

Project Design Phase-II

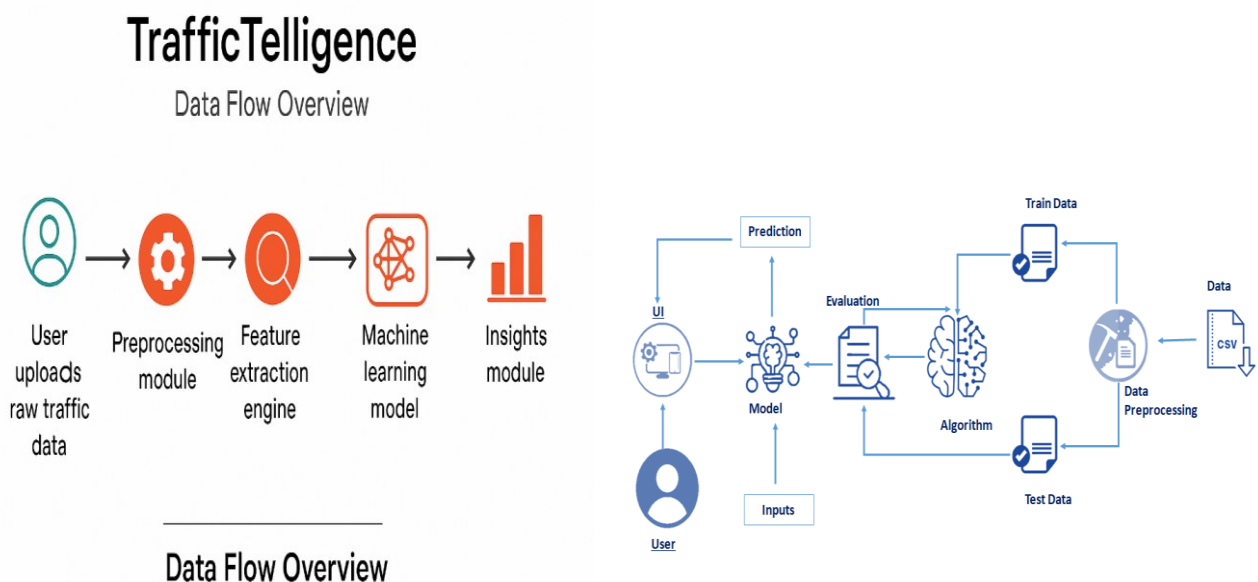
Data Flow Diagram & User Stories

Date	28 June 2025
Team ID	LTVIP2025TMID40870
Project Name	TrafficTelligence: Advanced Traffic Volume Estimation with Machine Learning.
Maximum Marks	4 Marks

Data Flow Diagrams:

TrafficTelligence is an innovative platform designed to estimate traffic volume using advanced machine learning algorithms. By streamlining the flow of data from raw input sources—such as sensor logs, video feeds, or geolocation files—through preprocessing, feature extraction, and predictive modeling, it delivers accurate and actionable insights for urban planners and traffic engineers. The system not only enhances forecasting precision but also supports smart city initiatives by transforming complex data into intuitive visual reports.

Example: DFD Level 0 (Industry Standard)



User Stories – TrafficTelligence Project

This document lists the user stories defined for the TrafficTelligence web-based traffic volume prediction system. It includes user types, functional requirements, story IDs, expected outcomes, priorities, and release sprint versions.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Customer (Web User)	Input Form	USN-1	As a user, I can input traffic-related details (time, weather, holiday) into the form.	I can submit the form without errors	High	Sprint-1
Customer (Web User)	Model Integration	USN-2	As a user, I receive predicted traffic volume instantly after form submission.	I can see predicted traffic volume on the output page	High	Sprint-2
Customer (Web User)	User Interface	USN-3	As a user, I can view the app with a background image and styled layout.	UI loads with background image correctly	Medium	Sprint-1
Administrator	Data Validation	USN-4	As an admin, I can validate if the ML model accepts only valid data types.	Model throws errors for wrong inputs	Medium	Sprint-2
Customer Care Executive	Error Handling	USN-5	As support staff, I can verify error messages shown for missing or invalid inputs.	App shows descriptive error messages	Medium	Sprint-2

Customer (Web User)	Flask Deployment	USN-6	As a user, I can access the prediction system online through a browser.	App loads via localhost or deployment link	High	Sprint-2
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