Model Optimization and Tuning Phase Template

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Team ID	SWTID1720537811
Project Title	Dog Breed Identification using Transfer Learning
Maximum Marks	10 Marks

Model Optimization and Tuning Phase

The Model Optimization and Tuning Phase involves refining neural network models for peak performance. It includes optimized model code, fine-tuning hyperparameters, comparing performance metrics, and justifying the final model selection for enhanced predictive accuracy and efficiency.

Hyperparameter Tuning Documentation (8 Marks):

Model	Tuned Hyperparameters
Model 1(VGG-16)	Used Adam optimizer, which gave better accuracy than SGD and ran for 10 epochs.
Model 2(ResNet50)	Used Adam optimizer, which gave better accuracy than SGD and ran for 10 epochs.
Model 3(Inception)	Used Adam optimizer, which gave better accuracy than SGD and ran for 10 epochs.
Model 4(Xception)	Used Adam optimizer, which gave better accuracy than SGD and ran for 10 epochs.

Final Model Selection Justification (2 Marks):

Final Model	Reasoning
Model 4 (Xception)	This model gave batter accuracy than other models.