Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	16 October 2022
Team ID	PNT2022TMID33271
Project Name	Project – Trip Based Modelling Of Fuel Consumption In Modern Fleet Vehicles by Using Machine Learning
Maximum Marks	4 Marks

Functional Requirements:

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Input	User inputs an Email and Password in required field to check its validation.
FR-2	Website Comparison	Model compares the Modern Fleet Vehicles using Blacklist and Whitelist approach.
FR-3	Feature extraction	After comparing, if none found on comparison then it extracts feature using heuristic and visual similarity approach.
FR-4	Prediction	Model predicts the Email and Password using Machine Learning algorithms such as Logistic Regression, KNN
FR-5	Classifier	Model sends all output to classifier and produces final Result
FR-6	Announcement	Model then displays Fuel Consumption In Modern Fleet Vehicles.
FR-7	Events	This model needs the capability of retrieving and displaying accurate result for a website

Non-functional Requirements:

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	It helps the users to analyze the consumption of fuel in modern fleet vehicle.
NFR-2	**Security**	Refers to the security measures that individuals and organizations can take to prevent wastage of fuel in heavy duty vehicles.
NFR-3	**Reliability**	Previously proposed machine learning models for average fuel consumption use a set of predictors that are collected over a time period to predict the corresponding fuel consumption in terms of either gallons per mile or liters per kilometer
NFR-4	**Performance**	Data modeling can easily help to diagnose the reason behind fuel consumption with a knowledge of input parameters. In this model it is able to capture the impact of both the duty cycle and the environment on the average fear fuel consumption of the vehicle.
NFR-5	**Availability**	By developing and deploying it in online & offline we can access any time it may help to detect the fuel consumption of modern fleet vehicle.
NFR-6	**Scalability**	Scalable This project can be used more efficiently with accurate information.