**📄 Test Plan for app.vwo.com – Login Page**

**1. Test Plan ID**

TP-LOGIN-APPVWO-001

**2. Introduction**

This test plan outlines the testing approach for the login functionality of https://app.vwo.com. The goal is to ensure that the login process works as expected under various scenarios, and that security, usability, and functionality are maintained.

**3. Objectives**

* Verify valid users can log in successfully.
* Validate error messages for invalid login attempts.
* Ensure input fields have proper validations.
* Test login-related UI/UX elements.
* Confirm session handling and redirects after login.
* Evaluate security aspects like HTTPS, password masking, and rate limiting.

**4. Scope**

**In Scope:**

* Login with valid/invalid credentials
* Forgot password link functionality
* UI validation (input field design, placeholder, responsiveness)
* Security tests (HTTPS, input validation, brute-force handling)
* Session management (remember me, logout, session timeout)

**Out of Scope:**

* Sign-up flow
* Post-login dashboard testing
* Multi-factor authentication (unless present)

**5. Test Strategy**

**Test Types:**

* **Functional Testing**
* **UI/UX Testing**
* **Regression Testing**
* **Security Testing**
* **Cross-browser Testing**
* **Responsive Testing (Mobile/Desktop)**

**Tools Used (Optional):**

* Browser DevTools
* JIRA/TestRail (for tracking)
* Postman (for login API verification, if allowed)
* BrowserStack (for cross-browser/device testing)

**6. Test Environment**

* **URL:** https://app.vwo.com
* **Browsers:** Chrome, Firefox, Safari, Edge (latest versions)
* **Devices:** Desktop, Android, iOS
* **OS:** Windows 10/11, macOS Monterey+, iOS 16+, Android 12+

**7. Test Cases Overview**

| **Test Case ID** | **Title** | **Description** |
| --- | --- | --- |
| TC-001 | Valid Login | Login with correct email & password |
| TC-002 | Invalid Email Format | Enter improperly formatted email |
| TC-003 | Incorrect Password | Valid email with wrong password |
| TC-004 | Empty Fields | Submit with blank email/password |
| TC-005 | Password Masking | Check password field masking behavior |
| TC-006 | Forgot Password | Click and navigate to reset flow |
| TC-007 | Session Timeout | Check auto-logout after idle timeout |
| TC-008 | Browser Compatibility | Test login on different browsers |
| TC-009 | Mobile Responsiveness | View login on different screen sizes |
| TC-010 | SQL Injection Attempt | Attempt SQL/code injection in inputs |

**8. Entry Criteria**

* The login feature is deployed to a stable test environment.
* Functional specifications are finalized and available.
* Test data (valid users, invalid users) is ready.

**9. Exit Criteria**

* All critical and major test cases pass.
* No high-severity bugs are open.
* Regression on related modules (like forgot password) passes.

**10. Risks & Assumptions**

* Test environment may not reflect production configuration.
* Login APIs are assumed stable and not rate-limited for testing.
* CAPTCHA/MFA is assumed absent or disabled for test users.

**11. Approvals**

| **Name** | **Role** | **Status** |
| --- | --- | --- |
| QA Lead | Quality Lead | ✅ Approved |
| Dev Lead | Development | ✅ Approved |
| PM | Product Manager | ✅ Approved |