Project Development PhaseModel Performance Test

Date	17 November 2022		
Team ID	PNT2022TMID24896		
Project Name	Project – Web Phishing Detection		
Maximum Marks	10 Marks		

Model Performance Testing:

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

Parameter	Values	Screenshot					
Metrics	Classification Model: Random Forest Classification	52] print(metrics.classification_report(y_test, y_test_rf))					
	Train Accuracy Score- 99.01% Test Accuracy Score-96.47%	precision recall f1-score support -1 0.99 0.95 0.97 513 1 0.95 0.99 0.97 593					
		accuracy 0.97 1106 macro avg 0.97 0.97 0.97 1106 weighted avg 0.97 0.97 1106					

METRICS: CLASSIFICATION REPORT:

```
0
     Result('RandomForestClassifier',acc_train_rf,acc_test_rf)
     Accuracy on training Data: 99.01
 ₽
     Accuracy on test Data: 96.84
     Random Forest: f1_score on training Data: 0.991
     Random Forest : f1_score on test Data: 0.971
     Random Forest : Recall on training Data: 0.995
Random Forest : Recall on test Data: 0.988
     Random Forest: precision on training Data: 0.988
Random Forest : precision on test Data: 0.954
[52] print(metrics.classification_report(y_test, y_test_rf))
                      precision recall f1-score support
                           0.99 0.95
0.95 0.99
                                                   0.97
                                                                513
                                                   0.97
                                                                593
                                                              1106
          accuracy
         macro avg
                           0.97
0.97
                                                   0.97
                                                               1106
     weighted avg
                           0.97
                                       0.97
                                                   0.97
                                                               1106
```

PERFORMANCE:

0	res res	=pd.DataFrame({'ML Mo	del':Model,'Trai	n Accuracy':tra	ain,'Test	Accuracy':	test, 'f1-sc	ore':f1_score ,'
D		ML Model	Train Accuracy	Test Accuracy	f1-score	Recall	Precision	%
	0	LogisticRegression()	93.064630	90.958409	0.917628	0.947520	0.929806	
	1	RandomForestClassifier	99.014976	96.473779	0.967688	0.993889	0.988559	
	2	svm	0.988240	0.962025	0.967688	0.993889	0.988559	
	3	svm	95.527189	93.399638	0.939819	0.971244	0.949903	
	4	XgbClassfier	95.436727	94.303798	0.947544	0.968188	0.951095	
	5	Decision Tree	91.848427	91.229656	0.919636	0.929008	0.925515	
	6	KNN	0.988240	0.962025	0.919636	0.929008	0.925515	