Project Design Phase-II

Technical Architecture:

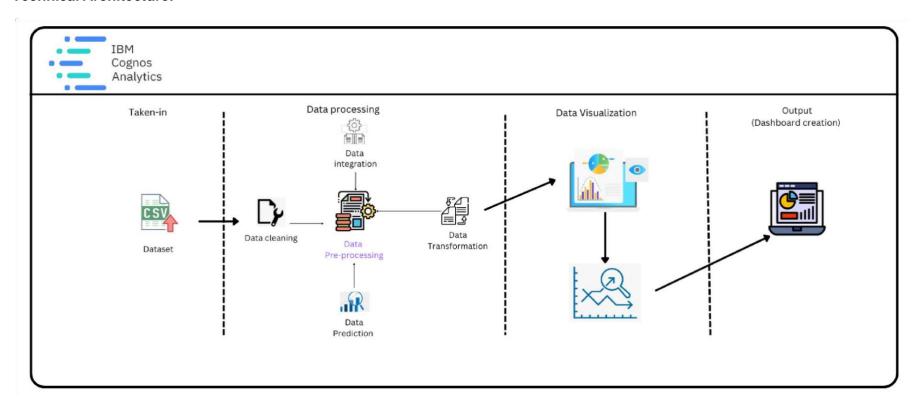


Table-1 : Components & Technologies:

| S.No | Component | Description | Technology |
|------|--------------------|---|--|
| 1. | User Interface | The user interacts with application using 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 techniques 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 | Open-source frameworks used | IBM Cognos Analytics, Python |
| 2. | Security Implementations | Request authentication using Encryptions | Encryptions |
| 3. | Scalable Architecture | Scalability consists of 3-tiers | 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 | The user can know how to maintain the inventory to increase profits. | ML algorithms |