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

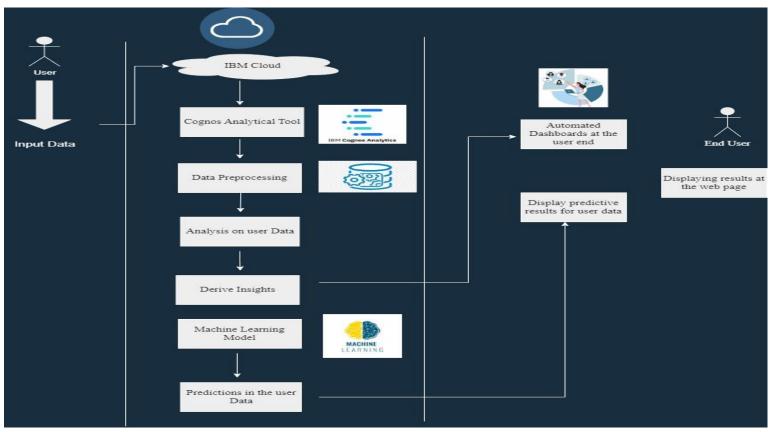| Date	03 October 2022
Team ID	PNT2022TMID01276
Project Name	Project - Data Analytics for DHL Logistics Facilities
Maximum Marks	4 Marks

Technical 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.	HTML, CSS, JavaScript
2.	Application Logic-1	Logic for a process in the application	IBM Cloud
3.	Application Logic-2	Logic for a process in the application	IBM Cognos analytical tool
4.	Application Logic-3	Logic for a process in the application	IBM Cognos analytical tool
5.	Database	Data Type, Configurations etc.	MySQL
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloud etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Cognos tool.
9.	External API-2	Purpose of External API used in the application	Jupyter Notebook
10.	Machine Learning Model	Purpose of Machine Learning Model	Predictive analysis Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Google
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	256-bit AES algorithm

S.No	Characteristics	Description	Technology
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	IBM Cloud
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	IBM Cloud
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	IBM Cloud, Cognos analytical tool