

Project Planning Phase

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

Date	15 February 2025
Team ID	LTVIP2026TMIDS79606
Project Name	online payments fraud detection 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	Dataset Preparation	User 01	Collect and explore credit card fraud dataset	3	High	Chandana
Sprint-1	Data Preprocessing	User 01	Perform data cleaning and handle missing values	5	High	Chandana
Sprint-1	Feature Engineering	User 01	Apply feature scaling using StandardScaler	5	High	Savitha
Sprint-1	Model Development	User 02	Train XGBoost fraud detection model	8	High	Savitha
Sprint-1	Model Evaluation	User 01	Evaluate model using accuracy, precision, recall, ROC-AUC	5	High	Chandana
Sprint-2	Model Optimization	User 01	Tune hyperparameters for better performance	5	Medium	Monisha
Sprint-2	Backend Development	User 01	Develop Flask backend application	8	High	Monisha
Sprint-2	API Integration	User 02	Integrate ML model with Flask backend	5	High	Nagarjuna
Sprint-2	Frontend Development	User 02	Design HTML/CSS web interface	5	High	Nagarjuna
Sprint-2	Input Validation	User 02	Implement input validation in Flask	3	Medium	Chandana

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Prediction Display	User 01	Display fraud result and probability on UI	5	High	Chandana

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	26	2 weeks	20 Dec 2025	4 Jan 2026	25	5 Jan 2026
Sprint-2	21	2 Weeks	6 Jan 2026	14 Jan 2026	21	15 Jan 2026
Sprint-3	18	2 weeks	16 Jan 2026	30 Jan 2026	18	31 Jan 2026
Sprint-4	13	2 weeks	01 Feb 2026	14-Feb 2026	13	15 Feb 2026

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)

$$\text{Average Velocity} = 75 / 4$$

$$\text{Average Velocity} = 18.75$$

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>

