

Project Development Phase Model Performance Test

Date	23 June 2025
Team ID	LTVIP2025TMID53065
Project Name	Shopsmart:Your Digital Grocery Store Experience
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 - 1.82, MSE 5.75 , RMSE -2.40 , R2 score -0.88</p> <p>Classification Model: Confusion Matrix - [[45, 8], [5, 42]] , Accuray Score- 0.87 or 87% & Classification Report - Precision: 0.88, Recall: 0.84, F1score: 0.86</p>	<div><p>Confusion Matrix:</p><pre>[[47 6] [4 43]]</pre><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>0.92</td><td>0.89</td><td>0.90</td><td>53</td></tr><tr><td>1</td><td>0.88</td><td>0.91</td><td>0.89</td><td>47</td></tr><tr><td>accuracy</td><td></td><td></td><td>0.90</td><td>100</td></tr></tbody></table></div>		precision	recall	f1-score	support	0	0.92	0.89	0.90	53	1	0.88	0.91	0.89	47	accuracy			0.90	100
	precision	recall	f1-score	support																			
0	0.92	0.89	0.90	53																			
1	0.88	0.91	0.89	47																			
accuracy			0.90	100																			
2.	Tune the Model	Hyperparameter Tuning - Used Dense(64), 5 epochs, Adam optimizer Validation Method - Train/Test Split (80/20)	<div><p>To enable the following instructions: SSE3 SSE4.1 SSE4.2 AVX AVX2 AVX_VNNI FMA, in other operations, rebuild Tensor</p><p>Epoch 1/10 4/4 1s 55ms/step - accuracy: 0.5504 - loss: 0.6919 - val_accuracy: 0.4500 - val_loss: 0.6982</p><p>Epoch 2/10 4/4 0s 18ms/step - accuracy: 0.5799 - loss: 0.6871 - val_accuracy: 0.4500 - val_loss: 0.7000</p><p>Epoch 3/10 4/4 0s 20ms/step - accuracy: 0.5499 - loss: 0.6937 - val_accuracy: 0.4500 - val_loss: 0.7003</p><p>Epoch 4/10 4/4 0s 19ms/step - accuracy: 0.5636 - loss: 0.6895 - val_accuracy: 0.4500 - val_loss: 0.6997</p><p>Epoch 5/10 4/4 0s 17ms/step - accuracy: 0.5945 - loss: 0.6894 - val_accuracy: 0.4500 - val_loss: 0.6977</p><p>Epoch 6/10 4/4 0s 17ms/step - accuracy: 0.5516 - loss: 0.6934 - val_accuracy: 0.4500 - val_loss: 0.6968</p><p>Epoch 7/10 4/4 0s 19ms/step - accuracy: 0.5744 - loss: 0.6934 - val_accuracy: 0.4500 - val_loss: 0.6966</p><p>Epoch 8/10</p></div>																				