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

Date	03 October 2022
Team ID	PNT2022TMID32748
Project Name	Global Sales Data Analytics
Maximum Marks	4 Marks

Technical Architecture:
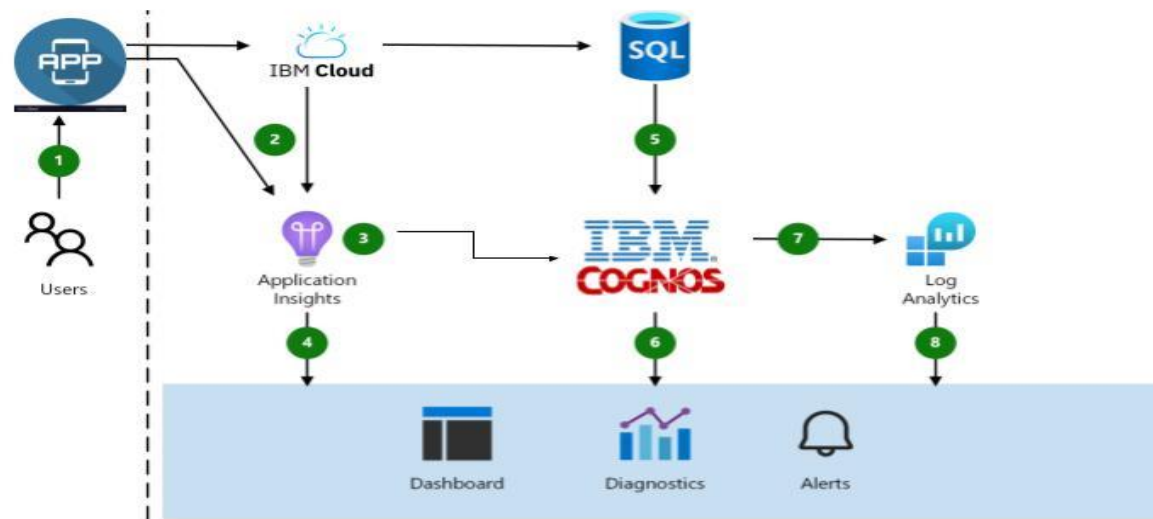
TECHNOLOGY STACK ARCHITECTURE

Table-1 : Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	JavaScript, HTML, CSS
2.	Application Process	The Application is under Process	JavaScript, Python
3.	Uploading the data	The data is been Uploaded	IBM Cloud, SQL, Python
4.	Data Exploration	The data is been uploaded and been processed	SQL, Python
5.	Data Visualization	To visualize the data.	IBM Cognos, Python
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloud and etc.
7.	Viewing Data	A dashboard is made for the users for viewing in the given data	IBM Cognos, Python (matplotlib and seaborn)
8.	Machine Learning	The Machine learning algorithm is used to predict the given data and visualize it	Python

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Open-Source frameworks are used	Python and its packages, Sheets

S. No	Characteristics	Description	Technology
2.	Security Implementations	By using safe encryption techniques the data has been secured	SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Architecture is used in 3-Tire application	Application layer, Database layer, Presentation layer (HTML, CSS, JavaScript, Python, IBM Cognos)
4.	Availability	It software and the data can be accessed by multiple users without any congestion at the same time	IBM Cloud, Cognos BI Server
5.	Performance	A huge data can be performed without crashing any data while processing	IBM Cloud