

Test Summary Report

Project: E-Commerce Web Application QA Testing
Application Under Test: <http://automationpractice.multiformis.com>
Test Cycle: Functional, Security, Accessibility, Performance & Compatibility
Tested Modules: Registration, Login, Product Search
Test Execution Type: Manual (with security and accessibility tooling where applicable)
Prepared By: QA Team
Document Version: 1.0

1. Executive Summary

This test cycle focused on validating the **Registration, Login, and Product Search** features of the e-commerce web application. A comprehensive set of functional, security, usability, accessibility, performance, and compatibility test cases were executed across supported browsers and devices.

Overall, **core functionality is partially stable**, but the application **does not meet production-readiness criteria** due to multiple **high-risk security and functional defects**, particularly around authentication security, HTTPS enforcement, password policies, and search reliability.

2. Test Execution Overview

Metric	Count
Total Test Cases Executed	95
Passed	74
Failed	13
Blocked	8
Not Applicable	2
Pass Rate	~78%

3. Module-Wise Summary

3.1 Login Module

Status: **✗ High Risk – Not Production Ready**

Key Observations:

- Core login functionality works correctly for valid credentials.
- Accessibility basics (keyboard navigation) are mostly supported.
- **Critical security gaps were identified.**

Major Issues Identified:

- **✗ No brute-force protection** – unlimited failed login attempts allowed.
- **✗ HTTPS not enforced** – all authentication traffic occurs over HTTP.
- **✗ Logout does not invalidate session properly** – browser back button restores authenticated state.
- **✗ Missing Caps Lock warning** (usability issue).

Blocked Areas:

- Secure cookie flags (HttpOnly, Secure, SameSite).
- Session regeneration after login.
- Screen reader error announcements.
- Backend error handling under 5xx/timeout scenarios.

Overall Login Risk Level: High

3.2 Registration Module

Status: **✗ High Risk – Security & Validation Issues**

Key Observations:

- Registration flow works across browsers and devices.
- Accessibility and usability are generally strong.
- **Validation and security controls are insufficient.**

Major Issues Identified:

- **✗ Weak passwords accepted** (e.g., 123, password).
- **✗ Invalid DOB values accepted** (future and unrealistic dates).
- **✗ HTTPS not enforced during registration.**
- **✗ No abuse prevention** (rate limiting / CAPTCHA).

Strengths:

- Duplicate email prevention works.
- Autofill, keyboard navigation, and screen reader support are solid.

- Unicode and special character handling is correct.

Overall Registration Risk Level: High

3.3 Product Search Module

Status: ⚠️ **Medium Risk – Functional Gaps**

Key Observations:

- Search is stable across browsers and devices.
- Performance is acceptable under normal load.
- Accessibility support is good.

Major Issues Identified:

- ❌ **Sorting (price low→high / high→low) not functional.**
- ❌ **Out-of-stock items not filtered correctly.**
- ❌ Multi-keyword search relevance issues.
- ❌ Add-to-cart from search results not integrated.

Blocked / Limited Coverage:

- Sort persistence across pagination (insufficient data).
- Invalid price range validation (not testable).
- Large catalog edge cases.

Overall Search Risk Level: Medium

4. Defect Summary

Defects by Severity

Severity	Count
Critical	3
High	4
Medium	5
Low	1

Critical / High Impact Defects

- No HTTPS enforcement (Login & Registration)
- No brute-force protection
- Weak password policy
- Session not invalidated on logout
- Broken search sorting
- Invalid DOB accepted during registration






All critical and high-severity defects have been logged in **JIRA** with reproducible steps and evidence.

5. Blockers & Limitations

Some security scenarios could not be fully validated due to environment/tooling limitations:

- Cookie replay and abuse-prevention testing require **Charles Proxy** or equivalent.
 - Backend fault injection (5xx responses) was not available.
 - Insufficient catalog data limited pagination and sorting persistence testing.
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6. Overall Quality Assessment

Area	Status
Functional Stability	 Partial
Security	 Poor
Accessibility	 Good
Performance	 Acceptable
Compatibility	 Good

7. Release Recommendation

 **DO NOT RELEASE TO PRODUCTION**

Reasons:

- Severe authentication and transport-level security gaps.
- Weak password enforcement.
- Broken core search functionality (sorting & stock handling).
- Session management vulnerabilities.

8. Recommended Next Steps

1. Enforce **HTTPS across the entire application**.
 2. Implement **brute-force protection** and login throttling.
 3. Enforce **strong password policy** during registration.
 4. Fix **session invalidation on logout**.
 5. Repair **search sorting and stock filtering logic**.
 6. Re-run **security regression testing** after fixes.
 7. Conduct a **full re-test of blocked security cases**.
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