# User Acceptance Testing (UAT) Template

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| Date | 28 June 2025 |
| Team ID | LTVIP2025TMID41715 |
| Project Name | Transfer Learning-Based Classification of Poultry Diseases for Enhanced Health Management |
| Maximum Marks | 4 Marks |

**Project Overview:**

Project Name: Transfer Learning-Based Classification of Poultry Diseases for Enhanced Health Management

Project Description: This project utilizes transfer learning techniques on a curated dataset of poultry disease images to classify various poultry diseases such as Newcastle Disease, Fowlpox, and Coccidiosis. The model aims to assist poultry farmers and veterinarians in early disease detection, reducing mortality and improving productivity.

Project Version: 1.0

Testing Period: 20 June 2025 to 27 June 2025

**Testing Scope:**

The scope of User Acceptance Testing (UAT) for this project includes the end-to-end validation of functionalities and outputs of the poultry disease classification system powered by transfer learning. The focus areas include:

1. Model Functionality Validation
    - Verifying the accuracy and reliability of disease predictions.
    - Testing the confidence scores and the behavior on edge cases (e.g., blurry or low-quality images).
2. User Interface and Workflow
    - Checking the ease of image upload and classification result display.
    - Verifying the responsiveness and usability of the dashboard and reports.
3. Data Visualization and Dashboard Filters
    - Validating dynamic updates based on user-selected filters (e.g., disease type, confidence score, date).
    - Ensuring graphs and metrics are accurate and reflective of real-time model predictions.
4. Historical Data Tracking
    - Verifying the correct logging of prediction results with associated metadata (e.g., date, disease type, image reference).
5. Error Handling and Edge Case Management

- Uploading unsupported file types to check for error messages.
- Testing model behavior with low-resolution, irrelevant, or corrupted images.

6. Security and Access Control
    - Validating login credentials and access restrictions to authorized users only.
7. Performance Metrics
    - Assessing model inference time for various image sizes.
    - Ensuring acceptable response time for dashboard updates.

**Testing Environment:**

URL/Location: http://localhost:8501

Credentials (if required): Username – Reddtmanoj304@Gmail.Com; Password : X9hTCjeu

**Test Cases:**

| Test Case ID | Test Scenario | Test Steps | Expected Result | Actual Result | Pass/Fail |
|---|---|---|---|---|---|
| TC-001 | Upload poultry disease image and classify | 1. Login<br>2. Upload image<br>3. View prediction | Model classifies correctly with confidence score | Prediction: Newcastle Disease (95% confidence) | Pass |
| TC-002 | View disease history report | 1. Login<br>2. Navigate to history tab | Past predictions are listed with date and type | Report visible and accurate | Pass |
| TC-003 | Test invalid image upload | 1. Upload a non-image file | Show error message | Error: Invalid file type | Pass |
| TC-004 | Check dashboard filters | 1. Go to dashboard<br>2. Apply disease filter | Dashboard updates with relevant graphs | Filters work as expected | Pass |
| TC-005 | Low confidence prediction warning | 1. Upload blurry image | System shows low confidence alert | Alert displayed: “Low confidence prediction” | Pass |

**Bug Tracking:**

| Bug ID | Bug Description | Steps to reproduce | Severity | Status | Additional feedback |
|---|---|---|---|---|---|
| BG-001 | Dashboard doesn't update on applying date filter | 1. Go to dashboard<br>2. Apply date range | Medium | Open | Needs dynamic refresh |
| BG-002 | Model takes long time on large images | 1. Upload 4MB image | High | In Progress | Optimize model loading time |

**Sign-off:**

Tester Name: Reddy Manoj Kumar

Date: 28 June 2025

Signature: R. Manoj Kumar

**Notes:**

- Ensure that all test cases cover both positive and negative scenarios.
- Encourage testers to provide detailed feedback, including any suggestions for improvement.
- Bug tracking should include details such as severity, status, and steps to reproduce.
- Obtain sign-off from both the project manager and product owner before proceeding with deployment.