



<b>Project Title:</b>	<b>Web Phishing Detection</b>
<b>Team ID:</b>	<b>PNT2022TMID29369</b>
<b>Team Members:</b>	<b>Chandru S Srihari S ArunKumar A Ashok E Purushothaman R</b>
<b>Total Marks:</b>	<b>10</b>

# **PERFORMANCE TESTING**

S.No.	Parameter	Values	Screenshot
1.	Metrics	<b>Classification Model: Gradient Boosting Classification Accuracy Score- 97.4%</b>	
2.	Tune the Model	<b>Hyperparameter Tuning - 97% Validation Method – KFOLD &amp; Cross Validation Method</b>	

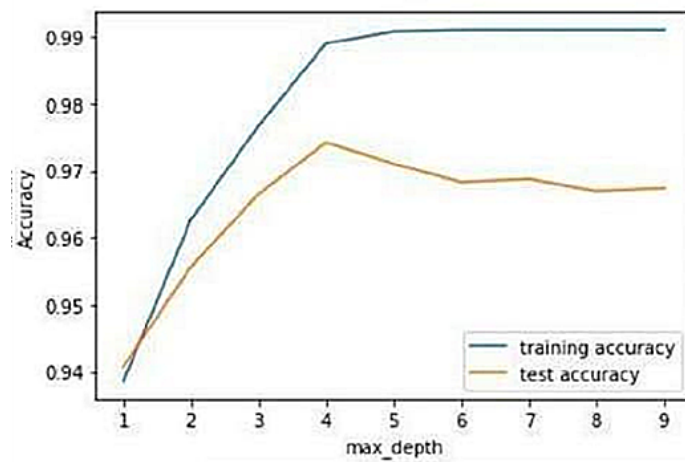
## 1. METRICS: CLASSIFICATION REPORT:

```
In [52]: #computing the classification report of the model

print(metrics.classification_report(y_test, y_test_gbc))
```

	precision	recall	f1-score	support
-1	0.99	0.96	0.97	976
1	0.97	0.99	0.98	1235
accuracy			0.97	2211
macro avg	0.98	0.97	0.97	2211
weighted avg	0.97	0.97	0.97	2211

## PERFORMANCE :



Out[83]:

	ML Model	Accuracy	f1_score	Recall	Precision
0	Gradient Boosting Classifier	0.974	0.977	0.994	0.986
1	CatBoost Classifier	0.972	0.975	0.994	0.989
2	Random Forest	0.969	0.972	0.992	0.991
3	Support Vector Machine	0.964	0.968	0.980	0.965
4	Decision Tree	0.958	0.962	0.991	0.993
5	K-Nearest Neighbors	0.956	0.961	0.991	0.989
6	Logistic Regression	0.934	0.941	0.943	0.927
7	Naive Bayes Classifier	0.605	0.454	0.292	0.997
8	XGBoost Classifier	0.548	0.548	0.993	0.984
9	Multi-layer Perceptron	0.543	0.543	0.989	0.983