Project Design Phase-II
Data Flow Diagram & User Stories

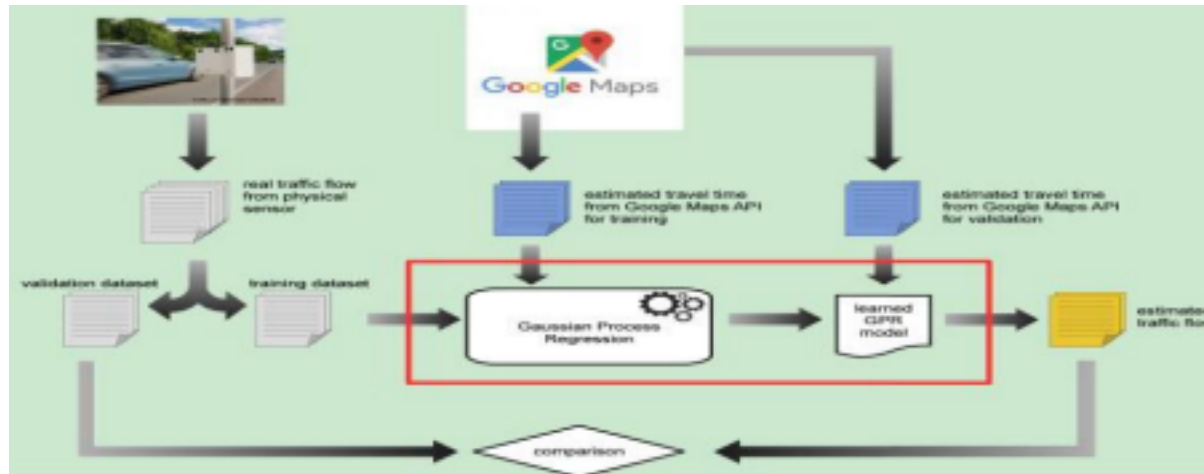| Date	26 June 2025
Team ID	LTVIP2025TMID32460
Project Name	Traffic Telligence: Advanced Traffic Volume Estimation with Machine Learning
Maximum Marks	4Marks

Data Flow Diagrams (DFD):

A **Data Flow Diagram (DFD)** is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of system requirements graphically. It shows:

- How data enters and leaves the system
- What processes change or transform the information
- Where data is stored

DFDs help stakeholders understand how the system functions by mapping out its processes, data stores, and data interactions in a visual and easily interpretable manner.

User Stories for Traffic Telligence

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Commuter (Web User)	Input Interface	USN-1	As a user, I can enter traffic-related inputs like time, location, and date.	I can submit data and get confirmation for processing.	High	Sprint-1
Commuter (Web User)	Prediction	USN-2	As a user, I can view predicted traffic volume for my selected time/location.	I can see the traffic estimation result displayed clearly.	High	Sprint-2
Commuter (Web User)	Alternative Route Suggestion	USN-3	As a user, I can get suggestions for alternative travel routes based on traffic.	I can view alternate routes with lower congestion.	Medium	Sprint-3
Traffic Authority	Dashboard Access	USN-4	As an authority, I can access a dashboard to monitor real-time traffic predictions.	I can see live data and predictions for multiple regions.	High	Sprint-2

Traffic Authority	Signal Adjustment Insight	USN-5	As an authority, I receive suggestions for optimizing signal timings.	I receive a report suggesting signal changes per region.	Medium	Sprint-3
Urban Planner/Admin	Historical Data Visualization	USN-6	As a planner, I can analyze past traffic trends using charts and graphs.	I can select parameters and view visualizations accordingly.	High	Sprint-3
Urban Planner/Admin	Export Prediction Report	USN-7	As an admin, I can export traffic prediction results as PDF or Excel.	I can click export and download the file.	Low	Sprint-3