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

Date	10 October 2022
Team ID	PNT2022TMID24015
Project Name	Global Sales Data Analytics
Maximum Marks	4 Marks
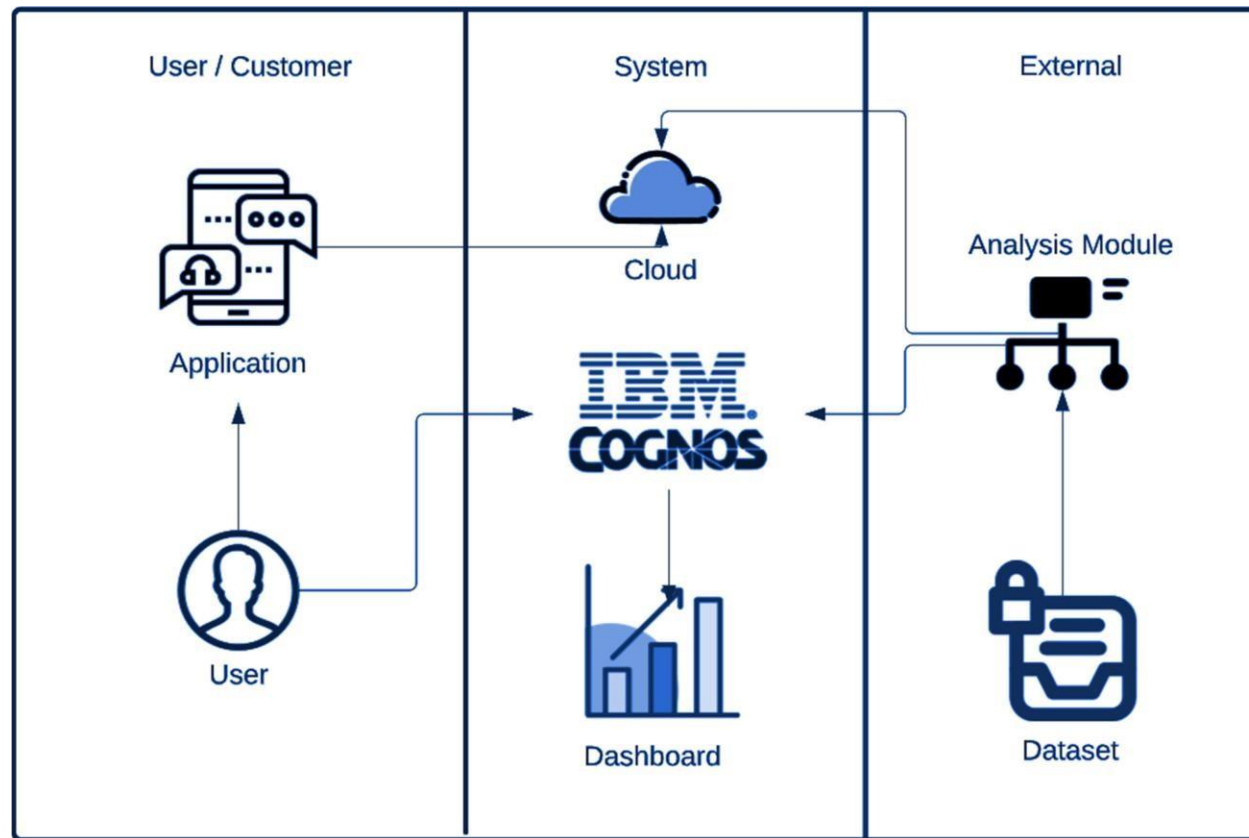
Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User uploads the csv or excel format into the web pages	HTML, CSS, JavaScript / Next js
2.	Storage Infrastructure	he user data will pass into the IBM cloud for storing and acts as a data source	IBM cloud
3.	Working with dataset	in cloud, data will be fetched by the Cognos analytical tool for data analysis	IBM Cognos analytical tool
4.	Data Visualization	The pre-trained Dashboards will be present to perform analysis tool	IBM Cognos analytical tool
5.	Database	Data will be retreived from cloud	IBM Cloud
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	Customer sales data is uploaded in cloud through interface	IBM Block Storage , local file system
8.	External API-1	To perform data analysis on the user data	IBM Cognos tool.
9.	External API-2	To build machine learning model for classification	Kaggle
10.	Machine Learning Model	To do predicitive analysis o the input data	Predictive Analysis model.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Using Flask Cloud Server Configuration : IBM Cloud	Local, Cloud Foundry.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Kaggle , Google Collab	Google
2.	Security Implementations	End to end encryption	SHA-256, Encryptions,.
3.	Scalable Architecture	Serverless like amazon lamda	IBM cloud.
4.	Availability	Multi page layout providing various visualizations of data and provide full support irrespective of platform and device specifications	Cognos Business Intelligence Server.
5.	Performance	Able to withstand huge stand and process them without crashing	IBM Cognos.