Model Development Phase Template

Date	15 June 2024
Team ID	739995
Project Title	prediction of full load electrical power output of a base load operated combined cycle power plant using machine learning
Maximum Marks	2 Marks

Model Selection Report

In the forthcoming Model Selection Report, various models will be outlined, detailing their descriptions, hyperparameters, and performance metrics, including Accuracy or F1 Score. This comprehensive report will provide insights into the chosen models and their effectiveness.

Random Forest	Ensemble of decision trees; robust, handles complex relationships, reduces overfitting, and provides feature importance	-	Accuracy score = 93%
Decision Tree	Simple tree structure; interpretable, captures non-linear relationships, suitable for initial insights.	-	Accuracy score = 92%
Linear Regression	shows the linear relationship between the independent(predictor) variable i.e. X-axis and the dependent (output) variable i.e. Y-axis	-	Accuracy score = 96%