**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**

| **Sprint** | **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