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

| Date | 09 november 2022 |
|---------------|--|
| Team ID | PNT2022TMID22185 |
| Project Name | Airline Data Analytics for Aviation Industry |
| Maximum Marks | 4 Marks |

Technical Architecture:

IBM CLOUD

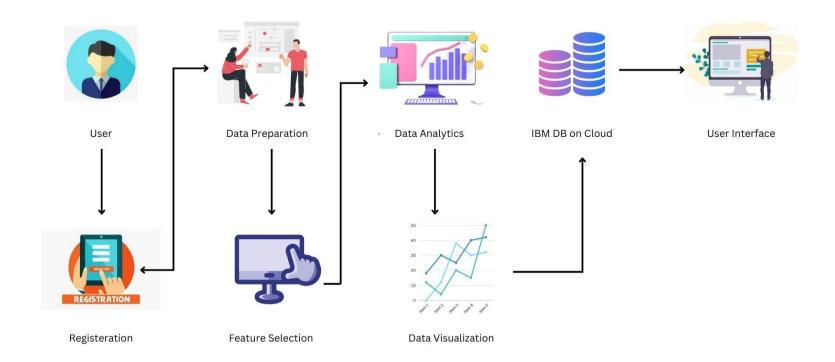


Table-1 : Components & Technologies:

| S.No | Component | Description | Technology |
|------|--------------------|--|----------------------------|
| 1. | User Interface | User can Interact with web Application | HTML, CSS, JavaScript . |
| 2. | Data Preparation | Pre processing of data should be done | Python |
| 3. | Feature Selection | Feature selection of Dataset using Correlation Feature Selection method. | Python |
| 4. | Data Analytics | Predication of Flight delay using Decision Tree. | Python |
| 5. | Data Visualization | Data Type, Configurations etc. | python |
| 6. | Data Storage | Database Service on Cloud | IBM DB2, IBM Cloudant etc. |
| 7. | User Interface | Dashboard showing the details of the flight Delay | HTML, CSS, JavaScript. |

Table-2: Application Characteristics:

| S.No | Characteristics | Description | Technology |
|------|--------------------------|--|--|
| 1. | Security Implementations | The main security concern is for users account hence proper login mechanism should be used to avoid hacking. | e.g. SHA-256, Encryptions, IAM Controls, OWASP etc. |
| 2. | Availability | The system shall be available 24 hours a day 7 days a week. User can access at anytime | |
| 3. | Performance | The system should require a fair amount of speed especially while browsing through the catalogue | |