

Project Planning Phase

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

Date	15 February 2025
Team ID	LTVIP2025TMID36983
Project Name	Smart Sorting: Transfer Learning for Identifying Rotten Fruits and Vegetables
Maximum Marks	5 Marks

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

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Collection & Preparation	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	1
Sprint-1	Model Training	USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	1
Sprint-2	Basic Inference	USN-3	As a user, I can register for the application through Facebook	2	Low	1
Sprint-1	Image Preprocessing	USN-4	As a user, I can register for the application through Gmail	2	Medium	2
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	1
Sprint-2	Performance Optimization	USN-7	As a machine learning engineer, I can optimize the model for faster inference time on standard hardware.	4	Medium	1
Sprint-3	Edge Case Handling	USN-8	As a machine learning engineer, I can expand the dataset to include varying degrees of rot and different lighting conditions.	4	Medium	1
Sprint-3	Reporting/Logging	USN-10	As an administrator, I can view a log of all predictions made by the system.	2	Low	1

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	20	6 Days	3 Jun 2025	10 Jun 2025	20	10 Jun 2025
Sprint-2	20	6 Days	10 Jun 2025	17 Jun 2025	20	17 Jun 2025
Sprint-3	20	6 Days	17 Jun 2025	24 Jun 2025	20	24 Jun 2025
Sprint-4	20	6 Days	24 Jul 2025	1 Jul 2025	20	1 Jul 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)

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

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.



Here is the Burndown Chart for sprint-1 of your project "Small sorting: Transfer learning for identifying rotten in fruits and vegetables". It shows both the ideal and actual story points remaining across the 6-day sprint.