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

Date	03 October 2022
Team ID	PNT2022TMID16605
Project Name	Developing a flight delay prediction using machine learning
Maximum Marks	4 Marks

Technical Architecture:

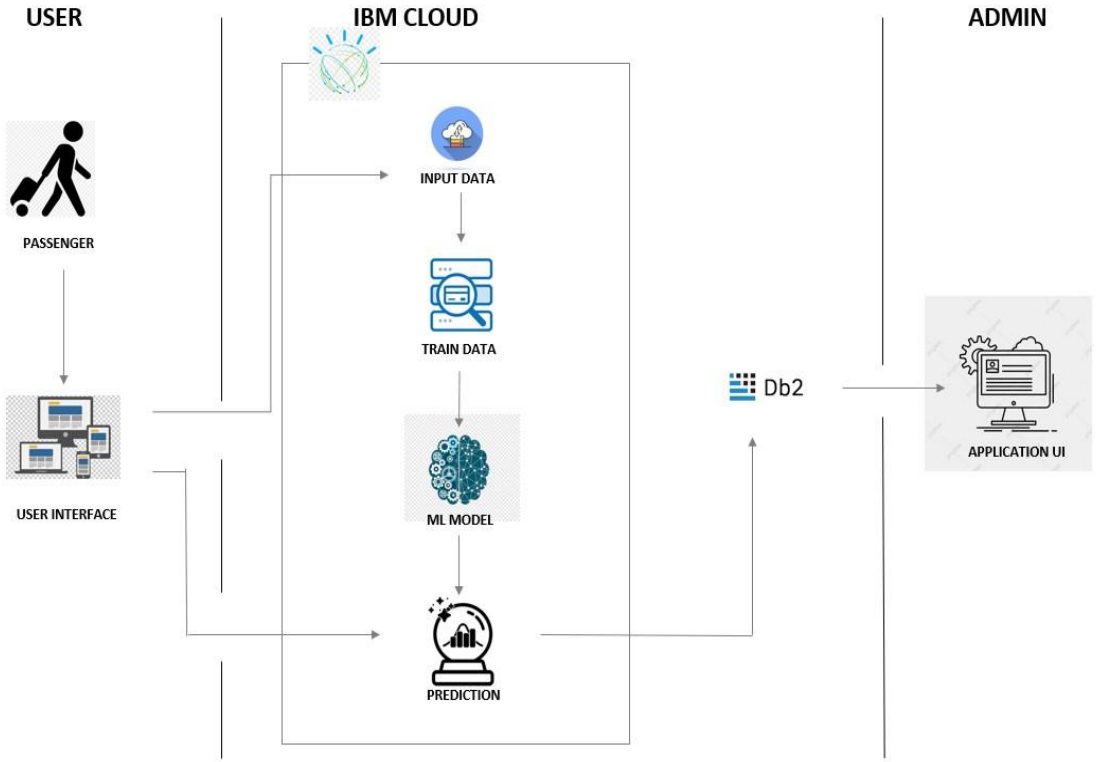

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	UI provides interaction between users and web application	HTML, CSS, JAVA SCRIPT.
2.	Application Logic-1	User can enter the details about the flight to know the delay	Python
3.	Application Logic-2	Application is directly deployed in the IBM cloud	IBM Watson STT service
4.	Database	In the Database,user details are stored and maintained for verifications.	MySQL
5.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
6.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
7.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Create a user friendly interface,collect the data,give those data as a input to the machine learning model.	Python flask
2.	Scalable Architecture	3 – tier, Micro-services	Cloud,Relational database,GUI
3.	Availability	Distributed servers	IBM cloud
4.	Performance	100 per sec	IBM Watson App service