

Project Planning logic

Date	
Team ID	LTVIP2026TMIDS40243
Project Name	Online Payments Fraud Detection
Maximum Marks	5 Marks

Planning Logic (Updated for Online Payments Fraud Detection System)

A Sprint is a fixed time period in which our team works to complete a defined set of tasks related to the fraud detection system.

An Epic is a major phase of the project such as Data Preparation, Model Building, or Application Development. Since these tasks are large, they are divided into smaller tasks.

A User Story (Story) is a small, manageable task that contributes to completing an Epic.

A Story Point represents the effort required to complete a task (based on complexity and time).

We followed Fibonacci scale:

- 1 – Very Easy task
- 2 – Normal task
- 3 – Moderate task
- 5 – Difficult task

Sprint 1 – Data Preparation & EDA

Epic 1: Data Collection & Understanding

- Loading Kaggle Fraud Dataset (USN1) – 2
- Understanding Dataset Structure (USN2) – 1

Epic 2: Data Preprocessing

- Removing unnecessary columns (nameOrig, nameDest) (USN3) – 2
- Handling Missing Values (USN4) – 2
- Encoding Transaction Type (USN5) – 3

Epic 3: Exploratory Data Analysis (EDA)

- Fraud vs Non-Fraud Distribution (USN6) – 2
- Transaction Type Analysis (USN7) – 3
- Amount Distribution & Outlier Detection (USN8) – 3

Total Story Points in Sprint 1

$$2 + 1 + 2 + 2 + 3 + 2 + 3 + 3 = 18$$

Sprint 2 – Model Building & Evaluation

Epic 4: Model Training

- Train Decision Tree Model (USN9) – 3
- Train Random Forest Model (USN10) – 3
- Train Support Vector Machine (USN11) – 5
- Train XGBoost Model (USN12) – 5

Epic 5: Model Evaluation & Comparison

- Accuracy & Confusion Matrix (USN13) – 3
- Precision, Recall & F1-Score (USN14) – 3
- Model Comparison & Final Selection (USN15) – 3

Total Story Points in Sprint 2

$3 + 3 + 5 + 5 + 3 + 3 + 3 = 25$

Sprint 3 – Application Development

Epic 6: Web Application Development

- Design Flask Application Structure (USN16) – 3
- Integrate Trained Model with Flask (USN17) – 5
- Create Prediction Page (USN18) – 3
- Implement Real-time Fraud Prediction Logic (USN19) – 5

Total Story Points in Sprint 3

$3 + 5 + 3 + 5 = 16$

Total Story Points

Sprint 1 = 18

Sprint 2 = 25

Sprint 3 = 16

Total Story Points = $18 + 25 + 16 = 59$

Number of Sprints = 3

Velocity Calculation

Velocity = Total Story Points Completed / Number of Sprints

Velocity = $59 / 3$

Velocity $\approx 19.6 \approx 20$ Story Points