

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	31 January 2025
Team ID	LTVIP2025TMID20285
Project Name	TrafficTelligence: Advanced Traffic Volume Estimation with Machine Learning
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Traffic Prediction	Input Traffic Metadata Model Prediction Display Traffic Volume Level
FR-4	Prediction Logs	Store Prediction History Download Log File

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	User-friendly interface for prediction and input submission
NFR-2	Security	Secure input handling, form validation, and API protection
NFR-3	Reliability	Consistent prediction behavior under repeated valid inputs
NFR-4	Performance	Response time within 1 second for each request
NFR-5	Availability	High uptime when deployed to Heroku or AWS
NFR-6	Scalability	Easily extendable to more input features or prediction classes