### **Agile Sprint Plan for Smart Sorting**

#### 1. Epic 1: Data Preparation and Preprocessing

**Sprint 1** – Duration: **5 Days** 

**Goal:** Prepare and preprocess the fruit & vegetable image dataset for training.

**Given Table:** 

**Sprint 1 Total Story Points: 8** 

Task	Story Point
Collect Fruit & Vegetable Dataset (Kaggle)	2
Load Data into Environment (Google Colab / Jupyter)	1
Handle Missing Values (check & clean dataset if needed)	3
Encode Categorical Labels (One-Hot Encoding / Label Encoding)	2

### 2. Epic 2: Model Training and Web Deployment

Sprint 2 – Duration: 5 Days

Goal: Build and test the classification model, and deploy using Flask.

**Given Table:** 

**Sprint 2 Total Story Points: 16** 

Task	Story Point
Build VGG16 Transfer Learning Model	5
Evaluate/Validate Model (Accuracy, Loss, Confusion Matrix)	3
Design HTML Pages (index.html, result.html, feedback.html)	3
Deploy Flask Backend with Model Integration	5

# 3. Sprint Summary

Sprin t	Total Story Points
Sprint 1	8
Sprint 2	16

**4. Total Story Points Across Sprints:** 8 + 16 = 24

## **5. Velocity Calculation**

Velocity = Total Story Points / No. of Sprints = 24 / 2 = 12 (Story Points per Sprint)

**Team Velocity:** 12 Story Points/Sprint