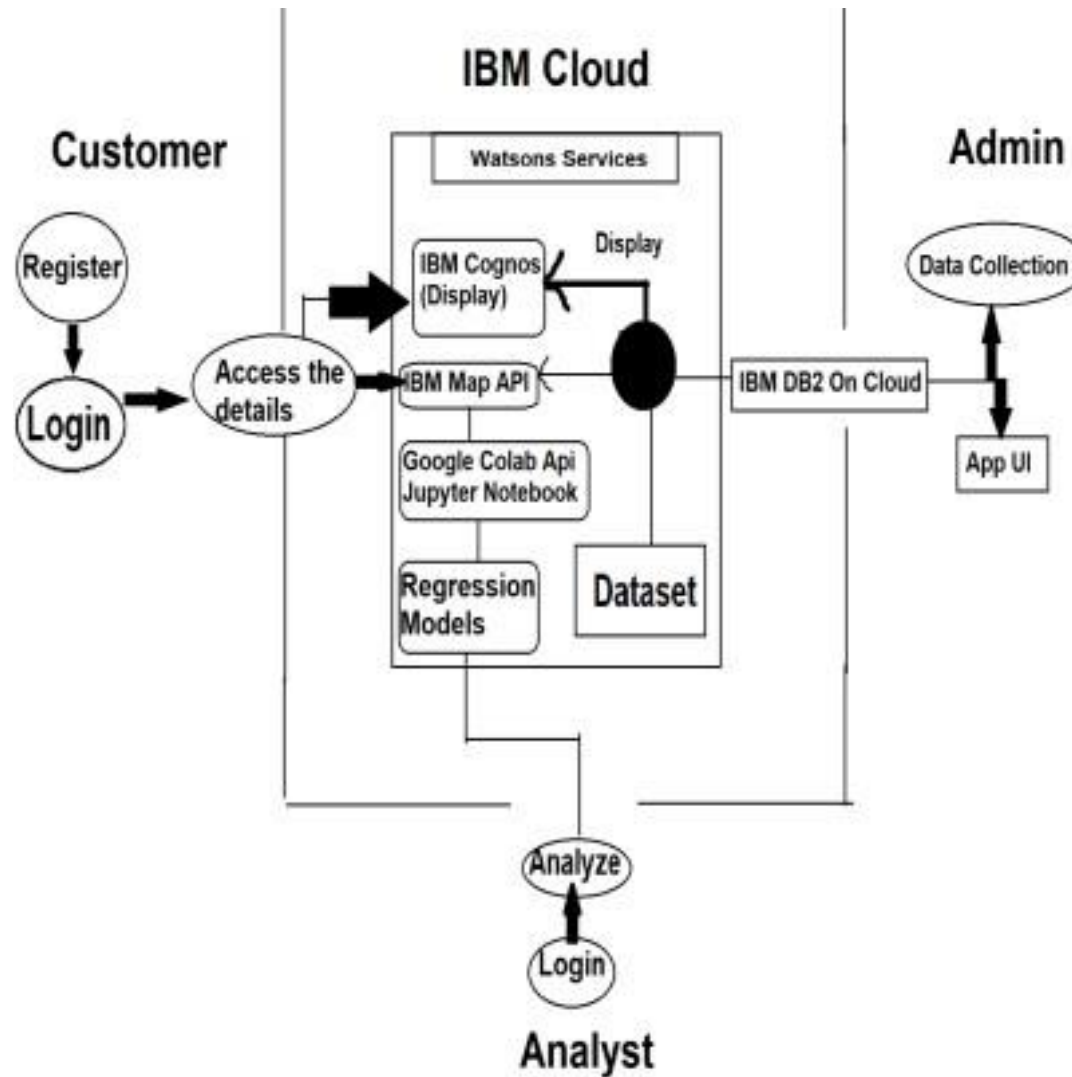**Project Design Phase-II**
**Technology Stack (Architecture & Stack)**

| Date | 16 October 2022 |
|---|---|
| Team ID | PNT2022TMID28308 |
| Project Name | Project - 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:

**IBM Cloud**

Customer

Register

Login

Access the details

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 |
|------|-----------|-------------|------------|
|      | User Interface | 1. Display the visualization of the analysed data 2. Display the inferences from the analysed data | HTML, CSS, JavaScript and IBM Cognos |

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