TEST PLAN AND TEST RESULTS

Reference: edugameai.app

1. Purpose & Scope

Purpose: Verify that the EduGameAI application meets functional, performance, security, and usability requirements.

Scope: End-to-end validation of Authentication, Medical Assistant flows, Doctor workflow, AI & RAG functionality, Tools & Features, Security, and Integrations.

2. Objectives

- Confirm critical user journeys.

- Validate PHI protection.

- Measure performance benchmarks.

- Surface defects before demo/production.

3. Test Items

Authentication, Medical Assistant, Doctor Workflow, AI & RAG, Tools & Features, Security, Integrations.

4. Test Environment

- URL: edugameai.lovable.app

- Browsers: Chrome, Firefox, Edge

- Devices: Desktop, Tablet

- Test Data: Synthetic medical data

- Network: LAN + simulated 3G/4G

5. Test Approach

Functional testing, regression, performance testing, security assessments, exploratory testing, acceptance testing.

6. Acceptance Criteria

- Pass rate ≥ 90% overall

- 100% pass for critical tests

- Performance SLAs met

- No PHI leakage

7. Entry/Exit Criteria

Entry: Environment ready, data loaded.

Exit: Critical tests passed, major defects resolved.

8. Test Cases Summary

28 total test cases across Authentication, MA Module, Doctor Workflow, AI & RAG, Tools, Security, Integration.

9. Test Results Summary

Overall: PASSED

Success Rate: 92.9% (26/28)

Area-wise:

- Authentication: 100%

- Medical Assistant: 100%

- Doctor Workflow: 100%

- AI & RAG: 75%

- Tools & Features: 100%

- Security: 100%

- Integration: 75%

10. Performance Metrics

- Dashboard Load: 2.1s

- Chart Prep: 22s

- AI Summary: 12s

- PDF Export: 8s

- Chat Response: 3s

11. Defects

HIGH:

- Citation source mismatch in AI & RAG.

MEDIUM:

- PDF export formatting issues.

12. Go / No-Go Recommendation

Go for demo with conditions:

- Fix citation mismatch.

- Improve PDF export error handling.

13. Risks & Mitigation

Risk: Incorrect citations → Fix mapping and verify manually.

Risk: PDF issues → Add fallback rendering.

14. Next Steps

- Fix critical issues.

- Re-test and prepare demo environment.

- UAT and Phase 2 improvements.

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