

Functional & Performance Testing Template

Model Performance Test

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| Date | 21 February 2025 |
| Team ID | LTVIP2025TMID35093 |
| 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 Input Validation | Upload valid and invalid fruit/vegetable images | Valid images accepted, invalid formats rejected | System accepts .jpg/.png , rejects .exe/.txt | Pass |
| FT-02 | Classification Accuracy | Upload sample image of rotten fruit | Model classifies as “rotten” | Model correctly classifies rotten sample | Pass |
| FT-03 | Sorting Mechanism | Place mixed produce on belt, activate sorter | Rotten produce is separated from fresh | Proper mechanical sorting observed | Pass |
| FT-04 | API Integration | Trigger model through API call | Model returns prediction (fresh/rotten) in JSON | API responds correctly with prediction | Pass |
| PT-01 | Inference Response Time | Time how long the model takes for prediction | Response time < 3 seconds | Average response time: 1.8 seconds | Pass |

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| PT-02 | Concurrent Image Upload | Upload multiple images at once | Model handles uploads without crash or lag | Successfully handled 10 parallel uploads | P as s |
| PT-03 | Load Test for Large Batches | Upload 100+ images and test stability | No crashes, all images processed | 98 out of 100 processed correctly | P as s |