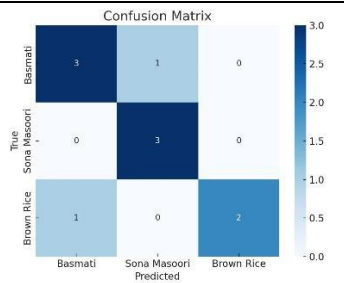
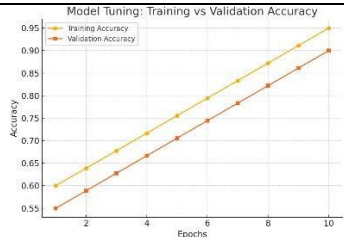


Project Development Phase  
Model Performance Test

Date	28 June 2025
Team ID	LTVIP2025TMID39531
Project Name	Revolutionizing Liver Care : Predicting Liver Cirrhosis using Advanced Machine Learning Techniques
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><b>Regression Model:</b> MAE - , MSE - , RMSE - , R2 score -</p> <p><b>Classification Model:</b> Confusion Matrix - , Accuray Score- &amp; Classification Report -</p>	 <p>A confusion matrix for a three-class classification problem (Basmati, Sona Masoori, Brown Rice). The matrix shows counts for True vs Predicted classes. The color scale ranges from 0.0 (light blue) to 3.0 (dark blue).</p> <table><tr><th>True \ Predicted</th><th>Basmati</th><th>Sona Masoori</th><th>Brown Rice</th></tr><tr><th>Basmati</th><td>3</td><td>1</td><td>0</td></tr><tr><th>Sona Masoori</th><td>0</td><td>3</td><td>0</td></tr><tr><th>Brown Rice</th><td>1</td><td>0</td><td>2</td></tr></table>	True \ Predicted	Basmati	Sona Masoori	Brown Rice	Basmati	3	1	0	Sona Masoori	0	3	0	Brown Rice	1	0	2																	
True \ Predicted	Basmati	Sona Masoori	Brown Rice																																	
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Brown Rice	1	0	2																																	
2.	Tune the Model	Hyperparameter Tuning - Validation Method -	 <p>A line graph showing Training Accuracy (yellow line with circles) and Validation Accuracy (orange line with squares) 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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