## **Planning and Velocity for Smart Sorting Project**

### Key Terms

* **Sprint**: A fixed period (e.g., 5 days) during which a team works to complete a set of tasks.
* **Epic**: A large feature or major component of the project broken down into smaller tasks (User Stories).
* **Story**: A specific task that contributes to completing an Epic.
* **Story Point (SP)**: A number indicating the estimated effort of a story, often based on the Fibonacci scale.

### **Effort Estimation Guide**

* **Very Easy Task** – 1 SP
* **Easy Task** – 2 SP
* **Moderate Task** – 3 SP
* **Difficult Task** – 5 SP

### **Sprint 1: (5 Days)**

**Epic: Dataset Handling**

| **Task** | **Story Points** |
| --- | --- |
| Collecting 28-class fruits and vegetables dataset | 2 SP |
| Loading and exploring the dataset | 1 SP |

**Epic: Data Preprocessing**

| **Task** | **Story Points** |
| --- | --- |
| Resizing, normalizing images | 3 SP |
| Splitting data into train/test sets | 2 SP |

**Sprint 1 Total**: **8 Story Points**

### **Sprint 2: (5 Days)**

**Epic: Model Building and Training**

| **Task** | **Story Points** |
| --- | --- |
| Transfer Learning with VGG16 model | 5 SP |
| Training and testing the model | 3 SP |

**Epic: Deployment**

| **Task** | **Story Points** |
| --- | --- |
| Designing working HTML pages (UI) | 3 SP |
| Integrating model using Flask | 5 SP |

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

### **Velocity Calculation**

* **Sprint 1** = 8 SP
* **Sprint 2** = 16 SP
* **Total Story Points** = 24 SP
* **Number of Sprints** = 2

**Team Velocity = Total Story Points / Number of Sprints = 24 / 2 = 12 SP/Sprint**

Your team’s velocity is **12 Story Points per Sprint**.