Project Planning Phase

Project Planning Template(ProductBacklog, SprintPlanning, Stories, Story points)

Date	28 June 2025
Team ID	LTVIP2025TMID48068
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

Functional	User Story	User Story / Task	Story Points	Priority	Team	
Requirement (Epic)	Number	As a user, I can register for the application by		High	Members	
Registration & Login	USN-1	entering my email, password, and confirming my password. As a user, I receive confirmation email after registration	2		4	
	USN-2	As a user, I can input battery %, vehicle model, and range preference	1	High	4	
Vehicle Input Module	USN-3	As a user, I can view estimated range on a visual map	3	High	4	
Range Estimation	USN-4	As a user, I can see alerts when range is critically low	5	High	4	
	USN-5	charger type and availability	2	Medium	4	
Charging Station Mapping	USN-6	with distance and cost data	4	High	4	
History & Analytics	USN-7	As a user, I can export session summaries for analysis	3	Medium	4	
	USN-8		2	Low	4	
	Requirement (Epic) Registration & Login Vehicle Input Module Range Estimation Charging Station Mapping	Requirement (Epic) Registration & Login USN-1 USN-2 Vehicle Input Module USN-3 Range Estimation USN-4 USN-5 Charging Station Mapping History & Analytics USN-7	Registration & Login Registration & Login USN-1 USN-1 USN-2 As a user, I can register for the application by entering my email, password, and confirming my password. As a user, I receive confirmation email after registration USN-2 As a user, I can input battery %, vehicle model, and range preference Vehicle Input Module USN-3 As a user, I can view estimated range on a visual map Range Estimation USN-4 As a user, I can see alerts when range is critically low USN-5 As a user, I can view nearby stations filtered by charger type and availability As a user, I can view previous charge sessions with distance and cost data As a user, I can export session summaries for analysis	Requirement (Epic) Number As a user, I can register for the application by Registration & Login USN-1 entering my email, password, and confirming my password. As a user, I receive confirmation email after registration USN-2 As a user, I can input battery %, vehicle model, and range preference 1 Vehicle Input Module USN-3 As a user, I can view estimated range on a visual map Range Estimation USN-4 As a user, I can see alerts when range is critically low USN-5 As a user, I can view nearby stations filtered by charger type and availability 2 Charging Station Mapping USN-6 As a user, I can view previous charge sessions with distance and cost data 4 History & Analytics USN-7 As a user, I can export session summaries for analysis 3	Requirement (Epic)NumberAs a user, I can register for the application by entering my email, password, and confirming my password. As a user, I receive confirmation email after registration4USN-2As a user, I can input battery %, vehicle model, and range preference1HighVehicle Input ModuleUSN-3As a user, I can view estimated range on a visual map3HighRange EstimationUSN-4As a user, I can see alerts when range is critically low5HighUSN-5As a user, I can view nearby stations filtered by charger type and availability2MediumCharging Station MappingUSN-6As a user, I can view previous charge sessions with distance and cost data4HighHistory & AnalyticsUSN-7As a user, I can export session summaries for analysis3Medium	

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

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on	Sprint Release Date (Actual)
	20 20 20 20			23 June 2022 23	Planned End Date)	29 Oct 2022
Sprint-1		6 Days	23 June 2022	June 2022 24	20	
Sprint-2		6 Days	23 June 2022	June 2022 24		
Sprint-3		6 Days	24 June 2022	June 2022		
Sprint-4		6 Days	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)

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

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