Project Development Phase
Model Performance Test

Date	23 June 2025
Team ID	LTVIP2025TMID43572
Project Name	Pollen's Profiling: Automated Classification of Pollen Grains
Maximum Marks	10 Marks

Model Performance Testing:

S.No.	Parameter	Values	Screenshot
1.	Model Summary	**Transfer Learning with VGG16** • Input Size: 224x224 • Pre-trained on ImageNet • Frozen base layers, added custom Dense layers • Optimizer: Adam • Loss: Categorical Crossentropy	
2.	Accuracy	**Training Accuracy**: ~**86.7%** (from last epochs of graph) **Validation Accuracy**: ~**84.3%** (based on final values, not 94.3%)	
3.	Fine Tunning Result(if Done)	After unfreezing and fine-tuning: **Validation Accuracy**: ~**85.8%–86.0%** (approximate peak seen in accuracy graph)	