

Project Design Phase
Proposed Solution

Date	26 june 2026
Team ID	LTVIP2025TMID35978
Project Name	Traffictelligence
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Urban commuters, traffic managers, and delivery drivers need a reliable way to predict traffic volume based on weather conditions, time, and holidays because current methods lack real-time accuracy, leading to delays, poor route planning, and inefficient traffic management.
2.	Idea / Solution description	A web-based application that uses a pre-trained machine learning model (RandomForestRegressor) to predict traffic volume based on user-inputted weather, time, and holiday data, displayed through an intuitive interface
3.	Novelty / Uniqueness	Combines real-time user inputs with a scalable machine learning model, offering a free, accessible tool without requiring user registration, unlike commercial traffic apps.
4.	Social Impact / Customer Satisfaction	Reduces travel time and stress for commuters, improves safety and efficiency for traffic managers, and optimizes delivery schedules for drivers, enhancing overall urban mobility.
5.	Business Model (Revenue Model)	Currently free with potential for a premium subscription (e.g., SuperGrok-style) offering advanced features like real-time weather integration or historical data analysis
6.	Scalability of the Solution	Designed for local deployment with potential to scale to cloud services (e.g., AWS) to handle increased users and integrate real-time data sources.