

## Project Planning Phase

### Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

Date	27 June 2025
Team ID	LTVIP2025TMID59908
Project Name	Smart Sorting: Transfer Learning for Identifying Rotten Fruits and Vegetables
Maximum Marks	5 Marks

#### Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	New produce types can be added by updating the dataset and retraining.	USN-1	As a plant head, I want to upload images of products to detect freshness so that I can ensure only fresh items are processed further.	2	High	Thulasi, Sreya, Pavani
Sprint-1	Real-Time Sorting Assistance	USN-2	As a plant head, I want instant freshness feedback so that sorting staff can separate unhealthy items quickly.	2	Medium	Narasimha, Thulasi, Sreya
Sprint-2	Quality Verification	USN-3	As a supermarket manager, I want to verify the freshness of incoming stock to reduce customer complaints.	2	High	Pavani, Thulasi, Sreya
Sprint-3	Mobile Compatibility	USN-4	As a supermarket manager, I want to use the system on my mobile device so that I can inspect stock directly.	2	Low	Thulasi, Sreya, Narasimha

#### Project Tracker, Velocity & Burndown Chart: (4 Marks)

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	40	12 Days	9-Jun-2025	14-Jun-2025	20	9-Jun-2025
Sprint-2	20	6 Days	16-Jun-2025	21-Jun-2025	20	16-Jun-2025
Sprint-3	20	6 Days	23-Jun-2025	28-Jun-2025	20	23-Jun-2025

**Velocity:**

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{\textit{sprint duration}}{\textit{velocity}} = \frac{20}{10} = 2$$

**Burndown Chart:**

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>

<https://www.atlassian.com/agile/tutorials/burndown-charts>

**Reference:**

<https://www.atlassian.com/agile/project-management>

<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>

<https://www.atlassian.com/agile/tutorials/epics>

<https://www.atlassian.com/agile/tutorials/sprints>

<https://www.atlassian.com/agile/project-management/estimation>

<https://www.atlassian.com/agile/tutorials/burndown-charts>