## 4. Project Planning and Scheduling

Date	23 june 2025
Team ID	LTVIP2025TMID41942
Project Name	Traffic telligence : advanced traffic volume estimation with machine learning
Maximum	5 Marks
Marks	

## - TrafficTelligence

A structured approach was followed to plan and execute the **TrafficTelligence** project within a fixed timeline. The tasks were divided into manageable phases to ensure smooth development and timely delivery.

## Project Timeline Overview

Phase	Duration	Activities
Phase 1: Requirement Analysis	Day 1	Understanding objective, defining features
Phase 2: Data Collection & Exploration	Day 2–3	Dataset loading, inspection, and visualization
Phase 3: Preprocessing	Day 4–5	Null handling, feature selection, date parsing
Phase 4: Model Building	Day 6–7	Train/test split, Random Forest model training
Phase 5: Evaluation & Testing	Day 8	R <sup>2</sup> Score, MSE evaluation, basic predictions
Phase 6: Web App Development	Day 9–10	Flask backend + HTML/CSS frontend
Phase 7: Integration & Testing	Day 11	Connect frontend to backend + manual testing
Phase 8: Report & PPT Creation	Day 12– 13	Final documentation, presentation preparation

Phase	Duration	Activities
Phase 9: Final Review & Demo	Day 14	Dry-run, corrections, and final demonstration

## **✓** Tools Used for Planning

- Excel / Google Sheets for timeline tracking
- Trello / Notion for task breakdown (optional)
- Manual daily progress updates