

A **Sprint** is a fixed period during which the team completes a set of planned tasks.

An **Epic** is a major feature or functionality that is broken down into smaller tasks (User Stories).

A **User Story** is a small, implementable task that contributes to completing an Epic.

A **Story Point** represents the effort required to complete a story.

(Using Fibonacci sequence: 1, 2, 3, 5)

- 1 → Very Easy
- 2 → Easy
- 3 → Moderate
- 5 → Complex

◆ Sprint 1

Epic 1: Project Setup & Environment Configuration

- Setting up Python environment (USN1) → 2
- Installing required libraries (USN2) → 1
- Configuring Gemini API key securely (USN3) → 3

Epic 2: User Interface Development

- Designing Streamlit interface (USN4) → 3
- Creating input fields (destination, days, nights) (USN5) → 2
- Adding “Generate Itinerary” button (USN6) → 2

Total Story Points in Sprint 1

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

= 13 Story Points

◆ Sprint 2

Epic 3: Input Validation & Prompt Engineering

- Validate destination input (USN7) → 2
- Validate number of days and nights (USN8) → 2

- Create structured prompt format (USN9) → 3

Epic 4: AI Integration

- Integrate Gemini API (USN10) → 5
- Handle AI response formatting (USN11) → 3

Epic 5: Error Handling & Output Display

- Implement try-except for API errors (USN12) → 2
- Display generated itinerary clearly (USN13) → 3

Total Story Points in Sprint 2

= 2 + 2 + 3 + 5 + 3 + 2 + 3

= 20 Story Points

◆ Total Story Points

Sprint 1 = 13

Sprint 2 = 20

Total Story Points = 33

Number of Sprints = 2

◆ Velocity Calculation

Velocity = Total Story Points / Number of Sprints

Velocity = 33 / 2

= 16.5 ≈ 16 Story Points per Sprint

Final Result

Our team's velocity is approximately:

16 Story Points per Sprint