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

Date	27 June 2025
Team ID	LTVIP2025TMID49866
Project Name	Visualization Tool for Electric Vehicle Charge and Range Analysis
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	USN-1	As a developer, I can collect electric vehicle charging and range data from reliable sources.	2	High	Individual
Sprint-1	Data Collection	USN-2	As a developer, I can load the EV data into the analysis tool.	1	High	Individual
Sprint-1	Data Preprocessing	USN-3	As a developer, I can handle missing values in the EV dataset.	3	Medium	Individual
Sprint-1	Data Preprocessing	USN-4	As a developer, I can clean and normalize the EV data for analysis	2	Medium	Individual
Sprint-2	Model Building	USN-5	As a developer, I can create interactive charts showing charge time vs range.	5	High	Individual
Sprint-2	Model Building	USN-6	As a developer, I can implement filters for different EV models and years.	3	Medium	Individual
Sprint-2	Deployment	USN-7	As a user, I can view the visualization tool through a web interface.	3	High	Individual
Sprint-2	Deployment	USN-8	As a developer, I can deploy the visualization using Flask.	5	High	Individual

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	26 May 2025	01 June 2025	20	28 June 2025
Sprint-2	20	6 Days	02 June 2025	07 June 2025	19	28 June 2025
Sprint-3	20	6 Days	08 June 2025	13 June 2025	20	28 June 2025
Sprint-4	20	6 Days	14 June 2025	20 June 2025	18	28 June 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