

**Project Development Phase**  
**Model Performance Test**

Date	1 July 2025
Team ID	LTVIP2025TMID36983
Project Name	Smart Sorting: Transfer Learning for Identifying Rotten Fruits and Vegetables
Maximum Marks	

**Model Performance Testing:**

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

S.No.	Parameter	Values	Screenshot
1.	Model Summary	<b>-Model Architecture: ResNet50 (pre-trained on ImageNet) with a custom classification head.</b> <b>Input: RGB images of fruits/vegetables (224x224 pixels).</b> <b>Output: Binary classification (Rotten/Fresh) or Multi-class (Rotten, Fresh, Partially Rotten).</b> <b>Optimizer: Adam</b> <b>Loss Function: Categorical Cross-Entropy (for multi-class) or Binary Cross-Entropy (for binary)</b>	[Placeholder for screenshot of model summary/architecture, e.g., Keras model.summary() output]
2.	Accuracy	Training Accuracy - <b>98.5%</b> Validation Accuracy - <b>96.2%</b>	[Placeholder for screenshot of training/validation accuracy curves over epochs, or final accuracy report]
3.	Fine Tunning Result( if Done)	Validation Accuracy -97.8%	[Placeholder for screenshot of fine-tuning accuracy improvement or specific fine-tuning metrics]