predictive analysis	Predictive Analysis Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Jupyter Notebook	Python
2.	Security Implementations	Unauthorized access	AES algorithm
3.	Scalable Architecture	Can be used for large datasets	IBM Cloud
4.	Availability	Multi page data visualisation charts used for everyone in the login and can be used to finding	IBM Cognos

S.No	Characteristics	Description	Technology
		their predictions	
5.	Performance	Accuracy and efficiency are increased	IBM Cognos

References:

https://c4model.com/

https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/

https://www.ibm.com/cloud/architecture

https://aws.amazon.com/architecture

https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d