

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

Date	25 June 2025
Team ID	LTVIP2025TMID51738
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

<b>Sprint</b>	<b>Functional Requirement (Epic)</b>	<b>User Story Number</b>	<b>User Story / Task</b>	<b>Story Points</b>	<b>Priority</b>	<b>Team Members</b>
Sprint-1	Registration & Login	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	4
Sprint-1		USN-2	As a user, I receive confirmation email after registration	1	High	4
Sprint-1	Vehicle Input Module	USN-3	As a user, I can input battery %, vehicle model, and range preference	3	High	4
Sprint-2	Range Estimation	USN-4	As a user, I can view estimated range on a visual map	5	High	4
Sprint-1		USN-5	As a user, I can see alerts when range is critically low	2	Medium	4
Sprint-2	Charging Station Mapping	USN-6	As a user, I can view nearby stations filtered by charger type and availability	4	High	4
Sprint-3	History & Analytics	USN-7	As a user, I can view previous charge sessions with distance and cost data	3	Medium	4

		USN-8	As a user, I can export session summaries for analysis	2	Low	4
--	--	-------	--	---	-----	---

### 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	23 June 2022	23 June 2022	20	29 Oct 2022
Sprint-2	20	6 Days	23 June 2022	23 June 2022		
Sprint-3	20	6 Days	24 June 2022	24 June 2022		
Sprint-4	20	6 Days	24 June 2022	24 June 2022		

### 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.

<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>

<https://www.atlassian.com/agile/tutorials/burndown-charts>  
<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>

## Reference: