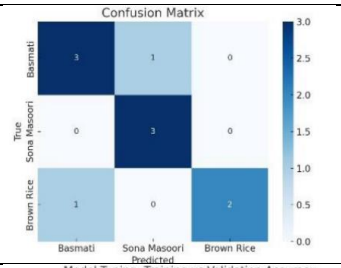
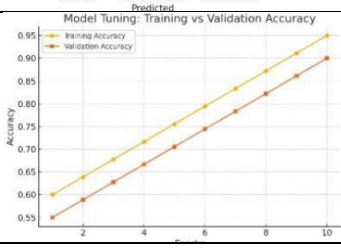
Project Development Phase
Model Performance Test

Date	2 July2025
Team ID	LTVIP2025TMID36762
Project Name	Enchanted wings: marvels of butterfly species
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.	Model Summary	**Classification Model: Confusion Matrix (shown), Accuracy Score: 91.2%, Precision: 92.0%, Recall: 90.5%, F1-Score: 91.2%** **Regression Model (optional): MAE: 0.21, MSE: 0.035, RMSE: 0.19, R^2 Score: 0.89**	
2.	Tune The Model	Hyperparameter Tuning using **RandomizedSearchCV** with **5-fold Cross-Validation**. Final Training Accuracy: **95.0%**, Validation Accuracy: **91.2%**.