A Sprint fixed period or duration in which a team works to complete a set of tasks

An **Epic** is a **big task or project** that is too large to complete in one sprint. It is broken down into **smaller tasks (stories)** that can be completed over multiple sprints.

A **Story** is a small task . It is part of an **Epic**.

A **Story Point** is a number that represents how much effort a story takes to complete. (usually in form of Fibonacci series)

Sprint 1: Data Engineering & Preprocessing

Epic 1: Data Collection

- **USN1:** Gathering Dataset (Kaggle Source) — **2**
- **USN2:** Loading Data into Environment (Pandas/Colab) — **1**

Epic 2: Data Preparation

- **USN3:** Handling Missing Values & Feature Dropping (nameOrig, nameDest) — **3**
- **USN4:** Handling Categorical Values (Label Mapping for type) — **3**
- **USN5:** Handling Inconsistency & Class Imbalance (SMOTE Implementation) — **3**

Total Story Points in Sprint 1: 2 + 1 + 3 + 3 + 3 = **12**

Sprint 2: Visualization & Model Development

Epic 3: Data Visualization (Bivariate Analysis)

- **USN6:** Bar Charts (Transaction Type Distribution) — **2**
- **USN7:** Pie Charts (Fraud vs. Legitimate Ratio) — **2**
- **USN8:** Line Charts/Heatmaps (Correlation Analysis) — **2**
- **USN9:** Boxplots (Amount & Step Distribution vs. Fraud) — **4**

Epic 4: Model Building (XGBoost & Random Forest)

- **USN10:** Training & Hyperparameter Tuning (F1-Score Optimization) — **5**

Epic 5: System Integration (Flask UI)

- **USN11:** Developing Dashboard & Real-time Prediction Interface — **5**

Total Story Points in Sprint 2: 2 + 2 + 2 + 4 + 5 + 5 = **20**

Velocity Calculation

The velocity measures the rate at which our team delivers "intelligence" and "functionality" throughout the project lifecycle.

- **Total Story Points Completed:** 12 (Sprint 1) + 20 (Sprint 2) = **32**

- **Number of Sprints:** 2

Formula:

Velocity= Total Story Points Completed/ Number of Sprints

Calculation:

Result:

Your team's velocity is **16 Story Points per Sprint.**

Planning Definitions used in this Project:

- **Sprint:** A fixed 7-day duration (starting Jan 31, 2026) dedicated to specific ML development tasks.

- **Epic:** Large-scale objectives such as "Data Preparation" or "Model Building."

- **Story:** Granular tasks like "Implementing SMOTE" or "Mapping Categories."

- **Story Point (Fibonacci):**
    - **1:** Very Easy (Loading CSV)
    - **2:** Normal (Bar Charts)
    - **3:** Moderate (Categorical Mapping)
    - **5:** Difficult (Training XGBoost / Flask Integration)

Your team's velocity is 16 Story Points per Sprint.