Test Strategy Document

Project: apo.vwo.com (A/B Testing Platform)

Prepared by: Senior QA Manager (20+ Yrs Experience)

Reviewed by: QA Lead (20+ Yrs Experience)

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1. Objective

Ensure the end-to-end functionality, usability, performance, security, and data accuracy of apo.vwo.com, an A/B testing platform, aligning with business and technical requirements.

2. Scope

In Scope:

- Customer Workflows:

- User Registration (Sign-up)

- User Login & Logout

- Dashboard navigation

- A/B Test creation, modification & deletion

- Reporting and analytics viewing

- Account Management:

- Profile updates

- Password reset

- Integrations:

- API Endpoints (A/B test management, user management, analytics)

- Webhooks & third-party analytics integrations (e.g., Google Analytics)

- Platform Coverage:

- Web application (Desktop + Mobile browsers)

Out of Scope:

- Mobile native apps (Android, iOS)

- Internal admin dashboards (for now)

- Third-party billing and payment workflows (handled externally)

3. Focus Areas

- Functional Correctness

- Data Accuracy

- UI / Navigation

- Performance

- Security

- Compatibility

- Usability

- API Reliability

- Database Integrity

- Server Log Validation

4. Test Approach

- Functional Testing: Manual, Selenium

- API Testing: Postman / Rest Assured (Java)

- Database Testing: SQL queries using DBeaver

- Log Validation: Kibana / Splunk

- Performance Testing: JMeter

- Security Testing: OWASP ZAP / Burp Suite

- Cross-browser Testing: BrowserStack

- Accessibility Testing: Axe, Lighthouse

- Exploratory Testing: Session-based test charters

- Regression Testing: Selenium + TestNG

5. Deliverables

- Functional Test Reports

- API Test Report

- Performance Test Results

- Security Assessment Report

- Cross-browser Compatibility Report

- Usability Evaluation Report

- UAT Sign-off Report

- Test Coverage & Defect Reports

- Automated Test Suite & Execution Logs

6. Team & Schedule

Team Composition:

- 4 QA Engineers (2 Manual, 2 Automation)

- 1 Performance Tester

- 1 Security Tester (part-time)

- 1 Contingency Backup QA (floating)

Schedule:

May: Functional, API, Database & Security Testing

June: Performance Testing, Cross-browser Testing

July: Usability Evaluation, UAT

August: Final Regression Testing & Release Sign-off

UAT Participants:

- 5 Business Stakeholders

- 5 Beta Users

7. Entry & Exit Criteria

Entry:

- All user stories signed-off by Product

- Test environment stable & accessible

- APIs deployed and documented

Exit:

- All functional & non-functional tests executed

- No Critical/High open defects

- Load test SLAs met (Avg Response < 2 sec @ 1000 users)

- No OWASP Top 10 Critical/High vulnerabilities

- UAT sign-off obtained

- 95%+ Test Coverage achieved

8. Metrics to Track

- Requirement Coverage %

- Test Case Execution %

- Defect Density & Leakage Rate

- API Test Coverage %

- Automation Suite Pass Rate %

- Performance Metrics (TPS, Response time)

- Security Issues count (by severity)

- Usability Issues count

9. Risks & Mitigation

- Frequent UI changes: Early collaboration + Exploratory Testing

- API schema instability: Contract Testing + Dev sync

- Limited UAT participants: Pre-identify backups

10. Tools Stack

- Test Management: Jira + Zephyr

- Automation: Selenium + TestNG

- API Testing: Postman / Rest Assured

- Database: DBeaver

- Log Monitoring: Kibana / Splunk

- Performance: JMeter

- Security: OWASP ZAP / Burp Suite

- Cross-browser: BrowserStack

- Accessibility: Axe, Lighthouse

- CI/CD: Jenkins

Approval:

Role: QA Manager | Name: Pramod Dutta | Signature: (signed) | Date: 03-May-2025

Role: QA Lead | Name: Senior QA Lead | Signature: (signed) | Date: 03-May-2025

Role: Product Owner | Name: [Pending] | Signature: | Date: