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

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|---|---|
| Date | 15 October 2022 |
| Team ID | PNT2022TMID39035 |
| Project Name | Project – Global Sales Data Analytical |
| Maximum Marks | 4 Marks |

**Technical Architecture:**

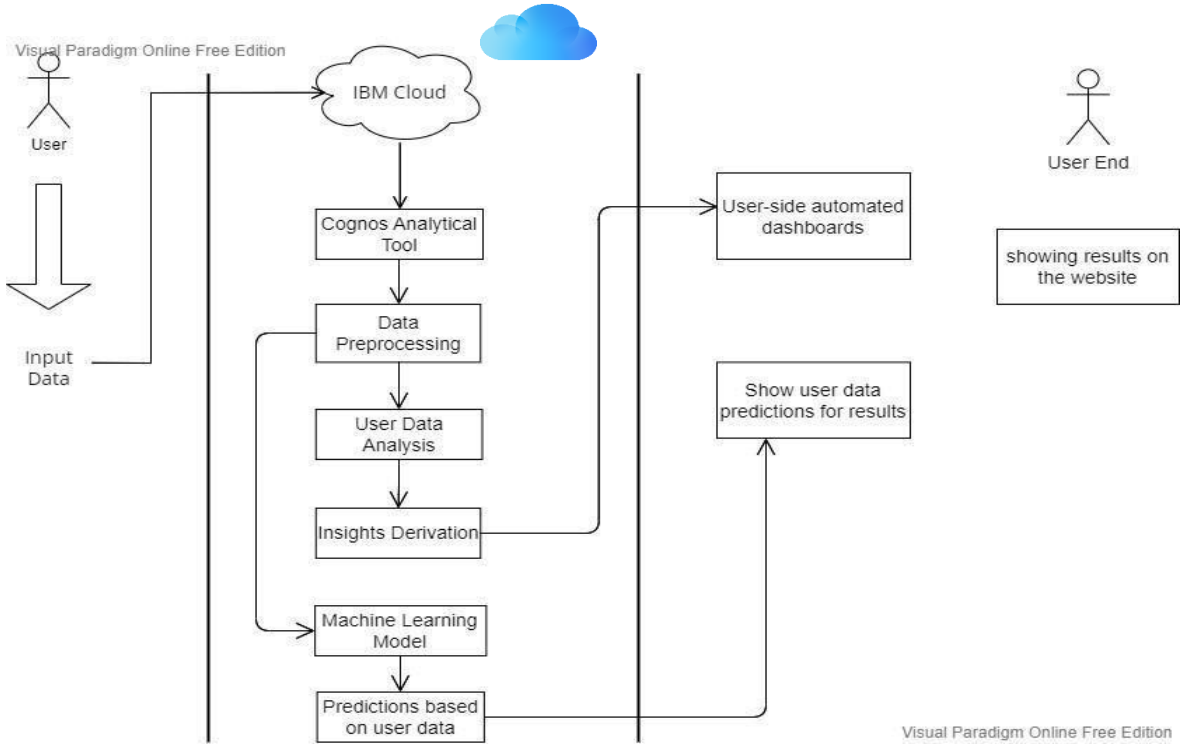


**Table-1: Components & Technologies:**

| S.No | Characteristics | Description | Technology |
|---|---|---|---|
| 1. | Open-Source Frameworks | Google Collaborator, Jupiter notebook | Google |
| 2. | Security Implementations | To protect data from the unauthorized access | 256-bit AES algorithm |
| 3. | Scalable Architecture | Supports various data sizes | IBM Cloud |

| S.No. | Component | Description | Technology |
|---|---|---|---|
| 1. | User Interface | User uploads the csv or excel format files into the web pages | HTML, CSS, JavaScript |
| 2. | Application Logic-1 | The user data will pass into the IBM cloud for storing and acts as a data source | IBM cloud |
| 3. | Application Logic-2 | In cloud, data will be fetched by the Congo's analytical tool for data analysis | IBM Congo's analytical tool |
| 4. | Application Logic-3 | The pre-trained Dashboards will be present to perform analysis on the incoming data | IBM Congo's analytical tool |
| 5. | Database | Data will be retrieved from cloud | MySQL |
| 6. | Cloud Database | Database Service on cloud | IBM DB2, IBM Cloud |
| 7. | File Storage | Customer sales data is uploaded in cloud through interface | IBM Block Storage or Other Storage Service or Local Filesystem |
| 8. | External API-1 | To perform data analysis on the user data | IBM Congo's Tool |
| 9. | External API-2 | To build the machine learning model for classification | Jupiter Notebook |
| 10. | Machine Learning Model | To do the predictive analysis on the input data | Predictive analysis model, etc. |
| 11. | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud Local Server Configuration: Using the flask Cloud Server Configuration: IBM cloud | Local, Cloud Foundry |

**Table-2: Application Characteristics:**

| S.No | Characteristics | Description | Technology |
|---|---|---|---|
| 4. | Availability | Multi page layout providing various visualizations of data and provide full support irrespective of platform and device specifications | Congo's Business Intelligence Server |
| 5. | Performance | Withstand huge data and process them without crashing | IBM Congo's |