Project Planning Phase

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

Date	15 June 2025
Team ID	LTVIP2025TMID44727
Project Name	**CleanTech: Transforming Waste Management with Transfer Learning**
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 Member
Sprint-1	Data Preparation	USN-1	As a developer, I want to collect and organize waste classification dataset from Kaggle.	2	High	R.charan sai
Sprint-1	Data Preparation	USN-2	As a developer, I want to load and explore the dataset to understand structure and labels.	1	High	R.charan sai
Sprint-1	Data Preprocessing	USN-3	As a data scientist, I want to handle missing and null values effectively.	3	High	R.charan sai
Sprint-1	Data Preprocessing	USN-4	As a data scientist, I want to encode categorical labels for model training.	2	Medium	R.charan sai
Sprint-2	Model Building	USN-5	As a developer, I want to build a waste classifier using transfer learning (VGG16).	5	High	R.charan sai

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Member
Sprint-2	Model Testing	USN-6	As a QA, I want to evaluate the model's performance using accuracy and confusion matrix.	3	High	R.charan sai
Sprint-2	Deployment	USN-7	As a web developer, I want to build HTML UI pages for image upload and prediction results.	3	Medium	R.charan sai
Sprint-2	Deployment	USN-8	As a developer, I want to deploy the model using Flask and host it online.	5	High	R.charan sai

Project Tracker, Velocity & Burndown Chart (4 Marks)

Sprint Tracker

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed	Sprint Release Date (Actual)
Sprint-1	8	5 Days	15 June 2025	20 June 2025	8	20 June 2025
Sprint-2	16	5 Days	20 June 2025	25 June 2025	16	17 June 2025

Velocity Calculation

Formula:

Velocity = Total Story Points Completed / Number of Sprints

Calculation:
Velocity = (8 + 16) / 2 = **12 Story Points per Sprint**

Average Velocity per Day (5-day sprints)

Average Velocity per Day = 12 / 5 = **2.4 story points/day**

Burndown Chart

To track daily progress during a sprint, create a burndown chart:

- **X-axis:** Days (1–5)
- **Y-axis:** Remaining story points (starts at 8 or 16, drops to 0 by Day 5)
- Tools:
    - Excel / Google Sheets
    - Visual Paradigm Chart Generator
    - Atlassian Burndown Guide

References

- Agile Project Management – Atlassian
- Scrum with Jira
- Burndown Charts – Atlassian