Project Planning Phase

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

Date	
Team ID	LTVIP2026TMIDS45779
Project Name	Electric Motor Temperature Prediction Using Meachine Learning
Maximum Marks	5 Marks

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

Product Backlog

S.No	Epic	User Story No	User Story / Task	Story Points	Priority
1	Project Setup	USN-1	Set up development environment (Python, Flask, VS Code).	2	High
2	Data Collection	USN-2	Download and load Kaggle Electric Motor dataset.	2	High
3	Data Preprocessing	USN-3	Clean dataset, handle null values, and select relevant features.	3	High
4	Data Visualization	USN-4	Generate histogram, scatter plot, and heatmap for analysis.	2	Medium
5	Model Development	USN-5	Implement Linear Regression model.	2	Medium
6	Model Development	USN-6	Implement Decision Tree Regressor.	2	Medium
7	Model Development	USN-7	Implement Random Forest Regressor.	3	High
8	Model Evaluation	USN-8	Evaluate models using MAE, RMSE, and R^2 score.	2	High
9	Model Saving	USN-9	Save trained model and scaler using Joblib.	1	High
10	UI Development	USN-10	Create HTML form to input motor parameters.	3	High

S.No	Epic	User Story No	User Story / Task	Story Points	Priority
11	Backend Integration	USN-11	Integrate MinMaxScaler and ML model with Flask backend.	2	High
12	Prediction Feature	USN-12	Display predicted PM surface temperature on web page.	3	High
13	Deployment	USN-13	Run application locally and test end-to-end flow.	2	High
14	Testing	USN-14	Perform functional and input validation testing.	2	High
15	Documentation	USN-15	Prepare final documentation and architecture diagrams.	2	Medium

Sprint Schedule

Functional Requirement	User Story No	Task	Story Points	Assigned To
Project Setup	USN-1	Environment setup	2	Team
Data Collection	USN-2	Dataset loading	2	Team
Data Preprocessing	USN-3	Data cleaning & feature selection	3	Team
Data Visualization	USN-4	Generate plots	2	Team

Estimation

Resource	Requirement
Team Members	3–4 Members
Development Tools	Python, Flask, VS Code
ML Libraries	Scikit-learn, Pandas, NumPy
Deployment	Local Server

Resource	Requirement
Dataset	Kaggle Electric Motor Dataset

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