Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	19 October 2022
Team ID	PNT2022TMI45143
Project Name	A New Hint to Transportation-Analysis of the NYC Bike Share System
Maximum Marks	4 Marks

Technical Architecture:

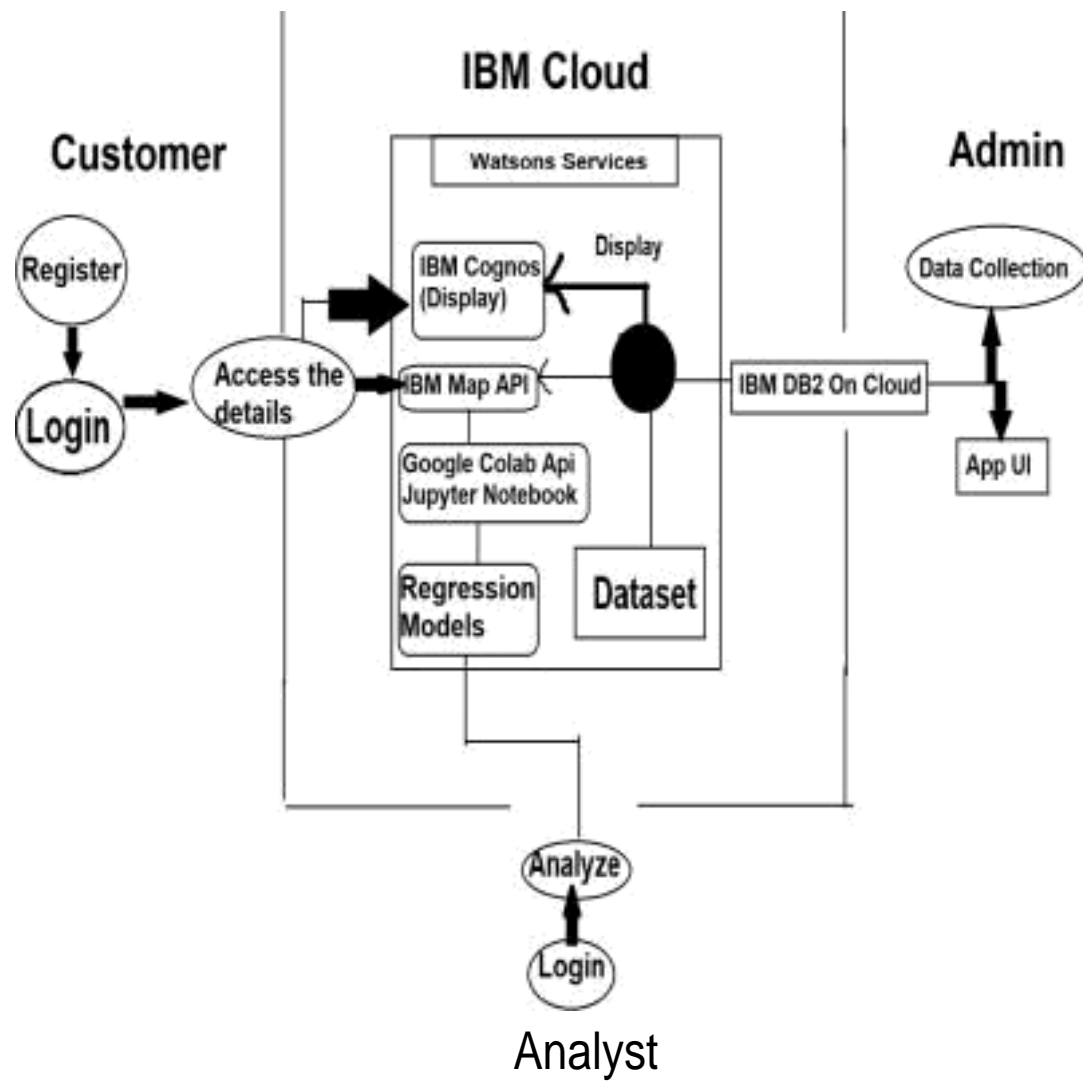The Deliverable shall include the architectural diagram as below:

Customer

Register

Login

Access the details

IBM Cloud

Watsons Services

IBM Cognos (Display)

Display

IBM Map API

Google Colab Api Jupyter Notebook

Regression Models

Dataset

IBM DB2 On Cloud

Admin

Data Collection

App UI

Analyze

Login

Analyst

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1	User Interface	1. Display the visualization of the analyseddata 2. Display the inferences from the analysed data	HTML, CSS, JavaScript andIBM Cognos

2	Application Logic-1	Display details	HTML
3	Database	Data Type, Configurations etc.	MySQL
4	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
5	File Storage	File storage requirements	IBM Block Storage or OtherStorage Service or Local Filesystem
6	External API-1	To map the Citi Bike ride in NYC	IBM Map API, etc.
7	External API-2	Analysis of the data	Google Colab, Jupyter Notebook
8	Machine Learning Model	To plot graphs and predict values	Regression models
9	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Local SystCloud Server Configuration : IBM Cloud	Local, Cloud Foundry, Kubernetes, etc.