Functional & Performance Testing Template

Model Performance Test

Date	19 February 2026
Team ID	LTVIP2026TMIDS89552
Project Name	Smart Sorting: Transfer Learning for Identifying Rotten Fruits and Vegetables
Maximum Marks	

Test Scenarios & Results

Test Case ID	Scenario (What to test)	Test Steps (How to test)	Expected Result	Actual Result	Pass/Fail
FT-01	Image Upload Validation	Upload valid image (JPG/PNG) and invalid file (PDF/TXT)	Valid image accepted, error shown for invalid file		
FT-02	Image Size Validation	Upload very small or very large resolution image	Image resized to 224x224 without error		
FT-03	Prediction Generation	Upload fruit/vegetable image and click "Predict"	Correct class (Healthy/Rotten) displayed		
FT-04	Model Loading Check	Start Flask app and load model (.h5 file)	Model loads without error		
FT-05	Preprocessing Consistency	Upload image and verify resizing & normalization	Same preprocessing as training applied		
PT-01	Response Time Test	Upload image and measure prediction time	Prediction should be under 3 seconds		
PT-02	Multiple Requests Test	Upload images consecutively multiple times	App should not crash or slow significantly		

PT-03	Large File Upload Test	Upload high-resolution image (>5MB)	System handles file or shows proper warning		