

Project Development Phase Model Performance Test

Date	19 November 2022
Team ID	PNT2022TMID03976
Project Name	Small Lender-Applicant Credibility Prediction for Loan Approval
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	Classification Model: Confusion Matrix , Accuracy Score, Classification Report -	<div><h3>Random Forest</h3><pre>from sklearn.ensemble import RandomForestClassifier model = RandomForestClassifier(n_estimators=40,random_state=30) model.fit(scaled_train_df,y_train) pred = model.predict(scaled_test_df) print("Classification Report \n") print(classification_report(y_test,pred)) print("Confusion Matrix\n") print(confusion_matrix(y_test,pred))</pre></div> <div><p>Classification Report</p><table><thead><tr><th></th><th>precision</th><th>recall</th><th>f1-score</th><th>support</th></tr></thead><tbody><tr><td>0</td><td>0.83</td><td>0.85</td><td>0.84</td><td>6797</td></tr><tr><td>1</td><td>0.85</td><td>0.82</td><td>0.83</td><td>6841</td></tr><tr><td>accuracy</td><td></td><td></td><td>0.84</td><td>13638</td></tr><tr><td>macro avg</td><td>0.84</td><td>0.84</td><td>0.84</td><td>13638</td></tr><tr><td>weighted avg</td><td>0.84</td><td>0.84</td><td>0.84</td><td>13638</td></tr></tbody></table><p>Confusion Matrix</p><pre>[[5800 997] [1225 5616]]</pre></div>		precision	recall	f1-score	support	0	0.83	0.85	0.84	6797	1	0.85	0.82	0.83	6841	accuracy			0.84	13638	macro avg	0.84	0.84	0.84	13638	weighted avg	0.84	0.84	0.84	13638
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