

Project Development Phase Model Performance Test

Team ID	593095
Project Name	Market segmentation using ML
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	<p>Regression Model: MAE - , MSE - , RMSE - , R2 score -</p> <p>Classification Model: Confusion Matrix - , Accuracy Score- & Classification Report -</p>	<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>0.98</td><td>1.00</td><td>0.99</td><td>98</td></tr><tr><td>1</td><td>1.00</td><td>0.99</td><td>1.00</td><td>124</td></tr><tr><td>2</td><td>1.00</td><td>0.99</td><td>0.99</td><td>69</td></tr><tr><td>accuracy</td><td></td><td></td><td>0.99</td><td>291</td></tr><tr><td>macro avg</td><td>0.99</td><td>0.99</td><td>0.99</td><td>291</td></tr><tr><td>weighted avg</td><td>0.99</td><td>0.99</td><td>0.99</td><td>291</td></tr></tbody></table> <p>Accuracy Score</p> <pre>from sklearn.metrics import accuracy_score print(accuracy_score(y_test,preds))</pre> <p>0.993127147766323</p> <p>Confusion Matrix</p> <p>True Label</p> <p>Predicted Label</p>		precision	recall	f1-score	support	0	0.98	1.00	0.99	98	1	1.00	0.99	1.00	124	2	1.00	0.99	0.99	69	accuracy			0.99	291	macro avg	0.99	0.99	0.99	291	weighted avg	0.99	0.99	0.99	291
	precision	recall	f1-score	support																																		
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2.	Tune the Model	Hyperparameter Tuning - Validation Method -	<p>Validation Method:</p> <p>Yes/No inputs:</p> <p>yummy:</p> <p>Really?</p> <p>Convenient:</p> <p>Yes</p> <p>Spicy:</p> <p>No</p> <p>Fattening:</p> <p>ValueError</p> <p>ValueError: could not convert string to float: 'Really?'</p> <p>Blank inputs:</p> <p>Like:</p> <p>Age:</p> <p>VisitFrequency:</p> <p>Gender:</p> <p>Predict!</p> <p>ValueError</p> <p>ValueError: could not convert string to float: ''</p> <p>Incorrect gender input:</p> <p>30</p> <p>VisitFrequency:</p> <p>Once a week</p> <p>Gender:</p> <p>M</p> <p>Predict!</p> <p>ValueError</p> <p>ValueError: could not convert string to float: 'M'</p> <p>Incorrect Age:</p> <p>Age:</p> <p>2</p> <p>VisitFrequency:</p> <p>Once a week</p> <p>Gender:</p> <p>Male</p> <p>Predict!</p>
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