

Agile Planning for Pattern Sense: Classifying Fabric Patterns using Deep Learning

Basic Definitions

📌 **Sprint:** A fixed duration (5 days in this case) where the team completes a set of tasks.

📌 **Epic:** A large feature or project deliverable, broken down into smaller tasks (Stories).

📌 **Story:** A small, actionable task that contributes to an Epic.

📌 **Story Point:** Effort estimate using Fibonacci scale (1, 2, 3, 5, 8, etc.), representing task complexity and time.

| **Story Point Reference:** |

| Very Easy = 1 Point 📌 |

| Easy = 2 Points 📌 |

| Moderate = 3 Points 📌 |

| Difficult = 5 Points 📌 |

Sprint 1 (5 Days)

Epic: Data Preparation

Story	Story Points
Collection of Fabric Pattern Data	2 📌 (Easy Task)
Loading Data into System	1 📌 (Very Easy Task)
Handling Missing Values	3 📌 (Moderate Task)
Handling Categorical Values	2 📌 (Easy Task)

Total Story Points for Sprint 1 = 8

Sprint 2 (5 Days)

Epic: Model Development & Deployment

Story	Story Points
Model Building (Deep Learning)	5 📌 (Difficult Task)
Testing Model Performance	3 📌 (Moderate Task)
Designing Working HTML Pages	3 📌 (Moderate Task)
Flask Deployment of Model	5 📌 (Difficult Task)

Total Story Points for Sprint 2 = 16

Velocity Calculation

Velocity Formula:

Velocity = Total Story Points Completed / Number of Sprints

| **Sprint 1 Story Points:** 8

| **Sprint 2 Story Points:** 16

| **Total Story Points:** 24

| **Number of Sprints:** 2

Velocity = 24 / 2 = 12 Story Points per Sprint

📌 **Your Team's Velocity = 12 Story Points per Sprint**

Summary

📌 Team works in 5-day sprints

📌 Tasks estimated using Fibonacci-based Story Points

📌 Two Epics: Data Preparation & Model Development

📌 Team's Average Velocity: 12 Story Points per Sprint