



## Agile Sprint Breakdown for Butterfly Image Classifier

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: Data & Preprocessing (5 Days)

Story	Story Points	Difficulty
Collection of Butterfly Dataset	2	Easy
Organizing Images + CSV Labels	1	Very Easy
Image Preprocessing (Resizing, Normalization)	3	Moderate
Splitting into Train/Test Sets	2	Easy
Total Story Points (Sprint 1): 8		

### ◆ Sprint 2: Model Training & Deployment (5 Days)

Story	Story Points	Difficulty
Load Pretrained Model (MobileNetV2) & Fine-Tune	5	Difficult
Train and Validate Model	3	Moderate
Build Streamlit Web UI	3	Moderate

Model Integration & Deployment

5

Difficult

**Total Story Points (Sprint 2): 16**



### Velocity Calculation

**Parameter**

**Value**

Total Story Points

8 (Sprint 1) + 16 (Sprint 2) = **24**

Number of Sprints

**2**

**Team Velocity**

$24 \div 2 = \mathbf{12 \text{ Story Points/Sprint}}$