Project Planning Phase

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

Date	16 February 2026
Team ID	LTVIP2026TMIDS50375
Project Name	Smart Sorting: Identifying rotten fruits and vegetables using transfer learning
Maximum Marks	4 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	Data Collection	USN-1	Collection of image dataset (manual or web scraping)	2	High	Member 1
Sprint-1	Data Collection	USN-2	Loading dataset into notebook	1	High	Member 2
Sprint-1	Preprocessing	USN-3	Handling missing/null values	2	Medium	Member 3
Sprint-1	Preprocessing	USN-4	Encoding categorical labels (e.g., rotten/fresh)	1	Low	Member 1
Sprint-2	Model Building	USN-5	Build the deep learning model using transfer learning	5	High	Member 2
Sprint-2	Model Building	USN-6	Test model performance and validate metrics	3	High	Member 3
Sprint-2	Deployment	USN-7	Build working HTML pages (UI for image upload)	3	High	Member 1
Sprint-2	Deployment	USN-8	Flask app deployment with prediction endpoint	2	Medium	Member 2
Sprint-2	Model Prediction API	USN-9	The backend can identify and return the freshness/rot status of the input image.	5	High	Member 3

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	8	5 Days	08-Feb-26	12-Feb-26	8	18-Feb-26
Sprint-2	16	5 Days	13-Feb-26	17-Feb-26		

Velocity:

We have a 10-day sprint duration, and the velocity of the team is 24 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

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

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.

Burndown Chart Overview

- **Total Sprint Duration: 5 Days per sprint**
- **Sprint-1 Story Points: 8**
- **Sprint-2 Story Points: 16**