Project Initialization and Planning Phase

Date	15th July 2024
Team ID	739740
Project Name	Predictive Modeling For Fleet Fuel Management Using ML
Maximum Marks	3 Marks

Define Problem Statements (Customer Problem Statement Template):

Predictive modeling for fleet fuel management involves several key problem statements. Accurately forecasting future fuel consumption based on historical data and various influencing factors is crucial. Identifying abnormal fuel usage patterns can help detect issues like theft or inefficiencies. Optimizing the timing and volume of fuel purchases is essential to take advantage of price fluctuations. Predicting optimal maintenance schedules ensures vehicles operate efficiently, minimizing fuel consumption. Determining the most fuel-efficient routes by considering traffic and road conditions can significantly reduce fuel usage. Lastly, analyzing and influencing driver behavior is vital for promoting fuel-efficient driving habits.

Example:

I am (Customer)	I'm trying to	But	Because	Which makes me
feel A fleet manager at a logistics company	Optimize fuel consumption and reduce costs across my vehicle fleet	I am struggling with predicting fuel usage accurately, detecting anomalies, and optimizing routes and maintenance schedules	Various factors such as inconsistent driving behaviors, different vehicle types, fluctuating fuel prices, and varying road conditions make it difficult to manage fuel efficiently	Frustrated and concerned about the increasing operational costs and inefficiencies