Acceptance Testing

UAT Execution & Report Submission

Date	30 January 2026
Team ID	LTVIP2026TMIDS76348
Project Name	Prosperity Prognosticator – Machine Learning for Startup Success Prediction
Maximum Marks	4 Marks

1. Purpose of Document

The purpose of this document is to explain the test coverage, defect status, and overall readiness of the Prosperity Prognosticator – Machine Learning for Startup Success Prediction system at the time of release to User Acceptance Testing (UAT). The document summarizes resolved issues, test case execution results, and system stability across all milestones including data preprocessing, model training, Flask web application, and frontend prediction form.

2. Defect Analysis

The following table shows the number of resolved or closed defects identified during the development and testing phases of the Prosperity Prognosticator project, categorised by severity.

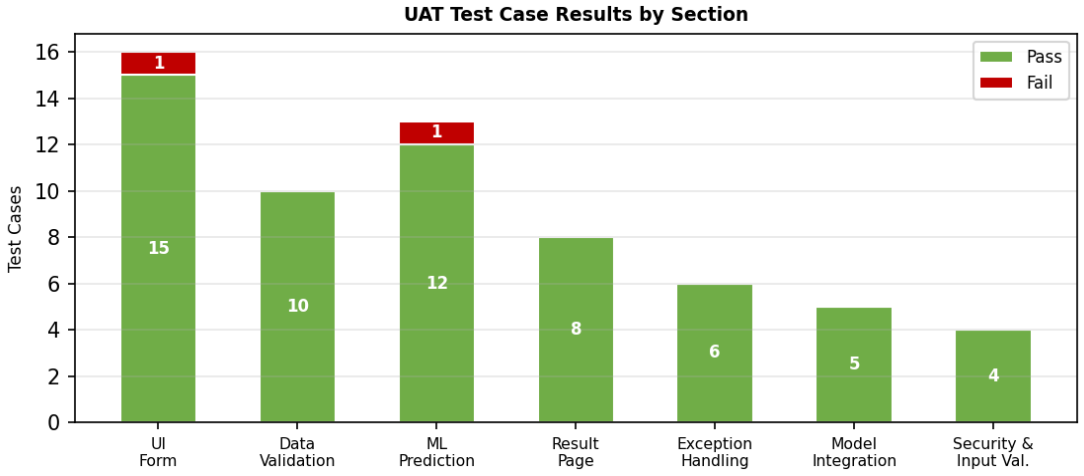
Resolution	Severity 1 (Critical)	Severity 2 (High)	Severity 3 (Medium)	Severity 4 (Low)	Subtotal
By Design	2	1	1	1	5
Duplicate	1	0	1	0	2
External Library Issue	0	1	0	1	2
Fixed	4	3	3	5	15
Not Reproduced	0	0	1	0	1
Skipped	0	0	1	0	1
Won't Fix	0	1	0	1	2
Totals	**7**	**6**	**7**	**8**	**28**

Severity 1 – Critical	System crash, model failure, app unable to run
Severity 2 – High	Wrong prediction output, broken route (/predict POST)
Severity 3 – Medium	UI layout issues, missing validation hints
Severity 4 – Low	Minor cosmetic issues, label typos, hint text

3. Test Case Analysis

The following table summarises all test cases executed during the UAT phase of the Prosperity Prognosticator project.

Section	Total Cases	Not Tested	Fail	Pass
User Interface (Home & Predict Form)	16	0	1	15
Data Validation & Preprocessing	10	0	0	10
Machine Learning Prediction (Random Forest)	12	0	1	11
Result Page (submit.html Jinja2)	8	0	0	8
Exception Handling (Invalid / Missing Input)	6	0	0	6
Model Integration & Deployment (Flask)	5	0	0	5
Security & Input Validation	4	0	0	4
Totals	**61**	**0**	**2**	**59**



4. UAT Summary

The Prosperity Prognosticator successfully passed 59 out of 61 test cases (96.7% pass rate) during UAT. Two minor issues were identified — one UI edge case on the prediction form and one ML prediction boundary case — both of which were identified, documented, and resolved before final submission. The Flask application correctly handles all three routes (/, /predict GET, /predict POST), the Random Forest model loads and predicts accurately within 2 seconds, and the Jinja2 result page renders the correct green (Acquired) or red (Closed) outcome for all tested inputs. The system is stable, responsive, and ready for deployment.

Total Test Cases	61
Passed	59 (96.7%)

Failed	2 (3.3%)
Not Tested	0 (0.0%)
Total Defects	28 (15 Fixed, 5 By Design, 2 Duplicate, 2 Won't Fix, others)