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

Date	15 February 2025
Team ID	LTVIP2025TMID35506
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 Members
Sprint-1	Waste Data Ingestion & Preprocessing	USN-1	As a user, I can upload various waste image datasets (e.g., plastic, paper, organic) for model training.	3	High	A.Lekhana Sai
Sprint-1	Initial Model Training (Transfer Learning)	USN-2	As a user, I can initiate pre-training of a base image classification model on a large, publicly available dataset.	5	High	A.Lekhana Sai
Sprint-1	User Authentication & Roles	USN-3	As a user, I can log in securely to manage user accounts and system settings.	2	High	Manasa Chandragiri
Sprint-2	Fine-tuning with Custom Data	USN-4	As a user, I can fine-tune the pre-trained model using our specific waste image datasets to improve classification accuracy.	8	High	S Md Hassain Ahmed
Sprint-2	Waste Classification Dashboard	USN-5	As a user, I can view real-time classification results of waste items processed by the AI system on a dashboard.	5	High	A.Lekhana Sai
Sprint-2	Data Annotation Interface	USN-6	As a user , I can easily label new waste images to continuously improve the model's accuracy.	3	Medium	Puchakatla Mohan Krishna

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	System Integration (Simulated)	USN-7	As a user,I can integrate the AI classification module with a simulated waste sorting line.	8	High	A.Lekhana Sai
Sprint-3	Performance Monitoring & Alerts	USN-8	As a user, I can receive alerts if the model's classification accuracy drops below a defined threshold	4	Medium	A.Lekhana Sai

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	1 Day	9 June 2025	9 June 2022	20	10 June 2025
Sprint-2	20	1 Day	11 June 2025	11 June2022	20	12 June 2025
Sprint-3	20	4 Days	13 June 2025	16 June 2022	20	17 June 2025
Sprint-4	20	6 Days	18 June 2025	23 June 2022	20	24 Jne 2025
Sprint-5	20	2 Days	25 June 2025	26 June 2025	20	27 June 2025
Sprint-6	20	5 Days	28 June 2025	01 July 2025	20	02 July 2025
Sprint-7	20	4 Days	03 July 2025	06 July 2025	20	07 July 2025
Sprint-8	20	6 Days	08 July 2025	13 July 2025	20	14 July 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)

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

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