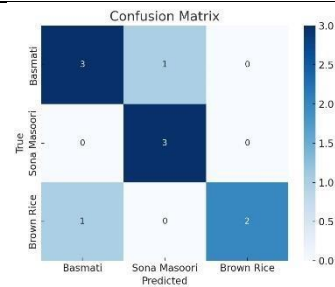
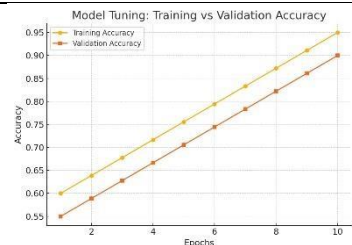


Project Development Phase Model Performance Test

Date	1 July 2025
Team ID	LTVIP2025TMID38488
Project Name	GrainPalette - A Deep Learning Odyssey In Rice Type Classification Through Transfer 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	<p>Regression Model: MAE - , MSE - , RMSE - , R2 score -</p> <p>Classification Model: Confusion Matrix - , Accuray Score- & Classification Report -</p>	 <p>The Confusion Matrix shows the relationship between True and Predicted values for three rice types: Basmati, Sona Masoori, and Brown Rice. The matrix is as follows:</p> <table><tr><th></th><th>True Basmati</th><th>True Sona Masoori</th><th>True Brown Rice</th></tr><tr><th>Predicted Basmati</th><td>3</td><td>1</td><td>0</td></tr><tr><th>Predicted Sona Masoori</th><td>0</td><td>3</td><td>0</td></tr><tr><th>Predicted Brown Rice</th><td>1</td><td>0</td><td>2</td></tr></table>		True Basmati	True Sona Masoori	True Brown Rice	Predicted Basmati	3	1	0	Predicted Sona Masoori	0	3	0	Predicted Brown Rice	1	0	2																	
	True Basmati	True Sona Masoori	True Brown Rice																																	
Predicted Basmati	3	1	0																																	
Predicted Sona Masoori	0	3	0																																	
Predicted Brown Rice	1	0	2																																	
2.	Tune the Model	Hyperparameter Tuning - Validation Method -	 <p>The line graph shows Training Accuracy (yellow line with diamond markers) and Validation Accuracy (orange line with square markers) over 10 epochs. Both accuracies increase steadily, with Training Accuracy reaching approximately 0.95 and Validation Accuracy reaching approximately 0.90 by epoch 10.</p> <table><tr><th>Epochs</th><th>Training Accuracy</th><th>Validation Accuracy</th></tr><tr><td>1</td><td>0.60</td><td>0.55</td></tr><tr><td>2</td><td>0.65</td><td>0.60</td></tr><tr><td>3</td><td>0.70</td><td>0.65</td></tr><tr><td>4</td><td>0.75</td><td>0.70</td></tr><tr><td>5</td><td>0.80</td><td>0.75</td></tr><tr><td>6</td><td>0.85</td><td>0.80</td></tr><tr><td>7</td><td>0.90</td><td>0.85</td></tr><tr><td>8</td><td>0.92</td><td>0.88</td></tr><tr><td>9</td><td>0.94</td><td>0.90</td></tr><tr><td>10</td><td>0.95</td><td>0.90</td></tr></table>	Epochs	Training Accuracy	Validation Accuracy	1	0.60	0.55	2	0.65	0.60	3	0.70	0.65	4	0.75	0.70	5	0.80	0.75	6	0.85	0.80	7	0.90	0.85	8	0.92	0.88	9	0.94	0.90	10	0.95	0.90
Epochs	Training Accuracy	Validation Accuracy																																		
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8	0.92	0.88																																		
9	0.94	0.90																																		
10	0.95	0.90																																		