

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)

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

Sprint 1: Core Setup

Epic	User Story	Story Points	Priority	Team Members
Backend Infrastructure	Prepare dataset loading pipelines and preprocessing (train/val/test split)	3	High	Dev1, Dev2
	Integrate pre-trained CNN architecture (e.g., ResNet, EfficientNet)	5	High	Dev2
Frontend Basics	Build Streamlit UI skeleton for image upload	2	Medium	Dev3
	API connection testing between UI and backend	2	High	Dev1

Total Sprint 1 Points: 12

Velocity: 12 points/sprint

Sprint 2: Model Development

Epic	User Story	Story Points	Priority	Team Members
Training & Tuning	Implement transfer learning model training	5	High	Dev2
	Evaluate model performance (accuracy, confusion matrix)	3	Medium	Dev1, Dev3
Testing	Implement unit tests for model prediction pipeline	2	Medium	Dev3
Documentation	Write initial model documentation	2	Low	Dev2

Total Sprint 2 Points: 12

Sprint 3: Deployment & Use Cases

Epic	User Story	Story Points	Priority	Team Members
Deployment	Set up Docker container for deployment	3	Medium	Dev3
Scenarios Integration	Implement Scenario 1 (Biodiversity Monitoring interface with real-time predictions)	3	High	Dev1, Dev2
	Implement Scenario 2 (Ecological research camera integration)	2	Medium	Dev3
	Implement Scenario 3 (Citizen science educational UI improvements)	2	Low	Dev3

Total Sprint 3 Points: 10

Velocity = Total Completed Points / Number of Sprints

$$= (12 + 12 + 10) / 3$$

$$= 11.33 \text{ points per sprint}$$