Project Planning Phase
Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

Date	27 June 2025
Team ID	LTVIP2025TMID43747
Project Name	TrafficTelligence Advanced Traffic Volume Estimation With Machine Learning
Maximum Marks	5 Marks

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	3	High	1.P.Jitendra Reddy 2.D.Chaoithanya Kumar Reddy 3.A.Kavya 4.A.Rahel 5.G.Silpa
Sprint-1	Development	USN-2	As a developer, I want to clean and preprocess the traffic data for training (fill missing values, convert time columns).	2	High	1.P.Jitendra Reddy 2.D.Chaoithanya Kumar Reddy 3.A.Kavya 4.A.Rahel 5.G.Silpa
Sprint-2		USN-3	As a data scientist, I want to train a machine learning model to predict traffic volume based on historical data.	5	High	1.P.Jitendra Reddy 2.D.Chaoithanya Kumar Reddy 3.A.Kavya 4.A.Rahel 5.G.Silpa

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1		USN-4	As a developer, I want to evaluate the model using MAE, MSE, and R2-score to ensure its accuracy.	2	Medium	1.P.Jitendra Reddy 2.D.Chaoithanya Kumar Reddy 3.A.Kavya 4.A.Rahel 5.G.Silpa
Sprint-1		USN-5	As a user, I want to view traffic trends and predictions in graphs and charts for better understanding	3	Medium	1.P.Jitendra Reddy 2.D.Chaoithanya Kumar Reddy 3.A.Kavya 4.A.Rahel 5.G.Silpa

Project Tracker, Velocity & Burndown Chart: (4 Marks)

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	15 June 2025	20 June 2025	20	20 June 2025
Sprint-2	20	6 Days	17 June 2025	22 June 2025	20	22 June 2025
Sprint-3	20	6 Days	19 June 2025	24 June 2025	20	24 June 2025
Sprint-4	20	6 Days	21 June 2025	26 June 2025	20	26 June 2025

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)

Velocity:

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$

Burndown Chart:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

https://www.visual-paradigm.com/scrum/scrum-burndown-chart/

https://www.atlassian.com/agile/tutorials/burndown-charts

Reference:

https://www.atlassian.com/agile/project-management

https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software

https://www.atlassian.com/agile/tutorials/epics

https://www.atlassian.com/agile/tutorials/sprints

https://www.atlassian.com/agile/project-management/estimation

https://www.atlassian.com/agile/tutorials/burndown-charts