

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.

1- Very Easy task

2- Easy task

3- Moderate task

5- Difficult task

Sprint Planning Logic (2-week cycle)

Sprint 1: Setup & Core Architecture

- Define user stories and prioritize backlog
- Set up FastAPI backend and Streamlit UI
- Integrate IBM Granite LLM via Hugging Face or watsonx API
- Configure Pinecone for vector search
- Deploy basic chatbot interface

Sprint 2: Core Features

- Implement document upload and summarization
- Add eco-tip generation using prompt templates
- Enable citizen feedback form and storage
- Connect to IoT data (mock or real-time)

Sprint 3: Intelligence & Forecasting

- Add time-series forecasting (e.g., LSTM) for energy/water
- Implement anomaly detection logic
- Generate sustainability reports (PDF/Markdown)
- Add multilingual support

Sprint 4: Security & Optimization

- Add RBAC, TLS, and audit logging
- Optimize model prompts and caching
- Conduct usability testing and gather feedback
- Prepare for pilot deployment

Total Story Points

Sprint 1 = 13

Sprint 2 = 21

Sprint 3 = 21

Sprint 4 = 13

Velocity = Total Story Points Completed / Number of Sprints

Total Story Points = 13 + 21 + 21 + 13 = 68

No of Sprints = 4

Velocity = 68 / 4 = 17

our team's velocity is 17 Story Points per Sprint.