User Acceptance Testing (UAT)

Date	18 February 2025
Team ID	LTVIP2026TMIDS76029
Project Name	Online Payments Fraud Detection using Machine Learning
Maximum Marks	4 Marks

Project Overview:

Project Name: Online Payments Fraud Detection using Machine Learning

Project Description:
This project is a Machine Learning-based web application designed to detect fraudulent online payment transactions. The system allows users to enter transaction details and receive a real-time prediction indicating whether the transaction is Fraud or Not Fraud using a trained classification model.

Project Version: Version 1.0

Testing Period: 15 February 2026 to 20 February 2026

Testing Scope:

Features Tested:

- Home Page display and navigation
- Transaction input form validation
- Fraud prediction processing
- ML model integration
- Result display (Fraud / Not Fraud)
- Navigation buttons (Predict Another / Back to Home)
- Error handling and input validation

User Stories Tested:

- User can view home page
- User can navigate to prediction page
- User can enter transaction details
- User can submit transaction for fraud detection
- User can view fraud prediction result
- User can navigate back or perform another prediction

Testing Environment:

URL/Location: http://127.0.0.1:5000 (Local Flask Server)

Credentials: Not Required

System Requirements:

- Python 3.8+
- Flask
- Scikit-learn
- Web Browser (Chrome / Edge / Firefox)

Test Cases:

Test Case ID	Test Scenario	Test Steps	Expected Result	Actual Result	Pass/Fail
TC-001	Verify Home Page Load	1. Open application 2. Check UI elements	Home page loads successfully	Page loaded correctly	Pass
TC-002	Navigate to Predict Page	1. Click Predict button	Prediction form opens	Form displayed correctly	Pass
TC-003	Validate Input Fields	1. Enter transaction details 2. Submit form	System accepts valid input	Input accepted	Pass
TC-004	Fraud Prediction Processing	1. Submit valid transaction 2. Wait for result	System processes ML model	Prediction generated	Pass
TC-005	Display Result	1. Submit form 2. View result page	Fraud/Not Fraud displayed clearly	Correct result shown	Pass
TC-006	Navigation Buttons	1. Click Predict Another 2. Click Back to Home	Redirects properly	Navigation works	Pass
TC-007	Invalid Input Handling	1. Enter invalid values 2. Submit	System handles error properly	Error handled correctly	Pass

Bug Tracking:

Bug ID	Bug Description	Steps to Reproduce	Severity	Status	Additional Feedback
BG-001	Minor UI alignment issue	1. Open Predict Page 2. Resize window	Low	Closed	Fixed in UI update
BG-002	Incorrect message for empty input	1. Leave field blank 2. Submit	Medium	Closed	Validation improved
BG-003	Delay in model loading (initial run)	1. Start server 2. First prediction	Medium	Closed	Model preloading optimized

UAT Summary

- Total Test Cases Executed: 7
- Passed: 7
- Failed: 0
- Critical Defects: 0
- Status: Approved for Release

The system successfully meets all functional and non-functional requirements.

Sign-off:

Tester Name: Project Testing Team – Online Payments Fraud Detection System

Date: 20 February 2026

Signature: _____