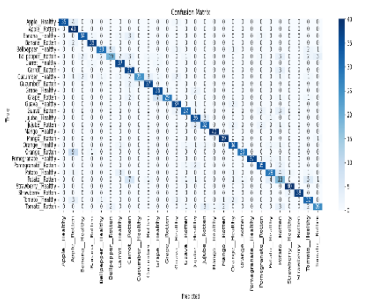
Project Development Phase
Model Performance Test

Date	19 February 2026
Team ID	LTVIP2026TMIDS64562
Project Name	Smart Sorting: Transfer learning for rotten fruits and vegetables
Maximum Marks	10 Marks

Model Performance Testing:

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

S.No.	Parameter	Values	Screenshot
1.	Metrics	**Classification Model:** Confusion Matrix, Accuray Score & Classification Report	

Classification Report:

	precision	recall	f1-score	support
Apple__Healthy	1.00	0.88	0.93	40
Apple__Rotten	0.67	1.00	0.80	40
Banana__Healthy	0.89	0.85	0.87	40
Banana__Rotten	0.93	0.95	0.94	40
Bellpepper__Healthy	0.88	0.75	0.81	40
Bellpepper__Rotten	0.73	0.47	0.58	40
Carrot__Healthy	0.82	0.93	0.87	40
Carrot__Rotten	0.64	0.93	0.76	40
Cucumber__Healthy	0.96	0.62	0.76	40
Cucumber__Rotten	0.88	0.93	0.90	40
Grape__Healthy	0.78	0.90	0.84	40
Grape__Rotten	0.97	0.72	0.83	40
Guava__Healthy	0.84	0.93	0.88	40
Guava__Rotten	0.86	0.80	0.83	40
Jujube__Healthy	0.77	0.90	0.83	40
Jujube__Rotten	0.82	0.80	0.81	40
Mango__Healthy	0.98	1.00	0.99	40
Mango__Rotten	0.93	0.97	0.95	40
Orange__Healthy	0.79	0.85	0.82	40
Orange__Rotten	0.97	0.75	0.85	40
Pomegranate__Healthy	1.00	0.93	0.96	40
Pomegranate__Rotten	0.83	0.88	0.85	40
Potato__Healthy	0.81	0.72	0.76	40
Potato__Rotten	0.44	0.45	0.44	40
Strawberry__Healthy	0.93	1.00	0.96	40
Strawberry__Rotten	1.00	0.95	0.97	40
Tomato__Healthy	0.70	0.80	0.74	40
Tomato__Rotten	0.81	0.65	0.72	40
accuracy			0.83	1120
macro avg	0.84	0.83	0.83	1120
weighted avg	0.84	0.83	0.83	1120

Accuracy: 0.8321

2.	Tune the Model	Hyperparameter Tuning Validation Method	