Project Planning Phase

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

Date	15 February 2025
Team ID	LTVIP2026TMIDS42870
Project Name	electric motor temperature prediction using machine learning
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 preparation	USN-1	As a data scientist, I want to generate a synthetic dataset of motor parameters so that I have data for model training.	3	High	Data Team
Sprint-1		USN-2	As a data scientist, I want to explore the dataset (statistics, distributions) to understand the data characteristics	1	High	Data Team
Sprint-2		USN-3	As a data scientist, I want to split the data into training (80%) and testing (20%) sets for model validation.	2	Low	Data Team
Sprint-1	Model Development	USN-4	As a data scientist, I want to implement feature scaling using StandardScaler to normalize input features.	2	Medium	ML Team
Sprint-1	Web Application - Main App	USN-5	As a developer, I want to set up a Flask application structure with templates folder.	2	High	ML Team

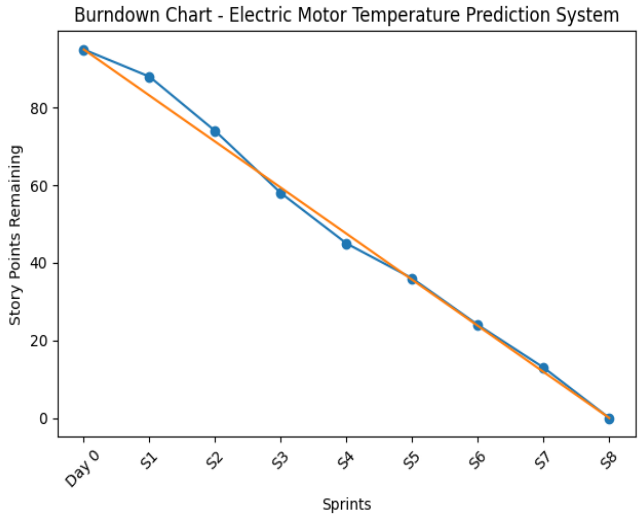
Project Tracker, Velocity & Burndown Chart: (4 Marks)

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	7	5 Days	24 dec 2025	29 jan 2025	7	29 dec 2025
Sprint-2	14	7 Days	31 dec 2025	05 dec 2025	14	02 dec 2025
Sprint-3	16	7 Days	07 jan 2026	12 jan 2026	16	09 dec 2025
Sprint-4	13	6 Days	14 jan 2026	19 jan 2026	13	15 jan 2026
Sprint -5	9	5 Days	16 jan 2026	20 jan 2026	9	18 jan 2026
Sprint-6	12	6 Days	21 jan 2026	24 jan 2026	12	26 jan 2026

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)

Sprint	Story Points Completed	Duration (Days)	Velocity (Points/Day)
Sprint-1	7	5	1.40
Sprint-2	14	7	2.00
Sprint-3	16	7	2.29
Sprint-4	13	6	2.17
Sprint-5	9	5	1.80
Sprint-6	12	6	2.00
Sprint-7	11	5	2.20
Sprint-8	13	6	2.17



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.

Reference:

Atlassian Agile Project Management

Scrum with Jira Software

Epics, Stories, and Themes

Sprint Planning