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

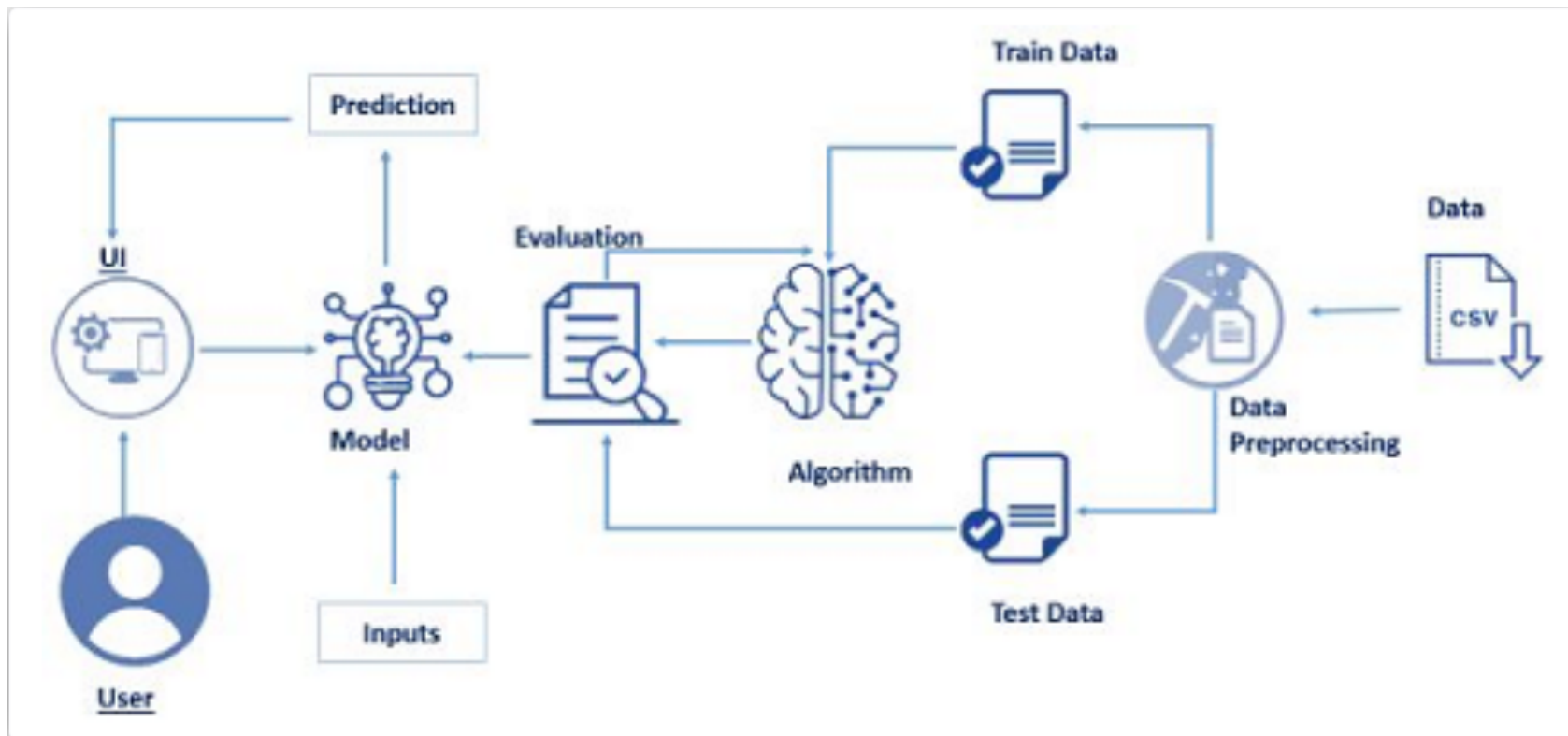| Date	15 October 2022
Team ID	PNT2022TMID20562
Project Name	Project - Machine Learning based Vehicle Performance Analyzer

Technical Architecture:

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web application that has the model built in and a UI for users to enter the values for predictions	HTML, CSS, Bootstrap, flask framework and python
2.	Application Logic-1	Running the ML Model	Python
3.	Database	String	MongodB
4.	Cloud usage	Training the Machine Learning model on Cloud	IBM Cloud
5.	File Storage	File storage requirements	Local Filesystem
6.	Machine Learning Model	Classification and regression	Random Forest, Decision Tree Regression/Classification
7.	Infrastructure (Server / Cloud)	Application Deployment on Cloud Cloud Server Configuration : SaaS	IBM Cloud

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask	Python
2.	Security Implementations	Javascript	JWT,Bcrypt