

Project Development Phase
Model Performance Test

Date	19 May 2023
Team ID	NM2023TMID01575
Project Name	A Reliable Energy Consumption Analysis System for Energy-Efficient Appliances

Model Performance Testing:

Project team shall fill the following information in the model performance testing template.

S.No.	Parameter	Values	Screenshot
1.	Metrics	Regression Model: MAE - , MSE - , RMSE - , R2 score - Classification Model: Confusion Matrix - , Accuracy Score- & Classification Report -	<p>▾ Testing Model With Multiple Evaluation Metrics</p> <p>LINEAR</p> <pre>✓ [51] 1 print('MAE:', metrics.mean_absolute_error(y_test, predictions)) 0s 2 print('MSE:', metrics.mean_squared_error(y_test, predictions)) 3 print('RMSE:', np.sqrt(metrics.mean_squared_error(y_test, predictions))) 4 print('RSquarevalue:', metrics.r2_score(y_test, predictions))</pre> <p>MAE: 0.027436181632289502 MSE: 0.0018080813899058466 RMSE: 0.042521540304954225 RSquarevalue: 0.9983866044361693</p>

2.	Tune the Model	Hyperparameter Tuning - Validation Method -	<div>▼ Comparing Model Accuracy Before & After Applying Hyperparameter Tuning</div> <div><div>✓ [52] 1 cv = cross_val_score(lm,X,y,cv=5) 3s</div><div>✓ 1 np.mean(cv) 0s</div><div>0.9983016109615026</div></div>
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