

Software Test Plan

Project: ProfInsights

Version: 1.0

Team: Group 8

Date: May 8, 2025

1. Introduction

This test plan outlines the testing strategy and activities for ProfInsights, an anonymous professor rating platform. It includes objectives, scope, testing strategy, resources, and deliverables to ensure that the software meets its requirements.

2. Objectives

The objective of this test plan is to validate that all functional and non-functional requirements of ProfInsights are correctly implemented and work as expected. This includes testing features like review submission, professor search, AI-based moderation, and responsiveness.

3. Test Scope

In Scope:

- Review submission
- Professor search and filtering
- Display of professor profiles and reviews
- AI-based moderation system
- Reporting system for inappropriate content
- Responsive design

Out of Scope:

- Admin moderation panel (not implemented in current version)

4. Test Strategy

The following types of testing will be conducted:

- Unit Testing: Using Jest for frontend and backend logic
- Integration Testing: Ensuring modules like API and database interact correctly
- System Testing: End-to-end testing of the full application
- Acceptance Testing: Based on user requirements and use cases
- UI/UX Testing: Checking layout and responsiveness across devices
- AI Moderation Testing: Testing the accuracy and handling of flagged content

5. Resources

Testing Tools:

- Postman: API testing
- Jest: JavaScript unit testing
- Selenium: Automated UI testing
- MongoDB Compass: Database inspection

Personnel:

- Testers: Group 8 members
- Dev Leads: Niharika A., Siri Vennela

6. Schedule

Testing Timeline:

- Unit Testing: May 3–4
- Integration Testing: May 5
- System Testing: May 6
- Final Regression & Acceptance Testing: May 7–8

7. Test Deliverables

The following artifacts will be produced:

- Test Plan (this document)
- Test Cases Document
- Bug Reports
- Test Summary Report

8. Entry and Exit Criteria

Entry Criteria:

- All development tasks must be completed
- Test environment must be ready

Exit Criteria:

- All critical and high-severity bugs are resolved
- 95% of test cases must pass
- Acceptance testing is signed off by stakeholders

9. Risks and Mitigation

- Risk: AI moderation may misclassify genuine reviews

Mitigation: Manual override in admin panel

- Risk: Delays in deployment may affect testing schedule
Mitigation: Use local environment backup

10. Test Metrics

- Test case pass rate
- Number of bugs found and fixed
- Code coverage percentage
- Bug severity distribution