

## **Sprint Planning and Velocity – Smart Sorting: Transfer Learning for Identifying Rotten Fruits and Vegetables**

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### **Agile Concepts**

**Sprint:** A fixed period (e.g., 5 days) where a team works to complete a specific set of tasks.

**Epic:** A large feature or objective that spans multiple sprints. It is divided into smaller, manageable user stories.

**Story:** A smaller task or unit of work that is part of an Epic.

**Story Point:** A unit that represents the effort needed to complete a story (typically using Fibonacci sequence: 1, 2, 3, 5, 8...).

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### **Sprint 1 – (5 Days)**

**Epic:** Image Data Acquisition & Pre-processing for Rotten Fruit/Vegetable Detection

User Story	Story Points	Task Difficulty
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Collecting Images of Fruits/Vegetables	2	Easy Task
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Uploading Data to Cloud/Local Storage	1	Very Easy Task
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Pre-processing (Resizing, Augmentation)	3	Moderate Task
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Labelling Rotten vs Fresh Classes	2	Easy Task
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## Sprint 2 – (5 Days)

Epic: Model Development using Transfer Learning & Web Deployment

User Story	Story Points	Task Difficulty
Building CNN Model with Transfer Learning	5	Difficult Task
Evaluating Model Performance (Accuracy, F1)	3	Moderate Task
Designing HTML Dashboard for Visual Output	3	Moderate Task
Deploying Model via Flask Web App	5	Difficult Task

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## Velocity Calculation

Total Story Points:

Sprint 1: 8

Sprint 2: 16

Total = 24

Total Number of Sprints: 2

Velocity = Total Story Points / Number of Sprints =  $24 / 2 = 12$