Model Development Phase Template

Date	7 July 2024
Team ID	739652
Project Title	Trip-Based Modelling of Fuel Consumption in Modern Fleet Vehicles Using Machine Learning
Maximum Marks	5 Marks

Feature Selection Report Template

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

Feature	Description	Selected (Yes/No)	Reasoning
Distance	The distance covered by a vehicle(km)	Yes	Major contributor to the fuel consmption.
Speed	The range/speed of vehicle (km/h)	Yes	Influencing engine efficiency and driving behavior.
Temperature_ inside	The temperature inside the vehicle(c)	Yes	Affects fuel consumption by impacting system usage, which in turn influences overall energy expenditure and efficiency in fleet vehicles.

Temperature_ outside	The outside temperature(c)	Yes	Affects fuel consumption by influencing engine efficiency, air density, and the need for heating or cooling.
AC	Air conditioning	Yes	An important factor in fuel consumption as it adds extra load to the engine
Rain	On Rainfall weather	Yes	Impacts fuel economy by lowering tire traction, and raising rolling resistance.
Sun	On Sunny weather	Yes	Impact on fuel consumption since it increases the need for air cooling, which strains the engine more and reduces fuel efficiency.
E10	Gasoline type	Yes	It alters energy density and combustion characteristics.
SP98	Super Plus 98	Yes	Affects fuel consumption by providing higher octane levels, potentially improving engine performance and efficiency