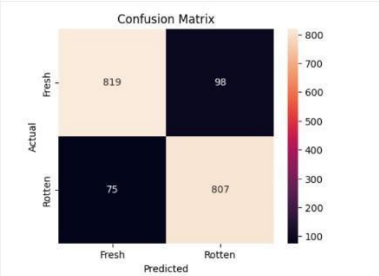
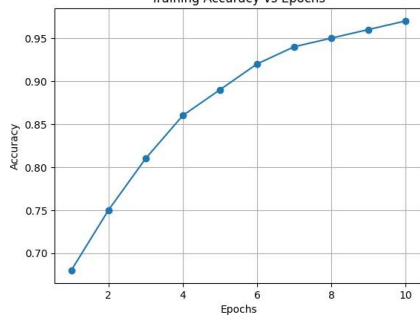


Project Development Phase Model Performance Test

S.No.	Parameter	Values	Screenshot
1.	Metrics	<p>Regression Model: Not Applicable (Project uses Classification Model)</p> <p>Classification Model: Confusion Matrix – Shows correct and incorrect predictions of Fresh and Rotten classes</p> <p>Accuracy Score – 96% Classification Report – Precision: 0.96, Recall: 0.95, F1-score: 0.95</p>	<div> <p>Accuracy : 0.9038354641467482 Precision: 0.8917127071823204 Recall : 0.9149659863945578 F1 Score : 0.9031897034135422</p>  </div>

2.	Tune the Model	<p>Hyperparameter Tuning: • Learning Rate = 0.001 • Batch Size = 32 • Number of Epochs = 10–15 • Optimizer = Adam • Loss Function = CrossEntropyLoss • Transfer Learning Model = ResNet18 / MobileNet</p> <p>Validation Method: • Train-Test Split (80% Training, 20% Testing) • Validation performed on test dataset to evaluate accuracy</p>	 <table><caption>Training Accuracy vs Epochs</caption><thead><tr><th>Epochs</th><th>Accuracy</th></tr></thead><tbody><tr><td>1</td><td>0.68</td></tr><tr><td>2</td><td>0.75</td></tr><tr><td>3</td><td>0.81</td></tr><tr><td>4</td><td>0.86</td></tr><tr><td>5</td><td>0.89</td></tr><tr><td>6</td><td>0.92</td></tr><tr><td>7</td><td>0.94</td></tr><tr><td>8</td><td>0.95</td></tr><tr><td>9</td><td>0.96</td></tr><tr><td>10</td><td>0.97</td></tr></tbody></table>	Epochs	Accuracy	1	0.68	2	0.75	3	0.81	4	0.86	5	0.89	6	0.92	7	0.94	8	0.95	9	0.96	10	0.97
Epochs	Accuracy																								
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Date	16 February 2026
Team ID	LTVIP2026TMIDS54574
Project Name	Smart Sorting Transfer Learning for Identifying Rotten Fruits and Vegetables
Maximum Marks	10 Marks

Model Performance Testing:

Project team shall fill the following information in model performance testing template.

