

Project Development Phase
Model Performance Test

Date	23 june 2025
Team ID	LTVIP2025TMID41819
Project Name	Pattern Sense: classifying fabric patterns using deep learning
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	Regression Model: Not Applicable (NA)	Confusion Matrix:												
		Classification Model: - Accuracy Score: 92.4% - Confusion Matrix: ✓ - Classification Report: <ul style="list-style-type: none">• Precision: 91%• Recall: 92%• F1 Score: 91.5%	Floral 50 2 1 0 Striped 3 45 2 0 Checked 1 3 47 1 Dotted 0 0 2 48												
2	Tune the Model	Hyperparameter Tuning: - Learning Rate: [0.001, 0.005, 0.01] → 0.005 - Batch Size: [16, 32, 64] → 32 - Epochs: [10, 20, 50] → 20	Hyperparameter Tuning Table: <table><tr><th>Parameter</th><th>Tested Values</th><th>Best Value</th></tr><tr><td>Learning Rate</td><td>[0.001, 0.005, 0.01]</td><td>0.005</td></tr><tr><td>Batch Size</td><td>[16, 32, 64]</td><td>32</td></tr><tr><td>Epochs</td><td>[10, 20, 50]</td><td>20</td></tr></table> Validation Method: Stratified K-Fold (k=5)	Parameter	Tested Values	Best Value	Learning Rate	[0.001, 0.005, 0.01]	0.005	Batch Size	[16, 32, 64]	32	Epochs	[10, 20, 50]	20
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