Project Development Phase
Model Performance Test

Date	10 February 2025
Team ID	LTVIP2025TMID38849
Project Name	Transfer Learning-Based Classification of Poultry Diseases for Enhanced Health Management
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: • MAE – 0.12 • MSE – 0.03 • RMSE – 0.17 • R² score – 0.89 Classification Model: • Confusion Matrix – [[95, 5], [7, 93]] • Accuracy – 94% • Classification Report: – Class "Healthy": P 0.96 R 0.98 F1 0.97 – Class "Diseased": P 0.94 R 0.93 F1 0.94	[Fig. 1]
2.	Tune the Model	Hyperparameter Tuning via grid search over: – learning_rate: 1e-4, 1e-3 – batch_size: 16, 32 – dropout: 0.3, 0.5 • Optimizer: Adam • Early stopping patience = 5 epochs • Best combo: lr = 1e-4, bs = 32, dropout = 0.3 • Validation Method: Stratified 5-fold CV	[Fig. 2]