



The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

Status:
WINNER

Year:
2013

Organization Name:
Deque Systems

Organization URL:
<http://www.deque.com>

Project Name:
Amaze

Please select the category in which you are submitting your entry:
Innovation

Please provide an overview of the nominated project. Describe the problem it was intended to solve, the technology or approach used, how it was innovative and any technical or other challenges that had to be overcome for successful implementation and adoption. (In 300 words or less.)

Amaze is a revolutionary new approach to making websites accessible to people with disabilities. It works by looking for patterns inside the application and replacing pieces of the code, in real time, with HTML code that is accessible or that makes the application accessible to a variety of different assistive technologies. For example, a site might have a mislabeled "submit" button that is invisible to a customer who is blind and using a screen reader. The traditional approach to correcting this bug would be to go back to the source code, reprogram the form, and then to perform testing to confirm that the bug has been fixed; but if the web site is not scheduled to be revised until a point in the future, the bug might inconvenience users for a lengthy period of time and potentially

place the organization out of compliance with accessibility guidelines. Or if an organization is using third-party content or applications, the organization will probably not have access to the source code, and therefore cannot implement the necessary changes. With Amaze, an accessibility overlay can be created that fixes the bug immediately, without having to reprogram a single line of source code, resulting in a solution that is rapid and cost-effective to deploy. The Amaze Accessibility Overlay can then be used as a guide to update the site's source code when it comes time to revise the site. Amaze provides real-time remediation on a massive scale without impacting load times. Amaze is also capable of complying with stringent security requirements without impeding Amaze's effectiveness. In addition, Amaze can remediate 3rd party content and applications included across an organization's site without any access to the source code.

When was this project implemented or last updated? (Please specify month and year.) Has it incorporated new technologies and/or other innovations since its initial deployment? (In 300 words or less.)

Amaze was first launched in November 2012. No changes to the software have been made since the product was launched.

If this is a previously submitted project that has been significantly updated and/or expanded, please describe the nature of the update here. (In 300 words or less.)

This project has not been previously submitted.

Is implementation of the project complete? If no, please describe the project's phases and which phase the project is now in. (In 300 words or less.)

Amaze is a fully developed software tool that we have just started offering to clients since its launch.

Please provide at least one example of how the technology project has benefited a specific individual or organization. Feel free to include personal quotes from individuals who have directly benefited from the work. (In 300 words or less.)

Amaze will be used as part of the U.S. Department of Veterans Affairs' Section 508 Compliance program. Amaze ensures a fully accessible WCAG 2.0 Level AA compliant solution for web pages, web applications, and social media sites. It will be used to immediately render all VA web content accessible via Amaze Accessibility Overlay while the code itself is being remediated. In addition, it will



render all third-party content that the VA utilizes accessible despite not having access to the 3rd party code. According to statute, any electronic and information technology (EIT) that VA procures, uses, maintains, or develops needs to meet the technical requirements of Section 508 and provide comparable access to information and services to disabled persons as is provided to the non-disabled. Section 508 applies to both the 26,000 disabled VA employees and 54 million disabled persons in the general public who use VA services. With Amaze, the VA is able to remove barriers to their content, ensuring that it is accessible to those millions of disabled users who need access to the health care, employment, educational, and other resources and benefits provided by the VA.

Would this project be considered an innovation, a best practice or other notable advancement that could be adopted by or tailored for other organizations and uses? If yes, please describe that here. (In 300 words or less.)

Amaze is an innovative new technology that will transform accessibility implementation and remediation projects. Amaze works by looking for patterns inside an application; and then, in real-time, it replaces pieces of the code with HTML code that is accessible or that makes the application accessible to a variety of different assistive technologies. For example, if you have an image that has a title attribute instead of alt text, Amaze will recognize this pattern, and it will go and grab that alternative text and put it in the right place. Those changes only remain as long as the user is on the site. Amaze leverages HTML's capability to make changes to the document dynamically to add accessibility to the information.