Project Initialization and Planning Phase

Date	15 March 2024
Team ID	SWTID1720078183
Project Name	Predictive Modeling For Fleet Fuel Management Using Machine Learning
Maximum Marks	3 Marks

Define Problem Statement :

Efficiently managing and predicting fuel consumption is crucial for enhancing fuel economy, optimizing operational costs, and preventing fraudulent activities in fleet management. This project aims to develop a robust machine learning model to accurately predict fuel consumption for fleet vehicles based on gas type and other available data. By addressing the challenges of identifying relevant data points, handling incomplete or inconsistent data, and building an accurate predictive model, the solution will provide actionable insights for fleet managers. The project also includes developing a user-friendly web application to integrate the machine learning model, enabling real-time fuel consumption predictions, seamless data entry, and result visualization. Successful implementation will empower fleet managers to make data-driven decisions, optimize fuel usage, reduce costs, and prevent fraud.

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	Fleet Manager	Optimize fuel consumption and prevent fraudulent activities within my fleet	I lack accurate predictions of fuel consumption based on various factors	Fuel consumption depends on several internal and external factors which are not all measured or available for analysis	Frustrated due to inefficiencies and potential losses in fuel costs
PS-2	Fleet Manager	Accurately predict fuel consumption for better	Current methods are inadequ	Fuel consumption is influenced	Concerned about inefficiencies and potential fraudulent activities

		management and cost-saving	ate and do not conside r all measura ble factors	by various internal and external factors	
PS-3	Fleet Manager	Utilize technology to streamline fuel consumption predictions	Existing solution s are not tailored to conside r all relevant factors in predicti ng fuel usage	There is a lack of comprehen sive tools that integrate multiple data points for accurate predictions	Anxious about potential financial losses and inefficiencies in fleet management