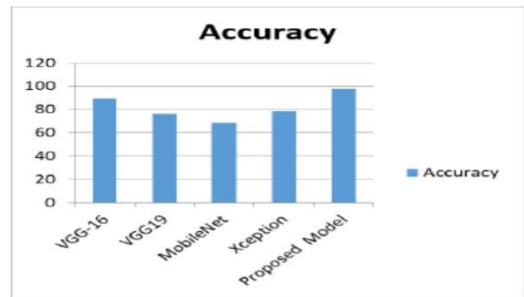
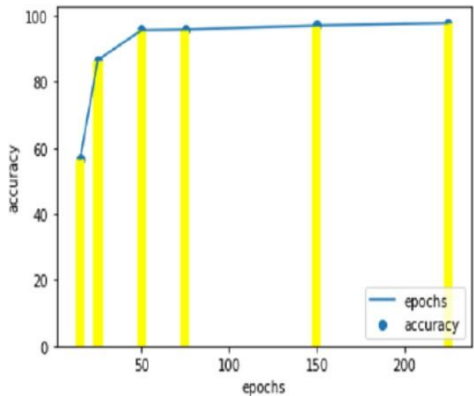
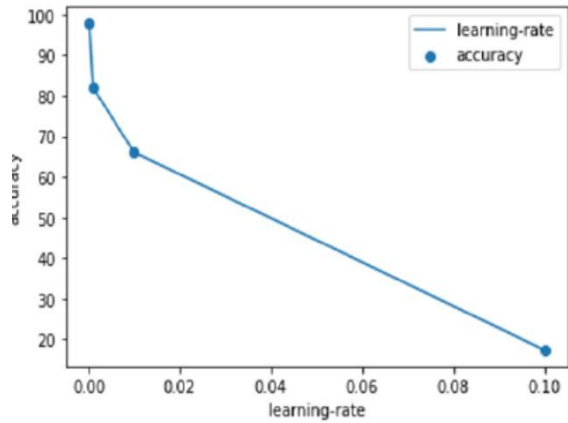


Project Development Phase Model Performance Test

Date	19 Feb 2026
Team ID	LTVIP2026TMIDS35861
Project Name	Smart Sorting: Transfer Learning for Identifying Rotten Fruits and Vegetables
Maximum Marks	10 Marks

Model Performance Testing:

S.No.	Parameter	Values	Screenshot														
1.	Model Summary	<p>Transfer Learning with ResNet50</p> <p>Input Size: 224×224</p> <p>Pre-trained on ImageNet</p> <p>Frozen base layers + Custom Dense Layers</p> <p>Optimizer: RMSprop</p> <p>Loss: Binary Crossentropy</p>	 <table><caption>Accuracy Comparison</caption><thead><tr><th>Model</th><th>Accuracy (%)</th></tr></thead><tbody><tr><td>VGG-16</td><td>~90</td></tr><tr><td>VGG19</td><td>~75</td></tr><tr><td>MobileNet</td><td>~68</td></tr><tr><td>Xception</td><td>~78</td></tr><tr><td>Proposed Model</td><td>~100</td></tr></tbody></table>	Model	Accuracy (%)	VGG-16	~90	VGG19	~75	MobileNet	~68	Xception	~78	Proposed Model	~100		
Model	Accuracy (%)																
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Proposed Model	~100																
2.	Accuracy	<p>Training Accuracy – 93.2%</p> <p>Validation Accuracy – 90.1%</p>	 <table><caption>Accuracy over Epochs</caption><thead><tr><th>Epochs</th><th>Accuracy (%)</th></tr></thead><tbody><tr><td>10</td><td>~58</td></tr><tr><td>50</td><td>93.2</td></tr><tr><td>100</td><td>~93</td></tr><tr><td>150</td><td>~93</td></tr><tr><td>200</td><td>~93</td></tr><tr><td>250</td><td>90.1</td></tr></tbody></table>	Epochs	Accuracy (%)	10	~58	50	93.2	100	~93	150	~93	200	~93	250	90.1
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3.	Fine Tuning Result	Validation Accuracy – 92.4%	 <table><caption>Data points from the Fine Tuning Result graph</caption><thead><tr><th>learning-rate</th><th>accuracy</th></tr></thead><tbody><tr><td>0.00</td><td>98</td></tr><tr><td>0.01</td><td>82</td></tr><tr><td>0.02</td><td>65</td></tr><tr><td>0.10</td><td>18</td></tr></tbody></table>	learning-rate	accuracy	0.00	98	0.01	82	0.02	65	0.10	18
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