

Website Evaluation, Functional and Section 508 Standard Testing of a Governmental Website

"I really appreciate the great job you did, as well as your patience with us."

Tom Flanagan
Senior Information Officer

Customer

The customer is a US-based local governmental institution.

Company	<i>Local Governmental Institution</i>
Country	<i>USA</i>
Business Domain	<i>Government</i>
Services Used	<i>Current Website Evaluation, Functional Testing, Usability Testing and Accessibility Audit (Section 508 Standard Testing)</i>
Cooperation Model	<i>Independent Software Testing and Quality Control</i>
Duration	<i>1 month</i>
Efforts	<i>50 man-hours</i>

Project

The customer needed complete website redesign of its official website. In addition, the project involved implementation of CMS functionality and an overall update of the existing functionality of the website. These tasks were assigned to an offshore development company.

For functional and regression testing the customer chose A1QA Software Testing and Quality Assurance services. In addition to these requests, the customer made it a priority to test the website for adherence to general web standards and regulations and check its compliance with the accessibility standards XHTML Transitional and Section 508.

Challenge

- The official website needed a modern look and convenient layout complying with the main usability and GUI principles.
- The previous version of the site was a set of static pages (120 in total) including a photo gallery that could be updated only through HTML code. To eliminate the inconvenience, we offered the customer a new and more reliable content management system (CMS).The implemented CMS needed a usability check.
- The previous version did not correspond to XHTML and Section 508 standards. However, according to the American legislation, any website must meet the requirements of the accessibility guidelines set forth by the United States government: Section 508 of the federal Rehabilitation Act and the W3C's Web Content Accessibility Guidelines. The new version of the website needed a combination of automated accessibility testing and accessibility audit by an experienced software testing and quality assurance team.

Solution

The A1QA team executed testing of the existing user interface functionality. After that functional testing of new functionality (Online Event Calendar integration, user registration and management, menu items management and CMS) was done.

To assure that the website design was convenient, attractive, and accessible to all users irrespective of their technical expertise, professional A1QA usability engineers tested the website for compliance with web usability principles. A1QA closely cooperated with the customer's in-house usability testing team.

All website pages were tested for compliance with W3C's Web Content Accessibility Guidelines and Section 508 standards.

Configuration testing performed in every stage of the project lifecycle helped to create a customer-oriented web application and ensure that the users of the previous application can easily adopt the new version.

Technologies used

Browsers: Internet Explorer 5.x+

Defect tracking system: IBM Rational ClearQuest (including IBM Rational ClearQuest Web)

Version control system: IBM Rational ClearCase

Success

- Efficient planning, coordination, and cooperation during the testing process helped us to meet the release deadline on time and on budget.
- The customer could launch an up-to-date, good-looking, and easy-to-use website.
- The users of the previous version adopted the new release easily and enjoyed its navigational and aesthetic value.
- Thorough testing of the application functionality greatly reduced the risk of product defects.
- Testing for compliance to accessibility standards and guidelines enlarged the potential target audience of the site and made the website technically more flexible to the preferences and needs of the end user. Users of all ages, abilities, and online experience could successfully and easily access all necessary information on the website due to its increased usability and accessibility.
- The content of web pages can be easily modified by a person with no programming background.