

## Project Planning Phase

### Project Planning Template(Product Backlog, Sprint Planning, Stories, Storypoints)

Date	2February2026
Team ID	LTVIP2026TMIDS47205
Project Name	Visualization Tool for Electric Vehicle Charge and Range Analysis
Maximum Marks	8Marks

### Product Backlog, Sprint Schedule, and Estimation(4Marks)

Sprint	Functional Requirement(Epic)	User Story Number	User Story/Task	Story Points	Priority	Team Members
Sprint-1	Data Collection & Input	USN-1	As a user, I want to input EV battery capacity and current charges ot hatl can see remaining range	5	High	TM1
Sprint-1	Data Collection & Input	USN-2	As a user, I want to select vehicle model so that range calculations are accurate	5	High	TM2
Sprint-2	Range Calculation Engine	USN-3	As a user, I want the system to calculate estimated driving range based on charge level	8	High	TM1
Sprint-2	Range Calculation Engine	USN-4	As a user, I want range to adjust based on driving conditions (city/highway)	7	Medium	TM3
Sprint-3	Visualization Dashboard	USN-5	As a user, I want to view charge and range using charts and graphs	10	High	TM2
Sprint-3	Visualization Dashboard	USN-6	As a user, I want color indicators (low/medium/high range)foreasy understanding	10	Medium	TM3
Sprint-4	Reporting & Optimization	USN-7	As a user, I want to compare range across trips and time periods	10	Medium	TM1
Sprint	Functional Requirement(Epic)	User Story Number	User Story/Task	Story Points	Priority	Team Members
Sprint-4	Reporting & Optimization	USN-8	As a user, I want to export range analysis reports	10	Low	TM2

### Project Tracker , Velocity & Burndown Chart:(4Marks)

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned EndDate)	Sprint Release Date (Actual)
Sprint-1	20	6Days	2February2026	7February2026	18	7February2026
Sprint-2	20	6Days	9February2026	14February2026	19	14February2026
Sprint-3	20	6Days	16February2026	21February2026	20	21February2026
Sprint-4	20	6Days	23February2026	28February2026	20	28February2026

### Velocity Calculation:

Velocity = Total Story Points Completed ÷ Number of Sprints

#### Total completed story points

18+19+20+20= **77 story points**

#### Number of sprints

= **4**

#### Average Team Velocity

### Average Team Velocity Calculation

Velocity = 77 / 4 = 19.25 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.



