

## Model Development Phase Template

Date	25/02/2026
Team ID	LTVIP2026TMIDS79278
Project Title	Electric Motor Temperature Prediction using Machine Learning
Maximum Marks	6 Marks

### Model Selection Report

**In this report, we will outline the process of selecting suitable machine learning models for predicting electric motor temperature. This includes the evaluation of different algorithms based on their performance metrics, strengths, and weaknesses.**

#### Model Selection Report:

Model	Description	Hyperparameters	Performance Metri
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Model 1	<p>Machine learning fights The goal of this project is to predict the temperature of electric motors using machine learning techniques. Accurate temperature predictions are crucial for maintaining motor efficiency, preventing overheating, and ensuring longevity. This report outlines the model selection process, including the evaluation of various algorithms based on their performance in predicting motor temperature..</p>	<p>Machine learning for Hyperparameters are crucial for controlling the learning process and performance of machine learning models. Tuning them effectively can lead to improved accuracy and generalization. Below is an overview of the key hyperparameters for the models considered in the electric motor temperature prediction task, along with recommendations for tuning strategies..</p>	<p>When evaluating machine learning models, it's essential to use appropriate performance metrics to assess how well the model predicts motor temperature. Here are the key performance metrics commonly used for regression tasks, including their definitions and how they can be interpreted.</p>
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