Project Design Phase - I
Proposed Solution

Date	1 October 2022
Team ID	PNT2022TMID12710
Project Name	Trip-Based Modelling of Fuel Consumption in Modern Fleet Vehicles
Maximum Marks	2 Marks

Proposed Solution:

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Predict the fuel consumption of fuel in fleet vehicles, which can help in improving the fuel economy and also can be useful in preventing fraudulent activities.
2.	Idea / Solution description	Use Supervised Regression Machine Learning algorithms like linear, or Support Vector Regression to predict the consumption of fuel in fleet vehicles based on various parameters like fuel type, weather, etc. The result of these algorithms will be displayed to the user via a web application with the ML models integrated with it.
3.	Novelty / Uniqueness	Several machine learning models can be used to obtain prediction results. These results can then be displayed to the user in an intuitive and easy-to-read manner.
4.	Social Impact / Customer Satisfaction	The results provided by the application will help the customer to plan ahead for future trips and find the best fuel type and vehicle in the fleet, thus it can improve the fuel economy of the fleet and allows the

		user to find the most appropriate fuel type for any particular vehicle type. This can allow the entire fleet to save fuel and thus reduce greenhouse emissions by using the optimal amount of carbon-based fuels, which is currently a diminishing resource.
5.	Business Model / Financial Benefits	By using the application, the customer will be able to find the most efficient combination of vehicles and fuel types in the fleet, and thus will be able to save expenses. By predicting the expenses for future trips, the customer is then able to plan ahead and also can prevent fraudulent activities.
6.	Scalability of the Solution	The majority of this solution can also be applied to similar vehicles like trains and airplanes if the appropriate data is available. The application is to be made as a web application and thus can be made available to any user.