

Project Planning Phase

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

Date	15 February 2025
Team ID	LTVIP2026TMIDS90945
Project Name	Visualization Tool for Electric Vehicle Charge and Range Analysis
Maximum Marks	5 Marks

Project Description

This project focuses on analyzing Electric Vehicle (EV) market trends, sales growth, performance metrics, battery capacity, range analysis, charging infrastructure, and manufacturer performance using Tableau Prep Builder for data preparation and Tableau for dashboard visualization and insights generation.

Product Backlog & Sprint Schedule

Sprint	Functional Requirement (Epic)	User Story / Task	Story Points
Sprint-1	Data Collection & Cleaning	Collect, clean and transform EV dataset	11
Sprint-2	Market & Manufacture Analysis	Sales and Trends and manufacturer performance	11
Sprint-3	Performance & KPI Dashboard	Analyse battery, range, charging & KPIs	13
Sprint-4	Interactive Dashboard & Report	insights, export & deployment	11

PRODUCT BACKLOG, SPRINT SCHEDULE & ESTIMATION

Sprint	Epic	User Story No	User Story / Task	Story Points	Priority
Sprint-1	Data Collection	USN-1	Collect EV dataset from reliable sources	3	High
Sprint-1	Data Cleaning	USN-2	Clean and preprocess EV data using Tableau Prep Builder	5	High
Sprint-1	Data Transformation	USN-3	Transform date, sales, range and battery fields	3	High
Sprint-2	Market Trend Analysis	USN-4	Analyse EV sales growth trends over years	5	High
Sprint-2	Manufacturer Analysis	USN-5	Compare EV manufacturer performance	3	Medium
Sprint-2	Regional Analysis	USN-6	Analyse EV adoption by region/state	3	Medium
Sprint-3	Performance Metrics	USN-7	Analyse EV range, battery capacity and efficiency	5	High
Sprint-3	Charging Infrastructure	USN-8	Visualize charging station distribution	3	Medium
Sprint-3	KPI Dashboard	USN-9	Create overall KPI dashboard in Tableau	5	High
Sprint-4	Interactive Dashboard	USN-10	Add filters by year, region, manufacturer	5	High
Sprint-4	Insights & Reporting	USN-11	Generate insights and export reports	3	Medium
Sprint-4	Testing & Deployment	USN-12	Final testing and deployment of dashboard	3	High

PROJECT TRACKER, VELOCITY & BURNDOWN CHART

Sprint	Total Story Points	Duration	Start Date	End Date	Completed Points
Sprint-1	11	6 Days	20 Feb 2026	25 Feb 2026	11
Sprint-2	11	6 Days	27 Feb 2026	04 Mar 2026	11
Sprint-3	13	6 Days	06 Mar 2026	11 Mar 2026	13
Sprint-4	11	6 Days	13 Mar 2026	18 Mar 2026	11

Velocity Calculation

Sprint Duration = 6 Days Average Story Points per Sprint = 11 Velocity (Story Points per Day) = $11 / 6 = 1.83 \approx 2$ Story Points per Day

Average Velocity (AV):

Total Story Points

$AV = \frac{\text{Total Story Points}}{\text{Sprint Duration}}$

Sprint Duration

11

$AV = \frac{11}{6} = 1.82 \approx 2$ Story points per seconds

6

Burndown Chart:

A burndown chart represents the remaining work versus time in a sprint. In this EV Analytics project, story points reduce each day of the sprint until reaching zero on the final day. This ensures proper tracking of dashboard development, performance analysis, and reporting completion.

Burndown chart is useful to:

Monitor progress

Identify delays

Improve sprint planning

Track team performance

Project Outcome

The project provides:

EV market growth trends

Regional EV adoption insights

Manufacturer performance comparison

Battery and range performance analysis

Charging infrastructure distribution

Interactive dashboards for business decision-making