

Ecommerce Website Testing

A case study

Challenge

The ecommerce website required quality check before going live. The biggest challenge was to test functionality of the whole site across variety of mobile devices in limited period of time.

Solution

We built a test strategy and planned the methodology to handle the project challenges. A combination of manual and automated testing processes was finalized to handle the project.

Approach

Test coverage focused on:



Multiple test scenarios & checklists were used to cover the system functionality. Testing tasks were divided amongst team members for quicker execution.

Progress & Coverage

Browser Testing

- Cross browser testing in Firefox, IE, Chrome, Safari, and Opera.
- OS compatibility checkup with Windows XP, Windows 7, and Macintosh OS
- Testing of navigation, content placement, videos, images, and overall look

Mobile browser testing

- Testing of visual appearance, navigation and UX on multiple devices & screen orientations.
- Ensuring smooth & quick website login, registration and checkout process on mobiles.

Functional & database testing

- System testing with different set of input data.
- Deep testing of system functionality & system logics.
- Automation of functional testing process using Selenium Automation tool
- Thorough testing of login, registration, user account, payment gateway, and checkout process
- Testing of website's integration with back-end database
- Checkup of add, update & delete operations.

Security testing

- Testing for spoofing, URL manipulation issues, XSS, SQL injection & other OWASP top 10 vulnerabilities
- Authentication and authorization testing to check system manipulation
- Testing of business logics, session management, data validation, Ajax etc
- Cookies testing for protection against spamming

Performance testing

- Locating performance bottlenecks in system
- Monitoring average response time of critical pages for maximum user loads.
- Response time checkup of all important business critical transactions

Bug Reporting & retesting

A detailed bug report was sent to client that included:

- Bug summary
- Screenshots
- URLs
- Bug effect
- Severity

For more complex bugs, our team shared steps to reproduce a bug. Following points were major part of reporting and retesting phase:

- Daily reporting of test results
- Retesting of bug-fix release.
- Automating regression testing for 100% testing effectiveness and productivity enhancement.

Findings

- Our systematic cross-browser testing detected over 100 defects.
- 40 high severity issues, 51 medium severity and 81 low severity issues reported during functional, security & performance testing.

All the bugs were fixed, retested and their status was updated. By employing automation testing, FATbit also made great savings for client in terms of time and money.

Results

- Handles up to 10,000 concurrent users
- Phenomenal sales of \$130,000 in first week of lunch
- Nominated for Best Ecommerce Website at Ecommerce Awards Spain 2013

TECHNOLOGIES