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

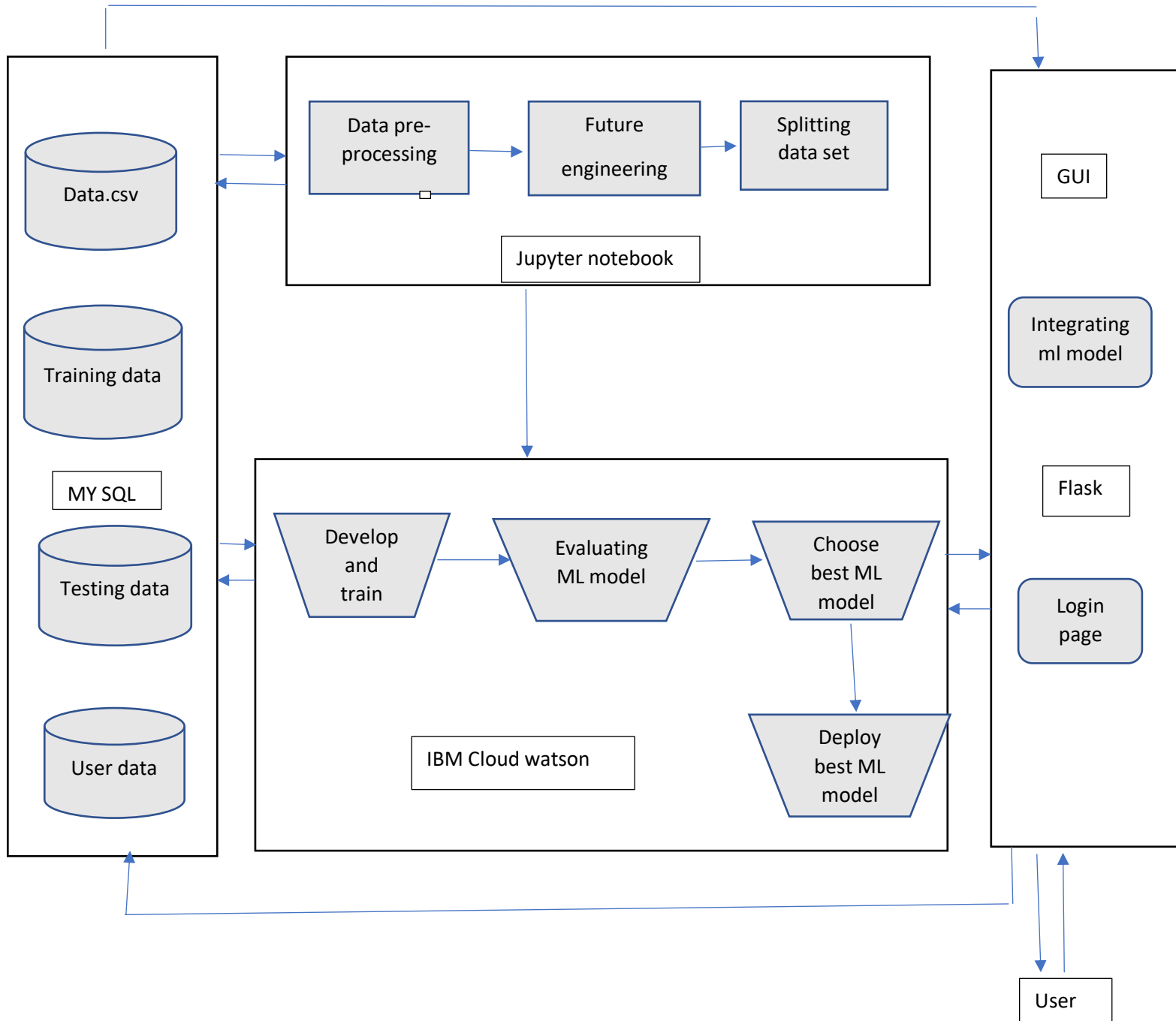| Date	03 October 2022
Team ID	PNT2022TMID43039
Project Name	Developing a flight delay prediction using machine learning
Maximum Marks	4 Marks

TECHNICAL ARCHITECTURE

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application (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 o 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-service	Relational database, cloud, GUI
3.	Availability	Distributed servers	IBM cloud
4.	Performance	100 per second	IBM Watson app service