Project Design Phase-II
Technology and Stock (Architecture and Stack)

Date	23 October 2022
Team ID	PNT2022TMID54414
Project Name	Machine Learning Based Vehicle Performance Analyzer
Maximum Marks	4 Marks

Technical Architecture:

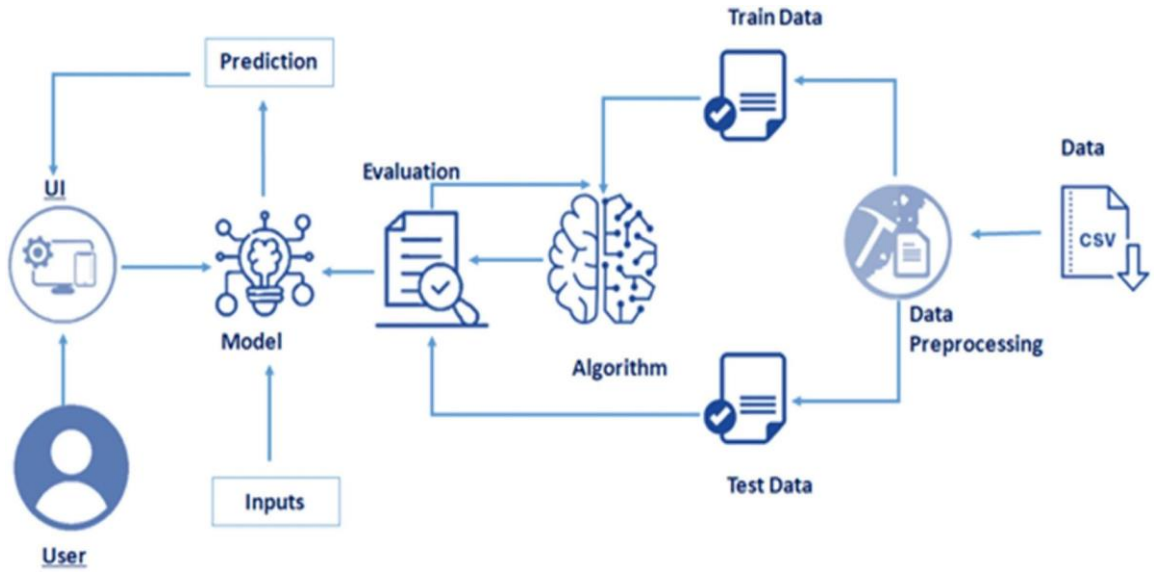

Table-1: Application Characteristics:

S.no	Characteristics	Description	Technology
1.	OpenSoure Frameworks	For wiring hardware devices, API and online services	Node RED
2.	Security Implementations	Advanced Encryption standard, DataEncryption standard ,RSA algorithm	Encryption
3.	Scalable Architecture	More number of users can be access the data.	Automated bootstrapping
4.	Availability	Increase the availability	Cloud computing
5.	Performance	High performance	Adaptive Contention Window

Table-2: Components & Technologies:

S.no	Component	Description	Technology
1.	User Interface	user interacts with application e.g. web application.	Python ,C
2.	Application Logic-1	Developing application	Python
3.	Application Logic-2	To add speech transcription capabilities to application.	IBM Watson STT service
4.	Application Logic-3	To automate interactions with customers	IBM Watson Assistant
5.	Database	To create data base	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM Cloud etc.
7.	File Storage	Storing data	IBM Block Storage or Other Storage Service or Local File system
8.	External API	To deliver accurate and precious data	IBM Weather API
9.	Machine Learning Model	To identify and locate objects	Object Recognition Model
10.	Infrastructure (Server / Cloud)	To compile and run the apps locally	Local, Cloud Foundry, etc.