Project Development Phase
Model Performance Test

Date	18 November 2022
Team ID	PNT2022TMID49528
Project Name	Efficient Water Quality Analysis and Prediction using Machine Learning
Maximum Marks	10 Marks

Model Performance Testing:

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

S.No	Parameter	Values	Screenshot

1.	Metrics	**Model Evaluation:**
		MAE :
		
		1.0140200501253205
		
		MSE :
		5.786707157894741
		
		RMSE :
		
		2.405557556554143
		
		R2 score :
		
		0.9684566685516488
			Model Evaluation
			
			`[ ]` `from sklearn import metrics`
			`print('MAE:',metrics.mean_absolute_error(y_test,y_pred))`
			`print('MSE:',metrics.mean_squared_error(y_test,y_pred))`
			`print('RMSE:',np.sqrt(metrics.mean_squared_error(y_test,y_pred)))`
			
			`MAE: 1.0140200501253205`
			`MSE: 5.786707157894741`
			`RMSE: 2.405557556554143`
			
			`[ ]` `metrics.r2_score(y_test, y_pred)`
			
			`0.9684566685516488`

2.	Tune the Model	Validation Method : Testing Accuracy 0.9684566685516488	**Model Evaluation**

```
[ ] from sklearn import metrics
    print('MAE:',metrics.mean_absolute_error(y_test,y_pred))
    print('MSE:',metrics.mean_squared_error(y_test,y_pred))
    print('RMSE:',np.sqrt(metrics.mean_squared_error(y_test,y_
```

```
    MAE: 1.0140200501253205
    MSE: 5.7867071578944741
    RMSE: 2.405557556554143
```

```
[ ] metrics.r2_score(y_test, y_pred)
```

```
    0.9684566685516488
```