Model Development Phase Template

Date	10 July 2024
Team ID	739970
Project Title	**TRAFFICTELLIGANCE-Advanced Traffic Volume Estimation With 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
Traffic_ID	Unique identifier for each traffic data	No	For predicting the traffic patterns, a Loan ID is not required.
Vehicle_Count	Number of vehicles passing through a point	Yes	Essential for understanding traffic volume congestion.

Average_Speed	Average speed of vehicles	Yes	Crucial for assessing traffic flow and identifying slowdowns
Accident_Count	Number of accidents	Yes	Important for identifying high risk areas and improving safety measures

Wheather_Condition	Wheather conditions during data collection	Yes	Wheather impacts traffic patterns and road safety.
Road_Type	Type of road(e.g.,highway, urban street)	Yes	Different types have varying traffic behaviors and capacity.
Time_of_Day	Time at which data Was collected	Yes	Traffic patterns change throughout the day, influencing peak and offpeak periods .
Day_of_Week	Day of the week On which data was collected	Yes	Traffic varies by weekdays and weekends, important for trend analysis.
Event_Proximity	Proximity o special events or holidays	Yes	Special events can cause a typical traffic patterns.
Lane_Count	Number of lanes	Yes	More lanes typically handle higher traffic volumes, affecting flow and congestion.
Signal_Timing	Traffic signal timing at intersections	Yes	Signal timing impacts vehicle flow and stop durations