

Acceptance Testing UAT Execution & Report Submission

Date	21 February 2026
Team ID	LTVIP2026TMIDS76798
Project Name	Electric Motor Temperature Prediction using Machine Learning
Maximum Marks	4 Marks

1. Purpose of Document

The purpose of this document is to briefly explain the test coverage and open issues of the **Electric Motor Temperature Prediction AI** project at the time of the release to User Acceptance Testing (UAT). It ensures that the Random Forest model and Flask application meet industrial standards for predictive maintenance.

2. Defect Analysis

This section outlines the testing status of the primary software modules, including the inference engine and the user interface.

Section	Total Cases	Not Tested	Fail	Pass
ML Inference Engine (Random Forest)	12	0	0	12
Web Dashboard (Flask/HTML)	25	0	0	25
Data Preprocessing (Scaler Logic)	10	0	0	10
API Security (CORS/Validation)	5	0	0	5
Totals	52	0	0	52

Bug Resolution Report: This report shows the number of resolved or closed bugs identified during the development of the prediction pipeline.

Resolution	Severity 1 (Critical)	Severity 2 (Major)	Severity 3 (Minor)	Severity 4 (Trivial)	Subtotal
By Design	2	1	2	1	6
Duplicate	0	0	1	0	1
External (Library)	1	1	0	0	2
Fixed	5	3	4	2	14
Not Reproduced	0	0	1	0	1
Totals	8	5	8	3	24

3. Test Case Analysis

This report focuses on the specific validation of the machine learning output and the stability of the final report generation.

Feature Group	Total Cases	Not Tested	Fail	Pass
Prediction Accuracy Reporting	9	0	0	9
Sensor Data Exception Handling	6	0	0	6
Final Prediction Output	4	0	0	4
Model Version Control (.pkl)	2	0	0	2
Totals	21	0	0	21