

VWO Login Page Test Cases

Overview

This document outlines comprehensive test cases for the login functionality of app.vwo.com as per the VWO Test Plan. These test cases are designed to ensure the login page meets all functional, security, performance, and compatibility requirements across supported environments.

Test Environments

As specified in the test plan, testing will be conducted on:

- Windows 10 – Chrome, Firefox and Edge
- Mac OS – Safari Browser
- Android Mobile OS – Chrome
- iPhone Mobile OS - Safari

Testing environments:

- QA: qa.vwo.com
- Pre Prod: preprod.vwo.com
- UAT: uat.vwo.com
- Production: app.vwo.com

1. Smoke Testing (Login Functionality)

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment
SMK-01	Verify login page accessibility	1. Navigate to app.vwo.com	N/A	Login page should load successfully	High	All environments
SMK-02	Verify successful login	1. Navigate to app.vwo.com 2. Enter valid email 3. Enter valid password 4. Click Login button	Email: [valid email] Password: [valid password]	User should be logged in successfully and redirected to the dashboard	High	All environments

2. Functional Testing

2.1 Authentication Tests

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment
FUN-01	Valid Login	1. Navigate to app.vwo.com 2. Enter valid email 3. Enter valid password 4. Click Login button	Email: [valid email] Password: [valid password]	User successfully logs in and redirects to dashboard	High	All environments
FUN-02	Invalid Email Format	1. Navigate to app.vwo.com 2. Enter invalid email format 3. Enter valid password 4. Click Login button	Email: invalid.email Password: [valid password]	Error message "Please enter a valid email address"	High	All environments
FUN-03	Invalid Email (Non-existent)	1. Navigate to app.vwo.com 2. Enter non-existent email 3. Enter any password 4. Click Login button	Email: <u>nonexistent@example.com</u> Password: any	Error message indicating invalid credentials	High	All environments
FUN-04	Invalid Password	1. Navigate to app.vwo.com 2. Enter valid email 3. Enter incorrect password 4. Click Login button	Email: [valid email] Password: [incorrect password]	Error message indicating incorrect credentials	High	All environments
FUN-05	Empty Email	1. Navigate to app.vwo.com 2. Leave email field empty 3. Enter valid password 4. Click Login button	Email: [empty] Password: [valid password]	Error message indicating email is required	High	All environments

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment
FUN-06	Empty Password	1. Navigate to app.vwo.com 2. Enter valid email 3. Leave password field empty 4. Click Login button	Email: [valid email] Password: [empty]	Error message indicating password is required	High	All environments
FUN-07	Both Fields Empty	1. Navigate to app.vwo.com 2. Leave both fields empty 3. Click Login button	Email: [empty] Password: [empty]	Error messages for both required fields	High	All environments
FUN-08	Case-Sensitivity in Email	1. Navigate to app.vwo.com 2. Enter valid email with mixed cases 3. Enter valid password 4. Click Login button	Email: <u>User@Example.com</u> Password: [valid password]	Login should be successful (email should be case-insensitive)	Medium	All environments
FUN-09	Case-Sensitivity in Password	1. Navigate to app.vwo.com 2. Enter valid email 3. Enter password with incorrect case 4. Click Login button	Email: [valid email] Password: [case-modified password]	Login should fail (password should be case-sensitive)	Medium	All environments
FUN-10	Account Lockout	1. Navigate to app.vwo.com 2. Enter valid email 3. Enter incorrect password multiple times (typically 5+) 4. Try login again	Email: [valid email] Password: [incorrect password]	Account should be temporarily locked after defined number of attempts	High	All environments

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Envi
				with appropriate message		

2.2 Remember Me Functionality

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
FUN-11	Remember Me - Checked	1. Navigate to app.vwo.com 2. Enter valid credentials 3. Check "Remember Me" 4. Login 5. Close browser 6. Reopen and navigate to app.vwo.com	Email: [valid email] Password: [valid password]	User should still be logged in or credentials should be pre-filled	Medium	All environments	Use Case Testing
FUN-12	Remember Me - Unchecked	1. Navigate to app.vwo.com 2. Enter valid credentials 3. Ensure "Remember Me" is unchecked 4. Login 5. Close browser 6. Reopen and navigate to app.vwo.com	Email: [valid email] Password: [valid password]	User should be logged out and no credentials pre-filled	Medium	All environments	Use Case Testing
FUN-13	Remember Me - Cookie Expiration	1. Navigate to app.vwo.com 2. Enter valid credentials 3. Check "Remember Me" 4. Login 5. Wait for cookie expiration period 6. Attempt to access app.vwo.com	Email: [valid email] Password: [valid password]	User should be required to login again after expiration period	Low	All environments	State Transition Testing

2.3 Forgot Password Functionality

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
FUN-14	Forgot Password - Valid Email	1. Navigate to app.vwo.com 2. Click on "Forgot Password" 3. Enter valid registered email 4. Submit	Email: [valid email]	Success message confirming reset email sent	High	All environments	Use Case Testing
FUN-15	Forgot Password - Invalid Email	1. Navigate to app.vwo.com 2. Click on "Forgot Password" 3. Enter unregistered email 4. Submit	Email: [nonexistent email]	Appropriate message (either success to prevent user enumeration or specific error)	High	All environments	Error Guessing
FUN-16	Forgot Password - Empty Email	1. Navigate to app.vwo.com 2. Click on "Forgot Password" 3. Leave email field empty 4. Submit	Email: [empty]	Error message indicating email is required	Medium	All environments	Boundary Value Analysis
FUN-17	Password Reset Link	1. Request password reset 2. Check email 3. Click on reset link 4. Set new password	New password: [new valid password]	Password should be successfully reset	High	All environments	Use Case Testing
FUN-18	Expired Reset Link	1. Request password reset 2. Wait for link to expire (typically 24+ hours) 3. Try to use reset link	N/A	Error message indicating link has expired	Medium	All environments	State Transition Testing

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
FUN-19	Password Reset - Password Requirements	1. Request password reset 2. Follow reset link 3. Try setting passwords that don't meet requirements	Various weak passwords	System should reject weak passwords and provide strength requirements	Medium	All environments	Boundary Value Analysis

2.4 Single Sign-On (SSO) Testing

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
FUN-20	Google SSO	1. Navigate to app.vwo.com 2. Click on "Sign in with Google" 3. Complete Google authentication	Valid Google account	Successful login and redirection to dashboard	High	All environments	Use Case Testing
FUN-21	SSO with Valid Enterprise Credentials	1. Navigate to app.vwo.com 2. Use SSO authentication option 3. Enter valid enterprise credentials	[Valid enterprise credentials]	Successful login and redirection to dashboard	High	All environments	Use Case Testing
FUN-22	SSO Failure Handling	1. Navigate to app.vwo.com 2. Click on SSO option 3. Cancel or fail authentication	N/A	Appropriate error handling and return to login page	Medium	All environments	Error Guessing

2.5 Navigation and Redirects

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
FUN-23	Redirect After Login	1. Navigate to app.vwo.com/some-protected-page 2. System redirects to login 3. Login with valid credentials	[Valid credentials]	Redirection to originally requested protected page	Medium	All environments	Use Case Testing
FUN-24	Create Account Navigation	1. Navigate to app.vwo.com 2. Click on "Create Account" link	N/A	Proper redirection to account creation page	Medium	All environments	Use Case Testing
FUN-25	Login From Signup Page	1. Navigate to signup page 2. Click "Already have an account? Login"	N/A	Redirect to login page	Medium	All environments	Use Case Testing

3. Security Testing

3.1 Authentication Security

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
SEC-01	Password Field Masking	1. Navigate to app.vwo.com 2. Enter password 3. Verify password is masked	Password: [test password]	Password characters should be masked by default	High	All environments	Use Case Testing
SEC-02	Show/Hide Password	1. Navigate to app.vwo.com 2. Enter password 3. Click show/hide password icon	Password: [test password]	Password visibility should toggle accordingly	Medium	All environments	Use Case Testing
SEC-03	SQL Injection Attempt	1. Navigate to app.vwo.com 2. Enter SQL injection strings in email/password	Email: ' OR 1=1 -- Password: ' OR 1=1 --	System should reject the login attempt and not be vulnerable	High	All environments	Error Guessing
SEC-04	XSS Prevention	1. Navigate to app.vwo.com 2. Enter XSS payloads in email/password	Email: <script>alert(1)</script>	System should encode or reject input without executing scripts	High	All environments	Error Guessing
SEC-05	CSRF Protection	1. Analyze login form 2. Check for CSRF token 3. Attempt to reuse an old form submission	N/A	Form should have CSRF protection and reject replayed submissions	High	All environments	Error Guessing

3.2 Session Security

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
SEC-06	Session Timeout	1. Login successfully 2. Remain inactive for timeout period 3. Try to perform an action	[Valid credentials]	User should be logged out or prompted to re-authenticate	High	All environments	State Transition Testing
SEC-07	Logout Functionality	1. Login successfully 2. Click on logout 3. Try to access protected pages	[Valid credentials]	All sessions should terminate and require re-authentication	High	All environments	State Transition Testing
SEC-08	HTTP/HTTPS Testing	1. Access login page via HTTP 2. Verify redirection to HTTPS	N/A	Automatic redirection to HTTPS for secure communication	High	All environments	Error Guessing
SEC-09	HTTP Security Headers	1. Login successfully 2. Use browser tools to check security headers	N/A	Proper security headers (HSTS, Content-Security-Policy, etc.) should be present	High	All environments	Error Guessing
SEC-10	Brute Force Protection	1. Use automated tool to attempt repeated logins 2. Check for CAPTCHA, rate limiting, or IP blocking	Multiple invalid attempts	System should implement brute force protection mechanisms	High	QA environment only	Error Guessing

4. UI/UX Testing

4.1 Layout and Appearance

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
UI-01	Form Layout	1. View login page on desktop browser 2. Verify layout matches design specification	N/A	All elements properly aligned and spaced per design	Medium	All environments	Exploratory Testing
UI-02	Branding Elements	1. View login page 2. Verify VWO logo and branding elements	N/A	Correct logo, colors, and branding present	Medium	All environments	Exploratory Testing
UI-03	Error Message Styling	1. Trigger validation errors 2. Check error message styling	Invalid inputs	Error messages should be clearly visible and properly styled	Medium	All environments	Exploratory Testing
UI-04	Focus States	1. Use tab key to navigate through login form 2. Observe focus indicators	N/A	Clear visual indication of focused elements	Medium	All environments	Exploratory Testing
UI-05	Input Field Validation Indicators	1. Enter invalid data in fields 2. Check for visual validation indicators	Invalid data	Visual indicators should show validation status	Medium	All environments	Exploratory Testing

4.2 Responsiveness

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
UI-06	Mobile Responsiveness (Android)	1. View login page on Android device/emulator 2. Verify layout adapts to screen size	N/A	Login form properly displayed on Android devices	High	Android Chrome	Exploratory Testing
UI-07	Mobile Responsiveness (iOS)	1. View login page on iOS device/emulator 2. Verify layout adapts to screen size	N/A	Login form properly displayed on iOS devices	High	iOS Safari	Exploratory Testing
UI-08	Landscape Orientation	1. View login page on mobile device 2. Rotate to landscape mode	N/A	Layout adjusts appropriately to orientation change	Medium	Mobile environments	Exploratory Testing
UI-09	Different Screen Resolutions	1. Test login page on different screen resolutions 2. Verify layout adapts accordingly	N/A	Layout should be responsive to different screen sizes	Medium	All environments	Exploratory Testing

5. Accessibility Testing

5.1 Keyboard Navigation

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
ACC-01	Tab Order	1. Navigate to app.vwo.com 2. Use tab key to navigate through login form	N/A	Logical tab order through all interactive elements	High	All environments	Exploratory Testing
ACC-02	Keyboard Submission	1. Navigate to app.vwo.com 2. Enter credentials using keyboard only 3. Press Enter to submit	[Valid credentials]	Form submits successfully with Enter key	High	All environments	Use Case Testing
ACC-03	Focus Trapping	1. Open any modal dialogs (like forgot password) 2. Check that focus is trapped within the modal	N/A	Focus should remain within modal until closed	Medium	All environments	Exploratory Testing

5.2 Screen Reader Compatibility

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
ACC-04	ARIA Labels	1. Inspect page with developer tools 2. Verify proper ARIA labels on form elements	N/A	All interactive elements have appropriate ARIA labels	High	All environments	Exploratory Testing
ACC-05	Screen Reader Navigation	1. Use screen reader to navigate login page 2. Attempt login process	[Valid credentials]	All elements identifiable and usable with screen reader	High	All environments	Exploratory Testing
ACC-06	Error Announcements	1. Submit form with errors 2. Check if screen reader announces errors	Invalid inputs	Errors should be announced by screen reader	Medium	All environments	Error Guessing

6. Performance Testing

6.1 Load Time

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
PERF-01	Page Load Time	1. Use browser developer tools 2. Measure page load time	N/A	Page loads within acceptable time (typically < 3 seconds)	High	All environments	Exploratory Testing
PERF-02	Login Response Time	1. Submit login credentials 2. Measure time until redirection/response	[Valid credentials]	Login process completes within acceptable time (typically < 2 seconds)	High	All environments	Exploratory Testing
PERF-03	Multiple Concurrent Logins	1. Simulate multiple users logging in concurrently 2. Measure system response time	Multiple test accounts	System should handle multiple concurrent logins without significant degradation	Medium	QA environment	State Transition Testing

6.2 Resource Optimization

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
PERF-04	Page Size	1. Use browser developer tools 2. Measure total page size	N/A	Page size optimized (typically < 2MB)	Medium	All environments	Exploratory Testing
PERF-05	Resource Compression	1. Use browser developer tools 2. Check if resources are compressed	N/A	Static resources properly compressed (gzip/Brotli)	Medium	All environments	Exploratory Testing
PERF-06	Network Performance	1. Throttle network connection in dev tools 2. Test login functionality under poor network conditions	[Valid credentials]	Login should work under slow network conditions	Medium	All environments	Error Guessing

7. Browser and Device Compatibility

7.1 Browser Compatibility

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
COMP-01	Windows 10 - Chrome	1. Access app.vwo.com on Chrome (Windows) 2. Complete login process	[Valid credentials]	Works correctly on Chrome	High	Windows 10/Chrome	Use Case Testing
COMP-02	Windows 10 - Firefox	1. Access app.vwo.com on Firefox (Windows) 2. Complete login process	[Valid credentials]	Works correctly on Firefox	High	Windows 10/Firefox	Use Case Testing
COMP-03	Windows 10 - Edge	1. Access app.vwo.com on Edge (Windows) 2. Complete login process	[Valid credentials]	Works correctly on Edge	High	Windows 10/Edge	Use Case Testing
COMP-04	macOS - Safari	1. Access app.vwo.com on Safari (macOS) 2. Complete login process	[Valid credentials]	Works correctly on Safari	High	macOS/Safari	Use Case Testing
COMP-05	Android - Chrome	1. Access app.vwo.com on Chrome (Android) 2. Complete login process	[Valid credentials]	Works correctly on Android Chrome	High	Android/Chrome	Use Case Testing
COMP-06	iOS - Safari	1. Access app.vwo.com on Safari (iOS) 2. Complete login process	[Valid credentials]	Works correctly on iOS Safari	High	iOS/Safari	Use Case Testing

7.2 Operating System Compatibility

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
COMP-07	Windows OS	1. Access app.vwo.com on Windows 2. Complete login process	[Valid credentials]	Works correctly on Windows	High	Windows	Use Case Testing
COMP-08	macOS	1. Access app.vwo.com on macOS 2. Complete login process	[Valid credentials]	Works correctly on macOS	High	macOS	Use Case Testing

8. Network Condition Testing

8.1 Network Variations

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
NET-01	Slow Network	1. Throttle network speed using dev tools 2. Complete login process	[Valid credentials]	Login functions correctly under slow network	Medium	All environments	Error Guessing
NET-02	Intermittent Connection	1. Enable network throttling/disconnection 2. Attempt login during connection fluctuations	[Valid credentials]	Appropriate error handling and recovery	Medium	All environments	Error Guessing
NET-03	Offline Mode	1. Disable network connection 2. Attempt to access login page	N/A	Appropriate offline message or cached version	Low	All environments	Error Guessing

9. Integration Testing

9.1 Authentication Integration

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
INT-01	Authentication Service Integration	1. Login with valid credentials 2. Verify authentication token/cookie is properly set	[Valid credentials]	Proper authentication token/cookie with correct attributes	High	All environments	End to End Flow Testing
INT-02	User Profile Data Loading	1. Login successfully 2. Verify user profile data loads correctly	[Valid credentials]	Correct user data displayed after login	High	All environments	End to End Flow Testing

9.2 Analytics Integration

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
INT-03	Login Event Tracking	1. Login successfully 2. Verify login event is tracked in analytics	[Valid credentials]	Analytics system records successful login event	Medium	All environments	End to End Flow Testing
INT-04	Failed Login Tracking	1. Attempt failed login 2. Verify failed login event is tracked	Invalid credentials	Analytics system records failed login attempt	Medium	All environments	End to End Flow Testing

10. End-to-End Flow Testing

Test ID	Test Scenario	Test Steps	Test Data	Expected Result	Priority	Environment	Test Design Technique
E2E-01	Full Login Flow to Dashboard	1. Navigate to app.vwo.com 2. Enter valid credentials 3. Login 4. Verify dashboard access 5. Check dashboard elements	[Valid credentials]	Complete flow from login to dashboard works correctly	High	All environments	End to End Flow Testing
E2E-02	Password Reset to Login Flow	1. Navigate to app.vwo.com 2. Click forgot password 3. Complete password reset 4. Login with new password	[Valid email]	Complete flow from password reset to successful login works	High	All environments	End to End Flow Testing
E2E-03	SSO to Dashboard Flow	1. Navigate to app.vwo.com 2. Use SSO option 3. Complete SSO flow 4. Verify dashboard access	[Valid SSO credentials]	Complete flow from SSO login to dashboard works correctly	High	All environments	End to End Flow Testing

Defect Reporting Procedure

As per the test plan, all defects will be reported in JIRA with the following information:

- Detailed reproduction steps
- Environment information (OS, browser, device)
- Screenshots or videos of the issue
- Severity and priority assessment
- Expected vs. actual results

Test Execution Schedule

Testing will be conducted over 2 sprints as specified in the test plan document.

Exit Criteria

Testing will be considered complete when:

- All high-priority test cases have been executed
- No critical or high-severity defects remain open
- All functional requirements have been validated
- Test summary reports have been prepared and submitted