



QA Services for E-Commerce Domain



Client Overview

- **Implementation Partner :** TabdeltaSolutions
- **Industry :** E-Commerce
(Online Retail & Digital Marketplace)
- **Client Location :** New York, USA
- **Client Team Size :** 27 Employees
- **Project Team Size (Tabdelta) :** 2 QA Automation Engineers + 1 Project Manager



Client Challenges

The client, a rapidly growing e-commerce platform, was struggling to maintain seamless digital experiences across its website and mobile apps. The major QA pain points were:

1 Frequent Checkout Failures

Payment gateway errors during peak sales events (e.g., Black Friday).

High cart abandonment rates due to unreliable transaction flows.

2 Cross Browser & Device Inconsistencies

Payment gateway errors during peak sales events (e.g., Black Friday).

High cart abandonment rates due to unreliable transaction flows.



3 Slow Regression Cycles

Manual testing took 10–12 days per release, blocking new features.

Regression testing was incomplete due to time and resource limitations.

4 Integration Issues

APIs for inventory, logistics, and third-party vendors often failed.

Lack of proper test coverage for integrations with ERP and CRM systems.

5 Security & Compliance Gaps

PCI DSS compliance for payment processing was at risk.

No automated security validation for sensitive user data.



Tabdelta's Playwright Automation Solution

Tabdelta Solutions designed and implemented a comprehensive QA strategy combining manual testing, automation testing, and performance testing.

Key Actions Implemented:

01

Test Automation with Playwright & Selenium

Built automation for critical flows:
Login, Product Search, Add to Cart, Checkout, Payments, and Order Tracking.

Reduced regression execution from
12 days → 3 days with parallel test execution.



02

Cross-Platform & Cross-Browser Testing

Validated **UI/UX consistency** across 25+ browser/device combinations.



Ensured smooth experience on Chrome, Safari, Edge, and mobile browsers.

03

API & Integration Testing

Automated **REST & GraphQL API tests** for product catalog, inventory, and order systems.



Implemented **mock services** for vendor API downtime simulation.

04

Performance & Load Testing

Used **JMeter** to simulate peak loads (e.g., 50,000+ concurrent users).



Identified bottlenecks in checkout & optimized database queries.



05

Security & Compliance Validation

Implemented **PCI DSS compliance checks**.



Automated **penetration testing scripts** for payments & personal data security.



Results & Benefits

The implementation of Playwright automation delivered measurable improvements:

01

65% reduction in regression testing time (from 8 days → less than 3 days).

Improved compliance confidence with automated HIPAA checks.

02

100% cross-browser and cross device coverage, ensuring consistent patient experience.

03

40% reduction in production defects due to early bug detection in CI/CD.

04

Faster release cycles, enabling monthly feature releases instead of quarterly.

05



Future Roadmap

01

Expand Playwright automation to API Testing for EHR integrations.

02

Implement Visual Regression Testing to ensure UI consistency across devices.

03

Scale automation coverage for telemedicine and mobile health applications.



Key Takeaway



By implementing QA Automation with Playwright, Tabdelta Solutions helped the client achieve faster releases, improved patient experience, and ensured compliance with health care regulations.



Playwright proved to be a reliable, modern automation framework tailored for the complexities of health care applications.



Partner with Tabdelta Solutions

Tabdelta Solutions is a trusted QA Automation partner, specializing in Playwright, Selenium, Cypress, and AI-driven test automation for regulated industries like Health Care, FinTech, and Insurance.



Faster Regression Testing



Stable CI/CD Integrations



Compliance-Ready Test Automation



Scalable Cross-Browser & Device Coverage

Contact Tabdelta Solutions Today

To Explore How Playwright Automation
Can Transform Your Qa Process In The
Health Care Industry.

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