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

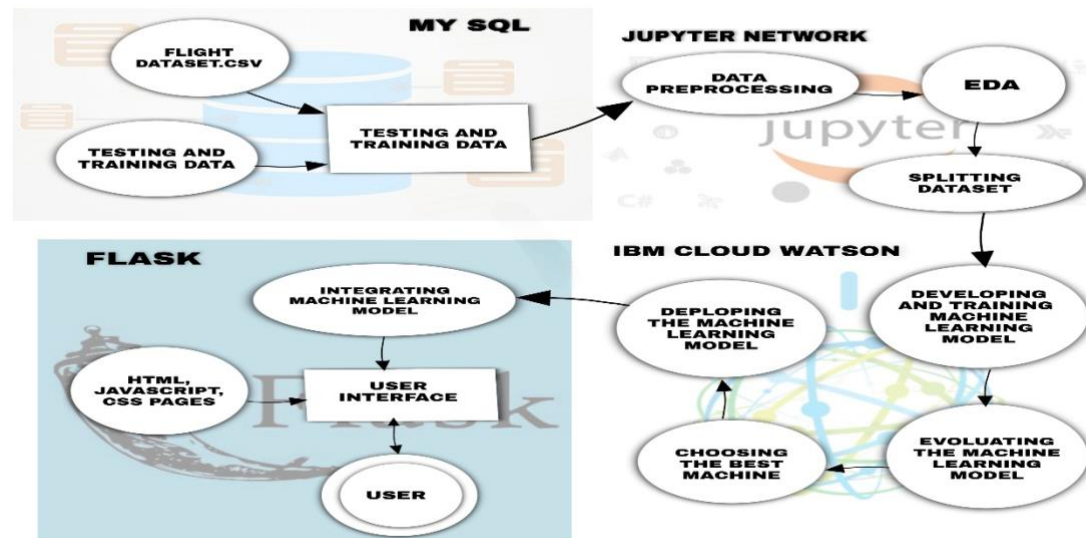| Date	03 October 2022
Team ID	PNT2022TMID43126
Project Name	Developing a flight delay prediction model using machine learning
Maximum Marks	4 Marks

Technical architecture:

Table 1:Components and Technologies:

S.No	Component	Description	Technology
1.	User Interface	Website with live weather and flight updates.	HTML, CSS, JavaScript
2.	Application Logic-1	Data preprocessing of flight data set	Python
3.	Application Logic-2	Testing , training and splitting of data	Python
4.	Application Logic-3	Developing , evaluating and deploying machine learning models	IBM Watson Assistant
5.	Database	Flight data and weather data	MySQL

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask	Python
2.	Scalable Architecture	3– tier, Micro-services	User Interface
3.	Availability	Use of load balancers, distributed servers	IBM cloud
4.	Performance	100 request per second	IBM cloud Watson