

## Project Planning Phase

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

Date	13 February 2026
Team ID	LTVIP2026TMIDS88814
Project Name	Online Payments Fraud Detection using Machine Learning
Maximum Marks	5 Marks

### Product Backlog, Sprint Schedule, and Estimation

Sprint	Functional Requirement (Epic)	User Story No.	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Collection & Exploration	USN-1	As a data analyst, I can import and inspect transaction datasets to understand fraud distribution and data quality.	3	High	Data Team
Sprint-1	Data Preprocessing	USN-2	As a developer, I can clean data, handle missing values, and encode features for fraud modeling.	4	High	ML Team
Sprint-1	EDA Visualization	USN-3	As a team member, I can visualize fraud trends using charts and correlation analysis.	2	Medium	Data Team
Sprint-2	Feature Engineering	USN-4	As a developer, I can create	3	High	ML Team

			behavior-based features (transaction frequency, deviation, time patterns).			
Sprint-2	Model Development	USN-5	As a user, I can get fraud prediction using a trained ML model.	5	High	ML Team
Sprint-2	Model Evaluation	USN-6	As a reviewer, I can view accuracy, precision, recall, F1-score, and ROC-AUC metrics.	3	High	ML Team
Sprint-3	Backend API	USN-7	As a developer, I can create API endpoints to process transaction inputs and return predictions.	4	High	Backend Team
Sprint-3	Model Serving	USN-8	As a developer, I can load saved model and preprocessing artifacts for real-time inference.	3	High	Backend Team
Sprint-4	Monitoring Dashboard	USN-9	As a fraud analyst, I can view flagged transactions and fraud statistics in a dashboard.	3	Medium	Frontend Team

### Project Tracker, Velocity & Burndown Chart

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed	Sprint Release Date (Actual)
Sprint-1	9	7 Days	15 Feb 2026	21 Feb 2026	9	21 Feb 2026
Sprint-2	11	7 Days	22 Feb 2026	28 Feb 2026	11	28 Feb 2026
Sprint-3	7	7 Days	01 Mar 2026	07 Mar 2026	7	07 Mar 2026
Sprint-4	5	5 Days	08 Mar 2026	12 Mar 2026	5	12 Mar 2026

#### Velocity

If sprint duration is 7 days and the team completes approximately 9–11 story points per sprint, average velocity  $\approx 1.3$ – $1.5$  story points/day. This helps forecast completion timelines for additional fraud detection enhancements.

#### Burndown Chart (Description)

A burndown chart tracks remaining story points versus time across each sprint. It helps visualize development progress, monitor delays, and ensure timely deployment of the fraud detection system. The chart can be generated using Agile tracking tools like Jira or Azure DevOps.

#### References

Atlassian Agile Project Management – Sprints, Epics, Story Points, Velocity, and Burndown Charts documentation.