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

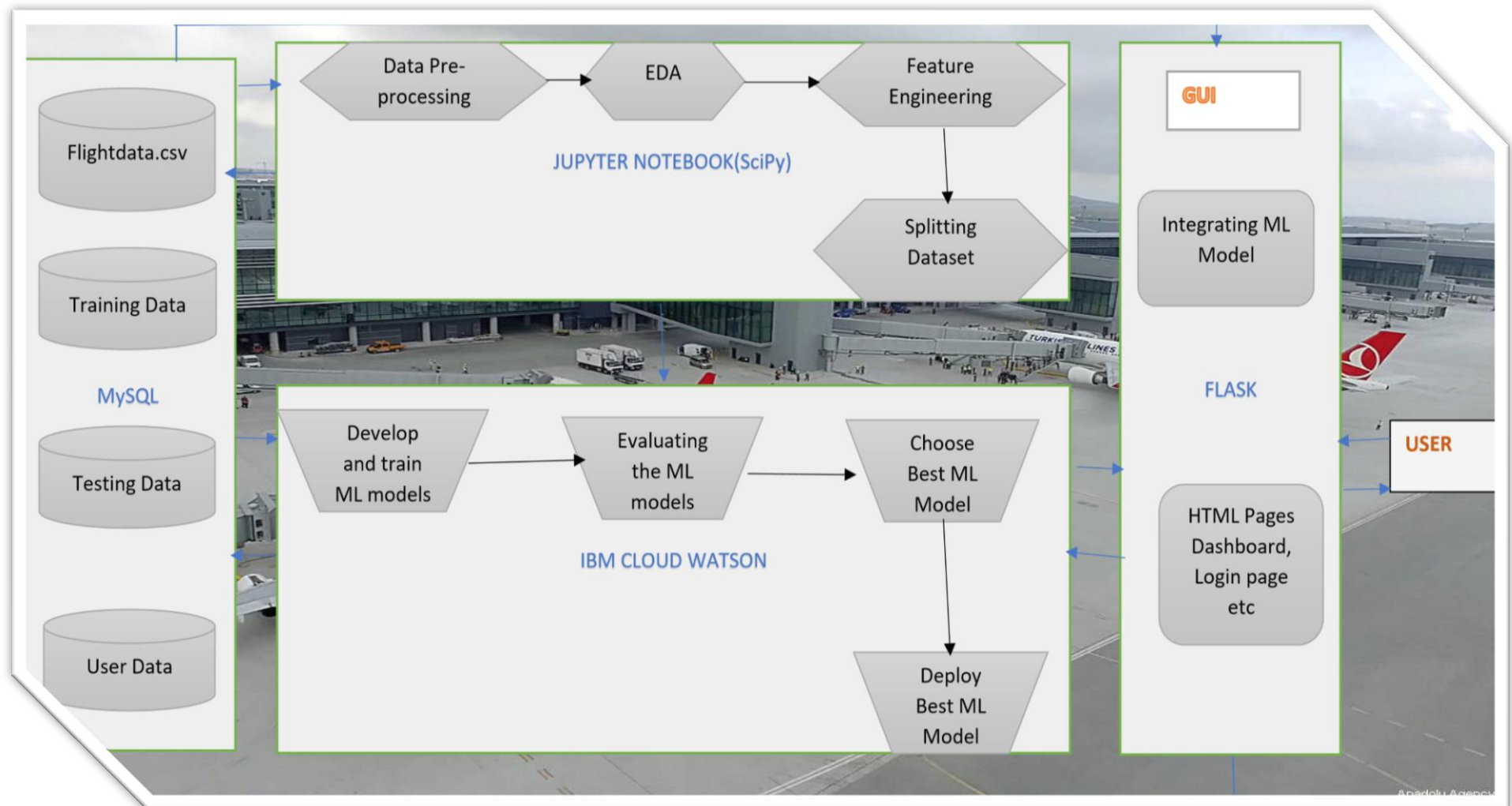| Date	20 October 2022
Team ID	PNT2022TMID27642
Project Name	Flight Delay Prediction Using Machine Learning
Maximum Marks	4 Marks

Technical Architecture:

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application Web UI.	HTML, CSS

2.	Application Logic-1	Develop , Train and find best ML Model	Python
3.	Application Logic-2	Deploy Best ML Model	IBM Watson
4.	Application Logic-3	Integrating ML model with Flask web app	IBM Watson, Flask, python
5.	Database	Structured data	MySQL
6.	Cloud Database	Database Service on Cloud	IBM DB2
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	Infrastructure (Server / Cloud)	Application Deployment on Cloud	Cloud Foundry, Kubernetes

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask, Scipy, Jupiter Notebook	microframework
2.	Scalable Architecture	3 – tier, Micro-services	Relational database, cloud, GUI
3.	Availability	distributed servers	IBM Cloud
4.	Performance	100 per sec	IBM Watson App Service