Web A11y Testing Process

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Today’s Outline

• Identify scope
• Testing process
  • Automated testing
  • Manual testing
• Usability
• Best Practices
• Reporting issues
  • Violations
  • Recommendations and best practices
Identify Scope

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Selective Sample

Select a representative sampling of different kinds of pages from the Web site to be reviewed; including most highly visited pages.
Scope of Testing

- Perceivable
- Operable
- Understandable
- Robust

https://www.w3.org/WAI/WCAG20/quickref/
Automated Testing

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Testing: Automated Testing

• Only able to verify 25-35%
  • Page title
  • Alternative text (present, but not if accurate)
  • Text headings and color contrast ratio
  • Keyboard access and visual focus
  • Form labels and errors (not logical order)
  • Video and audio alternatives present
  • Basic structure
  • Markup Validation
Testing: Evaluation Tools Used

1. **WebAIM's Wave** toolbar for Chrome
2. **HTML Code Sniffer** toolbar for Chrome, Firefox, Internet Explorer and Safari
3. **Web Accessibility Toolbar (WAT)** in Internet Explorer
4. **Fangs Screen Reader Emulator** in Firefox
5. **NoCoffee Vision Simulator** for Chrome
Testing: Evaluation Tools Used (continued)

6. **Pauljadam Bookmarklets** for Chrome, Firefox, Internet Explorer and Safari
7. **Colorzilla** in Chrome and Firefox
8. **Accessibility Color Wheel**
9. **Color Contrast Analyzer** desktop app
10. **Zoom Text Only** in Chrome
11. **W3C Markup Validation Service**
Manual Testing
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Important Keyboard Checks

• Keyboard focus
• Tab order
• JavaScript event handlers
• Skip Navigation
• No actions require a mouse (mouse hover or drag and drop)
Important Content Checks

• Language of the page
• Readability and reading order
• Headers and bulleted lists
• Zoom text
• Color used to convey meaning
• Meaning through positioning and proximity
Testing Using Browser Manipulation

- Turn off images
- Turn off sound
- Vary font size (zoom up to 200%)
- Change screen resolution and resize window
- Change display color to gray scale
- Tab through the page (unplug mouse)
Screen Reader Testing

• Verify that all content is being read
• Presented in a meaningful order
• Tools used:
  • [Job Access With Speech (JAWS)](https://www.jaws.com) (IE)
  • [Non-Visual Desktop Access (NVDA)](https://www.nvaccess.org) (Firefox)
  • [VoiceOver](https://www.apple.com/voiceover) (Safari)
  • [Dragon Naturally Speaking](https://www.dnsg/)
Code Review

• Source code of all third-party tools need to be tested
• Test labels, errors and required fields for forms
• Inspect and Validate:
  • Accessibility Developer Tools (Chrome)
  • Firefox Developer Tools
Usability
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Testing: Usability

Usability testing helps understand user needs, identify potential issues, and generate ideas for improvement.

Factors:
- User Task analysis
- Readability
- Site Navigability
- User Experience
Best Practices

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User Impact: Best Practices

Best Practices focus on the functional requirements that improve access to all users and support automated testing.

• [Web Accessibility – Best Practices]
Reporting Issues

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Testing Report

• Pages tested and any excluded
• Date of testing
• Reviewer
• Evaluations Performed & Tools used
• Results of testing
• Suggestions to correct issues
• Contact details if having any questions
• Disclaimer
Questions?
Thank you

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