

## Project Development Phase Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID36037
Project Name	Web Phishing Detection
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.	Model Summary	-	<div><h3>Random Forest</h3><table><thead><tr><th></th><th>precision</th><th>recall</th><th>f1-score</th><th>support</th></tr></thead><tbody><tr><td>-1</td><td>0.98</td><td>0.97</td><td>0.97</td><td>1001</td></tr><tr><td>1</td><td>0.97</td><td>0.98</td><td>0.98</td><td>1210</td></tr><tr><td>accuracy</td><td></td><td></td><td>0.97</td><td>2211</td></tr><tr><td>macro avg</td><td>0.98</td><td>0.97</td><td>0.97</td><td>2211</td></tr><tr><td>weighted avg</td><td>0.97</td><td>0.97</td><td>0.97</td><td>2211</td></tr></tbody></table></div> <div><h3>Support Vector Machine</h3><table><thead><tr><th></th><th>precision</th><th>recall</th><th>f1-score</th><th>support</th></tr></thead><tbody><tr><td>-1</td><td>0.98</td><td>0.96</td><td>0.97</td><td>1001</td></tr><tr><td>1</td><td>0.96</td><td>0.98</td><td>0.97</td><td>1210</td></tr><tr><td>accuracy</td><td></td><td></td><td>0.97</td><td>2211</td></tr><tr><td>macro avg</td><td>0.97</td><td>0.97</td><td>0.97</td><td>2211</td></tr><tr><td>weighted avg</td><td>0.97</td><td>0.97</td><td>0.97</td><td>2211</td></tr></tbody></table></div> <div><h3>Logistic Regression</h3><table><thead><tr><th></th><th>precision</th><th>recall</th><th>f1-score</th><th>support</th></tr></thead><tbody><tr><td>-1</td><td>0.93</td><td>0.92</td><td>0.93</td><td>1001</td></tr><tr><td>1</td><td>0.93</td><td>0.95</td><td>0.94</td><td>1210</td></tr><tr><td>accuracy</td><td></td><td></td><td>0.93</td><td>2211</td></tr><tr><td>macro avg</td><td>0.93</td><td>0.93</td><td>0.93</td><td>2211</td></tr><tr><td>weighted avg</td><td>0.93</td><td>0.93</td><td>0.93</td><td>2211</td></tr></tbody></table></div> <div><h3>Decision Tree</h3><table><thead><tr><th></th><th>precision</th><th>recall</th><th>f1-score</th><th>support</th></tr></thead><tbody><tr><td>-1</td><td>0.97</td><td>0.96</td><td>0.96</td><td>1001</td></tr><tr><td>1</td><td>0.97</td><td>0.98</td><td>0.97</td><td>1210</td></tr><tr><td>accuracy</td><td></td><td></td><td>0.97</td><td>2211</td></tr><tr><td>macro avg</td><td>0.97</td><td>0.97</td><td>0.97</td><td>2211</td></tr><tr><td>weighted avg</td><td>0.97</td><td>0.97</td><td>0.97</td><td>2211</td></tr></tbody></table></div> <div><h3>Naïve Bayes</h3><table><thead><tr><th></th><th>precision</th><th>recall</th><th>f1-score</th><th>support</th></tr></thead><tbody><tr><td>-1</td><td>0.90</td><td>0.92</td><td>0.91</td><td>1001</td></tr><tr><td>1</td><td>0.93</td><td>0.92</td><td>0.92</td><td>1210</td></tr><tr><td>accuracy</td><td></td><td></td><td>0.92</td><td>2211</td></tr><tr><td>macro avg</td><td>0.92</td><td>0.92</td><td>0.92</td><td>2211</td></tr><tr><td>weighted avg</td><td>0.92</td><td>0.92</td><td>0.92</td><td>2211</td></tr></tbody></table></div>		precision	recall	f1-score	support	-1	0.98	0.97	0.97	1001	1	0.97	0.98	0.98	1210	accuracy			0.97	2211	macro avg	0.98	0.97	0.97	2211	weighted avg	0.97	0.97	0.97	2211		precision	recall	f1-score	support	-1	0.98	0.96	0.97	1001	1	0.96	0.98	0.97	1210	accuracy			0.97	2211	macro avg	0.97	0.97	0.97	2211	weighted avg	0.97	0.97	0.97	2211		precision	recall	f1-score	support	-1	0.93	0.92	0.93	1001	1	0.93	0.95	0.94	1210	accuracy			0.93	2211	macro avg	0.93	0.93	0.93	2211	weighted avg	0.93	0.93	0.93	2211		precision	recall	f1-score	support	-1	0.97	0.96	0.96	1001	1	0.97	0.98	0.97	1210	accuracy			0.97	2211	macro avg	0.97	0.97	0.97	2211	weighted avg	0.97	0.97	0.97	2211		precision	recall	f1-score	support	-1	0.90	0.92	0.91	1001	1	0.93	0.92	0.92	1210	accuracy			0.92	2211	macro avg	0.92	0.92	0.92	2211	weighted avg	0.92	0.92	0.92	2211
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2.	Accuracy	<p><b>Random Forest</b> Training Accuracy - 98.93% Validation Accuracy -97.46%</p> <p><b>Support Vector Machine</b> Training Accuracy – 98.42% Validation Accuracy -96.96%</p> <p><b>Logistic Regression</b> Training Accuracy -92.79 % Validation Accuracy -93.44%</p> <p><b>Decision Tree</b> Training Accuracy – 98.93% Validation Accuracy -96.83%</p> <p><b>Naïve Bayes</b> Training Accuracy – 90.79% Validation Accuracy -91.85%</p>	<p><b>Random Forest</b> Accuracy of train data = 98.93713251922208 % Accuracy of test data = 97.46720940750791 %</p> <p><b>Support Vector Machine</b> Accuracy of train data = 98.4283129805518 % Accuracy of validation data = 96.96969696969697 %</p> <p><b>Logistic Regression</b> Accuracy of train data = 92.79737675260064 % Accuracy of validation data = 93.441881501583 %</p> <p><b>Decision Tree</b> Accuracy of train data = 98.93713251922208 % Accuracy of validation data = 96.8340117593849 %</p> <p><b>Naïve Bayes</b> Accuracy of train data = 90.79601990049751 % Accuracy of validation data = 91.85888738127545 %</p>
3.	Confidence Score (Only Yolo Projects)	<p>Class Detected -</p> <p>Confidence Score -</p>	Not applicable