# Functional & Performance Testing Template

## Transfer Learning-Based Poultry Disease Detection Model

| | |
|---|---|
| Date | 24 Jun 2025 |
| Team ID | LTVIP2025TMID33049 |
| Project Name | Transfer Learning-Based Classification of Poultry Diseases for Enhanced Health Management |
| Maximum Marks | 4 marks |

### Test Scenarios & Results:

| Test Case ID | Scenario | Test Steps (How to test) | Expected Result | Actual Result | Pass/ Fail |
|---|---|---|---|---|---|
| **FT-01** | Fecal Disease Classification | Open the app upload a poultry feces image click “Detect” check the result | The model correctly shows the name of the disease (Coccidiosis, Salmonella) | Model identified Coccidiosis in sample image with 96% accuracy | Pass |
| **FT-02** | Thermography Validation | Upload a thermal image of a sick bird click detect observe the prediction | The model detects early signs of disease and shows a result with high accuracy | Thermal image detected infection signs with 94% confidence | Pass |
| **FT-03** | Confidence Score Check | Submit any valid poultry image wait for prediction see confidence score | The predicted result includes a confidence score (e.g., 92%) | Confidence score displayed as 91% next to prediction | Pass |
| **FT-04** | Misleading Input Testing | Upload blurred or unrelated image (e.g., object, random photo) click detect | The model gives an error or “Cannot detect disease” message | Unrelated image gave “Invalid image” message | Pass |
| **PT-01** | Real-Time Field Speed Test | Use mobile phone on a farm upload image use stopwatch to measure time | The result is displayed within 3 seconds | Model gave result in 2.7 seconds on mobile device | Pass |
| **PT-02** | Battery & Memory Efficiency | Run model for 10–15 mins mobile check for heating, battery drain, RAM usage | The model runs smoothly without overheating or fast battery drain | No heating, battery dropped 4% in 15 mins | Pass |
| **PT-03** | Rural Network Tolerance | Switch off mobile data upload image in app try detecting disease | The model works offline or shows a helpful offline message | Model worked offline and gave results without internet | Pass |