IBM Research Delivers New Technology to Web Developers

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Emerging tool helps to ensure accessibility and usability for the visually disabled

IBM announced it is previewing a new tool called aDesigner, which helps developers ensure that Web pages are accessible and usable by the visually impaired.

aDesigner is a unique Java™-based tool developed at IBM's Tokyo Research Lab that enables developers to better understand the problems confronting users with disabilities. It also overcomes the limitations of current industry offerings by ensuring a Website's usability and compliance to current accessibility guidelines. The tool automatically detects accessibility and usability problems on a Web page for two types of visual impairments -- low vision and blindness -- and provides guidance on how to correct these issues.

In the United States, one factor driving demand for accessible products and services is federal legislation that requires accommodations for

persons with disabilities. Additionally, the American Association of Retired Persons (AARP) reported that seven in 10 Americans plan on working past the once-typical retirement age of 65, and nearly half expect to work well into their 70s and 80s. As a result of baby boomers staying in the workforce longer, computing and IT technologies will need to change to help this audience remain productive.

"IBM alphaWorks provides emerging technologies that are an important step in helping developers and ultimately the end-user remain productive," said Marc Goubert, manager, IBM alphaWorks and Developer Relations. "Today's innovative announcement ensures that all individuals aged or disabled can successfully work side-by-side."

aDesigner allows Web authors to easily determine how accessible or inaccessible Web pages are by simulating what it looks like from the viewpoint of a person with low-vision, such as weak eyesight, color vision deficiency and cataracts, and detects the inaccessible parts of the page by applying image analysis techniques. It also checks for fixed-font size, insufficient contrast between foreground and background, and inappropriate color combination in an image, all of which pose accessibility limitations on users with visual impairments. In the blind mode, aDesigner checks for excessive reaching time, which is the amount of time required to reach each element from the top of a page, as well as redundant text, insufficient intra-page linking, and failure to comply with accessibility guidelines.

For more information or to download aDesigner, please visit IBM alphaWorks at www.alphaworks.ibm.com.

Source: IBM

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