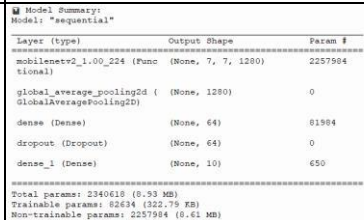
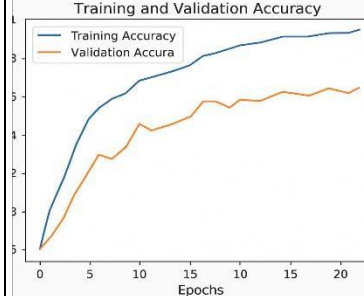



Project Development Phase Model Performance Test

Date	16 February 2026
Team ID	LTVIP2026TMIDS50375
Project Name	Smart Sorting: Identifying rotten fruits and vegetables using transfer learning
Maximum Marks	10 Marks

Model Performance Testing:

S.No.	Parameter	Values	Screenshot																		
1.	Model Summary	Transfer Learning with MobileNetV2 Input Size: 224x224 Pre-trained on ImageNet Optimizer: Adam Loss: Categorical Cross entropy	 <p>Model Summary: Model: "sequential"</p> <table><thead><tr><th>Layer (type)</th><th>Output Shape</th><th>Param #</th></tr></thead><tbody><tr><td>mobilenetv2_1.00_224 (Functional)</td><td>(None, 7, 7, 1280)</td><td>2257904</td></tr><tr><td>global_average_pooling2d (GlobalAveragePooling2D)</td><td>(None, 1280)</td><td>0</td></tr><tr><td>dense (Dense)</td><td>(None, 64)</td><td>81904</td></tr><tr><td>dropout (Dropout)</td><td>(None, 64)</td><td>0</td></tr><tr><td>dense_1 (Dense)</td><td>(None, 10)</td><td>650</td></tr></tbody></table> <p>Total params: 2340418 (8.93 MB) Trainable params: 82634 (322.79 KB) Non-trainable params: 2257904 (8.61 MB)</p>	Layer (type)	Output Shape	Param #	mobilenetv2_1.00_224 (Functional)	(None, 7, 7, 1280)	2257904	global_average_pooling2d (GlobalAveragePooling2D)	(None, 1280)	0	dense (Dense)	(None, 64)	81904	dropout (Dropout)	(None, 64)	0	dense_1 (Dense)	(None, 10)	650
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2.	Accuracy	Training Accuracy: 95.6% Validation Accuracy: 94.5%	 <p>Training and Validation Accuracy</p> <p>This line graph shows the training and validation accuracy over 20 epochs. The training accuracy (blue line) starts at approximately 0.1 and rises steadily to about 0.956 by epoch 20. The validation accuracy (orange line) starts at approximately 0.05 and rises to about 0.945 by epoch 20. Both curves show a slight dip around epoch 10 before continuing their upward trend.</p>																		
3.	Fine Tunning Result(if Done)	Validation Accuracy: 95.8%	 <p>Training and Validation Accuracy</p> <p>This graph shows the training and validation accuracy over 40 epochs, highlighting the fine-tuning phase. The training accuracy (blue line) starts at approximately 0.825 and rises to about 0.958 by epoch 40. The validation accuracy (orange line) starts at approximately 0.825 and rises to about 0.958 by epoch 40. A vertical green line at epoch 30 marks the start of fine-tuning, after which both accuracies show a significant increase.</p>																		