**Test Plan for app.vwo.com – A/B Testing Platform**

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**Version:** 1.0  
**Date:** May 3, 2025  
**Reviewed by:** Team Lead  
**Approved by:** PM/Stakeholder

**1. Objective**

This document outlines the test plan for **app.vwo.com**, a SaaS-based platform that enables A/B testing and website optimization for conversion improvement. The objective is to validate the functionality, usability, performance, and security of critical modules including Login, Dashboard, Account Creation, and Campaign Management.

**2. Scope**

**✔️ Features to Be Tested**

* Login Page (authentication, error handling)
* Dashboard (widgets, navigation, user-specific data)
* Create Account Page (sign-up, validation)
* A/B Testing Campaign (create, configure, preview, publish)

**❗ Testing Types**

* Manual Testing
* Automation Testing
* Performance & Load Testing
* Accessibility Testing
* Security Testing
* Cross-browser & Device Compatibility Testing

**3. Inclusions**

* Functional, UI, and UX validation for listed modules
* API-level validation where exposed
* Edge case and negative scenario coverage
* Multi-role testing (Admin, Editor, Viewer)

**4. Exclusions**

* In-depth analytics data validation (outside A/B scope)
* Third-party CRM or email integration flows
* Localization/Internationalization
* Load testing beyond 1,000 concurrent users (separate performance plan)

**5. Test Environments**

| **Environment Component** | **Details** |
| --- | --- |
| **OS** | Windows 10/11, macOS 12+, Ubuntu 20+ |
| **Browsers** | Chrome (latest 2), Firefox, Safari, Edge |
| **Devices** | Desktop, Laptop, Tablet, Smartphone |
| **Connectivity** | Wi-Fi, 5G, Ethernet |
| **Security Protocols** | HTTPS, Token-based Auth, 2FA (if enabled) |
| **Access Roles** | Admin, Editor, QA, Viewer |

**6. Test Data Strategy**

* Separate test accounts for each role (Admin, QA, Viewer)
* Dummy email IDs and domains (e.g., testuser+abc@domain.com)
* Use of mock credit card data for payment screens (if required)
* Compliance with GDPR – no real customer data in test env

**7. Test Metrics and KPIs**

| **Metric** | **Description** |
| --- | --- |
| Test Coverage | % of test cases mapped to requirements |
| Defect Density | Defects per module or function |
| Defect Leakage | Production bugs not found in test |
| Test Execution Progress | Planned vs. executed |
| Automation Coverage | % of regression test cases automated |
| Mean Time to Resolve Defect | Avg. time from bug report to fix |

**8. Defect Reporting Procedure**

* **Criteria:** Any deviation from expected behaviour or requirement
* **Tool:** JIRA (Bug Tracking)
* **Format:** Summary, Steps to Reproduce, Expected vs. Actual, Severity, Priority, Environment, Screenshots/Logs
* **Triage:** Daily bug review with dev and QA lead
* **Severity Levels:** Blocker, Critical, Major, Minor, Trivial
* **Communication:** Slack channel + daily email summary

**9. Test Strategy**

**Step 1: Test Design**

* Equivalence Class Partitioning
* Boundary Value Analysis
* Decision Table Testing
* Use Case Testing
* Exploratory Testing
* Negative Testing

**Step 2: Execution Procedure**

* **Smoke Testing:** Basic app health (login, dashboard load)
* **Sanity Testing:** Post-deployment quick checks
* **Functional Testing:** Detailed, case-based module checks
* **Regression Testing:** Full suite after each build or hotfix
* **Cross-Platform Testing:** Browser/device matrix
* **Security Testing:** Form validation, session timeout, injection

**10. Automation Strategy**

* **Scope:** Smoke tests, login flows, basic dashboard validation
* **Tools:** Cypress + GitHub Actions for CI/CD integration
* **Schedule:** Nightly build validation + post-release checks
* **Maintenance:** QA Automation led to review monthly
* **Reporting:** Automated HTML reports + JIRA integration

**11. Performance & Load Testing**

* **Tools:** JMeter or k6
* **Metrics:** Response time, concurrent users, error % under load
* **Scenarios:** Campaign load, dashboard refresh under 100 users
* **Threshold:** Login & dashboard < 2 seconds under 100 users
* **Frequency:** Once per release

**12. Accessibility Testing**

* **Tools:** axe DevTools, Wave, Lighthouse
* **Standards:** WCAG 2.1 (AA)
* **Focus Areas:** Login fields, navigation menus, buttons, colour contrast
* **Testing:** Screen reader compatibility (NVDA, Voiceover)

**13. Regression Testing Plan**

* Triggers: Major defect fixes, new release builds
* Includes: All critical and high priority test cases
* Tools: Manual for UI + Cypress automation
* Duration: 2–3 days per cycle

**14. Entry and Exit Criteria**

| **Phase** | **Entry Criteria** | **Exit Criteria** |
| --- | --- | --- |
| **Requirement Analysis** | All specs available | Use cases and flows clarified |
| **Test Design** | Approved use cases | Reviewed test cases |
| **Test Execution** | Stable build, signed-off test cases | All critical test cases executed, no high-sav defects open |
| **Test Closure** | All test cycles complete | Test summary report signed off |

**15. Test Schedule**

| **Activity** | **Duration** | **Start** | **End** |
| --- | --- | --- | --- |
| Test Plan Review | 1 day | May 3 | May 3 |
| Test Design | 3 days | May 4 | May 6 |
| Review & Baseline Test Cases | 1 day | May 7 | May 7 |
| Execution (Cycle 1) | 4 days | May 8 | May 11 |
| Regression Cycle | 2 days | May 12 | May 13 |
| Final Reporting | 1 day | May 14 | May 14 |

**16. Tools**

| **Tool** | **Purpose** |
| --- | --- |
| JIRA | Bug Tracking |
| TestRail / Excel | Test Management |
| Cypress | Automation |
| Browser Stack | Cross-browser/device testing |
| axe, Lighthouse | Accessibility checks |
| JMeter / k6 | Performance Testing |
| Snipping Tool / OBS | Screenshots & screen capture |

**17. Risks and Mitigations**

| **Risk** | **Impact** | **Mitigation** |
| --- | --- | --- |
| Unclear requirements | High | Frequent PM syncs, early clarification |
| Build delay | High | Use last working build for parallel test case prep |
| Resource unavailability | Medium | Backup QA identified |
| Late defect fixes | Medium | Buffer days added to test cycle |

**18. Version Control and Change Management**

* **Initial version:** v1.0
* **Change Control:** Any updates to test scope or modules must be versioned (v1.1, v1.2, etc.)
* **Owner:** QA Lead
* **Storage:** Project Git/Confluence

**19. Traceability Matrix**

*(Maintained as a separate spreadsheet or within TestRail – mapping requirements → test scenarios → test cases → defects)*

**20. Approvals**

| **Role** | **Name** | **Signature** | **Date** |
| --- | --- | --- | --- |
| QA Lead | Team Lead Name |  |  |
| Product Owner | PM Name |  |  |
| Dev Led | Dev Name |  |  |