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

Date	15-October-2022
Team ID	PNT2022TMID15316
Project Name	Project – Airlines Data Analytics for Aviation Industry
Maximum Marks	4 Marks

Technical Architecture:

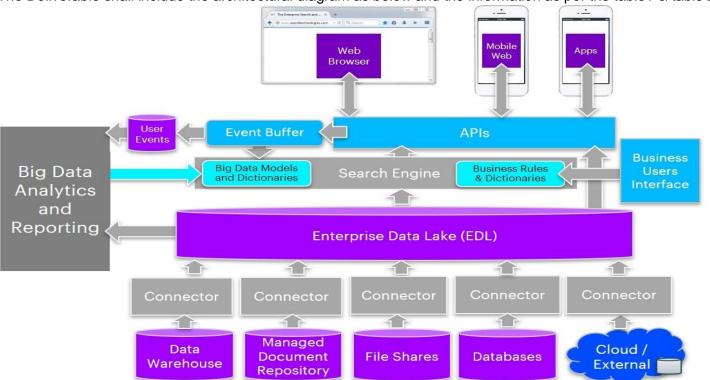The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI.	HTML, CSS, JavaScript / Angular.js / Node.js/ React.js
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant.
7.	File Storage	File storage requirements	IBM Block Storage.
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	For the backend/ server-side development	Python
2.	Security Implementations	Security / access controls implemented, use of firewalls.	SHA-256, Encryptions, IAM Controls, OWASP
3.	Scalable Architecture	The application is large so large amount of user can access it at a time.	IBM Cognos, IBM Cloud
4.	Availability	The application is available 24x7 so user can access it anytime.	Load balancers, Distributed servers
5.	Performance	The application will run very efficiently on the less memory and less performing system.	Cache memory, CDN