**User Acceptance Testing (UAT) Template**

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| --- | --- |
| Date | 10 February 2025 |
| Team ID | LTVIP2025TMID36078 |
| Project Name | GrainPalette - A Deep Learning Odyssey In Rice Type Classification Through Transfer Learning |
| Maximum Marks |  |

**Project Overview:**

Project Name: GrainPalette - A Deep Learning Odyssey In Rice Type Classification Through Transfer Learning

Project Description: A deep learning-based image classification system that identifies five rice types (Arborio, Basmati, Ipsala, Jasmine, Karacadag) using MobileNetV2 with transfer learning.

Project Version : v1.0

Testing Period: 05 February 2025 to 10 February 2025

**Testing Scope:**

[List of Features and Functionalities to be Tested]

1.Classification of rice grain images into correct categories.

2.UI test for model prediction using uploaded image.

3.Performance testing – accuracy, precision, recall, F1-score.

[List of User Stories or Requirements to be Tested]

1.As a user, I can upload a rice image and get a predicted rice type.

2.As a tester, I can validate model performance against test dataset.

3.The model should output accurate and fast predictions.

**Testing Environment:**

URL/Location: Local environment / VS Code with Python 3.13

Credentials (if required): NA

**Test Cases:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Test Scenario** | **Test Steps** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| TC-001 | Image Prediction from Model | 1. Load model 2. Upload rice image 3. Get prediction | Display correct rice type | Model predicts correct rice type | Pass |
| TC-002 | Handle Invalid Input | 1. Upload non-image file 2. Run model | Show error or invalid file message | Handled invalid input gracefully | Pass |

**Bug Tracking:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Bug ID** | **Bug Description** | **Steps to reproduce** | **Severity** | **Status** | **Additional feedback** |
| BG-001 | Model crashes on empty file | 1. Upload empty file 2. Click predict | Low | Closed | Handled using try-except |
| BG-002 | Incorrect prediction on low-quality image | 1. Upload a blurry or low-resolution image 2. Run prediction | Medium | Open | Model prediction confidence drops noticeably. Consider adding image quality checks or preprocessing. |

**Sign-off:**

Tester Name: Mullapudi Valli Gayathri

Date: 10 February 2025

Signature: M.Valli Gayathri

**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.