# Project Planning Phase

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

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|---|---|
| Date | 27 june 2025 |
| Team ID | LTVIP2025TMID45044 |
| 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 | Data Collection | USN-1 | As a user, I want to collect and load data into the system for model training. | 3 | High | Seelam Sai Sindhusha |
| Sprint-1 | Data Preprocessing | USN-2 | As a user, I want to handle missing values in the dataset for better model accuracy. | 3 | High | Satvika Chilakala |

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|---|---|---|---|---|---|---|
| Sprint-1 | | USN-3 | As a user, I want to encode categorical variables | 2 | medium | Pechetti Mohana Nikitha |
| | Data Preprocessing | | | | | |
| Sprint-2 | Model Building | USN-4 | As a user, I want to train a machine learning model to predict traffic volume. | 5 | high | Pilla Kavya |
| Sprint-2 | Model Evaluation | USN-5 | As a user, I want to test and evaluate the trained model for accuracy | 3 | medium | Satvika Chilakala |
| Sprint-2 | UI and Web Interface | UNS-6 | As a user, I want to build HTML pages for input and results. | 2 | medium | Seelam Sai Sindhusha |
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| 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 | 8 | 6 Days | 12 june 2025 | 17 june 2025 | 8 | 12 june 2025 |
| Sprint-2 | 16 | 6 Days | 18 june 2025 | 24 june 2025 | 16 | 18 june 2025 |
| Sprint-3 | – | — | 0 | — | | |
| **Sprint** | **Total Story Points** | **Duration** | **Sprint Start Date** | **Sprint End Date (Planned)** | **Story Points Completed (as on Planned End Date)** | **Sprint Release Date (Actual)** |
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**Project Tracker, Velocity & Burndown Chart: (4 Marks)**

**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**