**Project Planning Phase**

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

|  |  |
| --- | --- |
| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID60630 |
| Project Name | Traffictelligence:Traffic Volume Estimation using 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 Preprocessing |  | As a data scientist, I want to handle missing and inconsistent data | 3 | High | Sruthi |
| Sprint-1 | Feature Engineering |  | As a developer, I want to encode categorical data and normalize values | 2 | Medium | Pravalika |
| Sprint-2 | Model Building |  | As a developer, I want to train a regression model to predict traffic volume | 5 | High | Sruthi |
| Sprint-2 | Model Evaluation |  | As a tester, I want to evaluate model performance using MSE, MAE, and R² | 3 | High | George |
| Sprint-2 | Deployment |  | As a backend developer, I want to deploy the model using Flask or Streamlit | 3 | Medium | George |
| Sprint-2 | Dashboard |  | As a user, I want to see traffic volume predictions on an interactive dashboard | 2 | High | Pravalika |
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| Sprint-2 | Dashboard |  | As a user, I want to see traffic volume predictions on an interactive dashboard | 2 | High | pravalika |
|  |  |  |  |  |  |  |

**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 | 8 | 5 Days | 24 June 2025 | 28 June 2025 | 8 | 28 June 2025 |

**Velocity:**

**Average Velocity (AV)= 4 days 8 story points = 2**

**Burndown Chart:**

**Date Day Remaining Story Points**

**24 June 2025 Day 1 8**

**25 June 2025 Day 2 6**

**26 June 2025 Day 3 4**

**27 June 2025 Day 4 2**

**28 June 2025 Day 5 0 (Completed)**

<https://scikit-learn.org/stable/> (for model building and ML tools)

<https://flask.palletsprojects.com/> (for API/deployment part)

<https://towardsdatascience.com/> (for ML concepts, articles, regression)

**References:**

**<https://www.atlassian.com/agile/tutorials/sprints>**

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

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

**<https://scikit-learn.org/stable/>**

**<https://flask.palletsprojects.com/>**