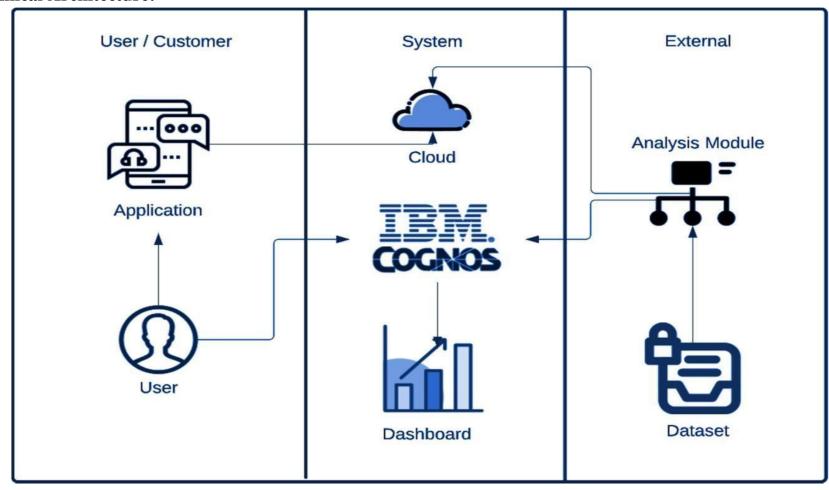
## **Technology Stack (Architecture & Stack)**

| Date          | 16 October 2022             |  |
|---------------|-----------------------------|--|
| Team ID       | PNT2022TMID06631            |  |
| Project Name  | Global Sales Data Analytics |  |
| Maximum Marks | 4 Marks                     |  |

## **Technical Architecture:**



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

| S. No | Component                       | Description  | Technology  |
|-------|---------------------------------|--|---|
| 1.    | User Interface                  | Simple UI with Dashboard and Graphs, pie chart   | HTML, CSS, JavaScript / Angular Js                                |
| 2.    | Storage Infrastructure (Cloud)  | Customer sales data is uploaded in cloud through interface   | IBM Cloud   |
| 3.    | Application Logic               | Data Preparation to remove duplicate, outliers   | Google collab in Python   |
| 4.    | Data Exploration                | Uploaded data is explored to identify trends   | IBM Cognos  |
| 5.    | Database                        | Data Type and Configurations   | Rdbms   |
| 6.    | Cloud Database                  | Database Service on Cloud  | IBM DB2, IBM Cloud etc,   |
| 7.    | File Storage                    | File storage requirements  | IBM Block Storage or Other Storage<br>Service or Local Filesystem |
| 8.    | External API                    | Purpose of External API used to authenticate user  | Google Firebase   |
| 9.    | Viewing Data                    | User logins to application to view visualizations for uploaded data  | IBM Cognos Dashboard  |
| 10.   | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud<br>Local Server Configuration = localhost: 8501<br>Cloud Server Configuration | Localhost, IBM cloud  |

**Table-2: Application Characteristics:** 

| S. No | Characteristics          | Description  | Technology                        |
|-------|--------------------------|--|-----------------------------------|
| 1.    | Open-Source Frameworks   | List the open-source frameworks used                 | IBM Cognos, IBM Cloud, IBM Watson |
| 2.    | Security Implementations | To authenticate mail to secure storage               | Google API, IBM cloud             |
| 3.    | Scalable Architecture    | Microservices tier-2                                 | IBM Cognos Analytics with Watson  |
| 4.    | Availability             | Application can be available through 24 hrs a day    | IBM cloud                         |
| 5.    | Performance              | Efficient performance for input and output responses | IBM Tech stacks                   |