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

| Date | 16 October2022 |
|---------------|---|
| Team ID | PNT2022TMID36407 |
| Project Name | Retail Store Stock Inventory Analytics. |
| Maximum Marks | 4 Marks |

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table 1 & table 2

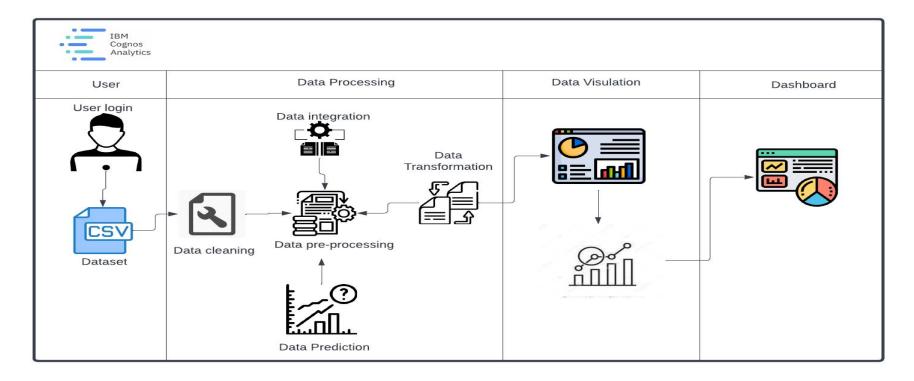


Table-1: Components & Technologies:

| S.No | Component | Description | Technology |
|------|--------------------|--|---|
| 1. | User Interface | The user interacts with application e.g. Web UI. | HTML, CSS, JavaScript. |
| 2. | Data Processing | The Data from the dataset is pre-processed | IBM Cognos Analytics. |
| 3. | Cloud Database | The clean dataset is stored on IBM cloud. | IBM Cloud. |
| 4. | Data Visualization | The data is Visualized into different forms | IBM Cognos Analytics, Python |
| 5. | Prediction | These Algorithm techiques are used to predict the proper way to make the stock in store. | Ml algorithms, Logistic Regression, Linear Regression, Random Forest, ABC Techniques. |

Table-2: Application Characteristics:

| S.No | Characteristics | Description | Technology |
|------|--------------------------|--|--|
| 1. | Open-Source Frameworks | the open-source frameworks used | IBM Cognos Analytics, Python |
| 2. | Security Implementations | Request authentication using Encrytions. | Encrytions. |
| 3. | Scalable Architecture | the scalability of architecture (3 – tier, Micro-services) | Web Server - HTML, CSS, JAVASCRIPT Application Server - Python Database Server - IBM Cloud |
| 4. | Availability | the application is available for cloud users | IBM Cloud Hosting |
| 5. | Performance | In this application is used to sale the more stock. | Basic web tools. |