**User Acceptance Testing (UAT) Template**

|  |  |
| --- | --- |
| Date | 29 June 2025 |
| Team ID | LTVIP2025TMID44727 |
| Project Name | CleanTech: Transforming Waste Management with Transfer Learning |
| Maximum Marks |  |

**Project Overview:**

### **Project Overview**

| **Project Name:** | CleanTech: Transforming Waste Management with Transfer Learning |
| --- | --- |
| Project Description: | A machine learning solution using transfer learning to classify waste images into biodegradable, recyclable, and trash categories to improve waste management processes. |
| Project Version: | 1.0 |
| Testing Period: | 20 June 2025 to 27 June 2025 |

### **Testing Scope**

* Image classification accuracy for waste types: biodegradable, recyclable, trash.
* Transfer learning model integration and prediction correctness.
* User interface responsiveness and usability.
* Dashboard visualization correctness.
* Exporting prediction reports.

| **Test Case ID** | **Test Scenario** | **Test Steps** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| --- | --- | --- | --- | --- | --- |
| TC-001 | Upload waste image and get classification | 1. Login to app 2. Upload waste image 3. Click ‘Classify’ button | Waste image classified correctly into one of the 3 categories | Waste image classified as "Recyclable" correctly | Pass |
| TC-002 | Dashboard displays prediction stats | 1. Navigate to dashboard 2. View summary statistics and charts | Dashboard correctly displays class-wise prediction counts and accuracy | Dashboard showed correct counts and accuracy | Pass |
| TC-003 | Export prediction report | 1. Click ‘Export Report’ 2. Download CSV or PDF report | Report downloads successfully with accurate data | Report downloaded correctly | Pass |
| TC-004 | Handle invalid image upload | 1. Upload unsupported file type (e.g., .txt) 2. Click ‘Classify’ | System shows an error message indicating invalid file format | Error message shown as expected | Pass |
| TC-005 | User logout | 1. Click ‘Logout’ button | User is logged out and redirected to login page | Logout successful | Pass |

**Bug Tracking:**

| **Bug ID** | **Bug Description** | **Steps to Reproduce** | **Severity** | **Status** | **Additional Feedback** |
| --- | --- | --- | --- | --- | --- |
| BG-001 | Dashboard loading delay | 1. Login 2. Navigate to dashboard | Medium | In Progress | Optimize dashboard loading for large datasets |
| BG-002 | Export report sometimes incomplete | 1. Generate report 2. Export to PDF | High | Open | Report misses some recent prediction entries |
| BG-003 | Misclassification on blurred images | 1. Upload blurred image 2. Classify | Low | Open | Model confidence drops on poor-quality images |

### **Sign-off**

| **Tester Name:** | ROUTHU CHARAN SAI |
| --- | --- |
| Date: | 27 June 2025 |
| Signature: | R.Charan Sai |