



The Accessible Technology Webinar Series is sponsored by the Great Lakes ADA Center and the Pacific ADA Center, both members of the ADA National Network.

**The Session is Scheduled to begin at 1:00 pm CDT
We will be testing sound quality periodically**

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Webinar Features

- Closed captioning – click **CC** icon (top of screen) or control-F8 and adjust your screen
- Customize your view – choose “View” from the menu bar at the top of the screen and choose the layout you prefer from the dropdown menu.
- Questions - type and submit questions in the Chat Area Text box or press control-M and enter text in the Chat Area
- Please do not use emoticons or hand-raising features during this session

Thoughtless, careless,
habitual,
accessible
Web authoring?

Jutta Treviranus

Inclusive Design Research Centre
OCAD University



Almost anyone can and is creating a Website

- 900 million Facebook users
- 30 billion apps downloaded in 2011



4

Digital Exclusion

- access to Websites no longer an option
- new entranceway to government services, commerce, education, employment, recreation, social engagement, civic engagement....
- estimated social and economic cost of digital exclusion (55.2 billion annually in the US)



5

Don't we have WCAG for this?

- Web Content Accessibility Guidelines 2.0
- Enshrined in legislation in more than 40 jurisdictions globally
- Reflected in Section 508
- Hundreds of courses and training programs
- Many checking tools

6

But.....

- Most governments are breaking their own laws
- Little progress in compliance
- Seen as impediment to innovation
- Most authors not aware of WCAG
- Some not motivated to comply
- Many find it hard to understand
- Easier to create a Website than to apply WCAG 2.0



7

Yes But... Almost Everyone Uses an Authoring Tool or Development Toolkit

- Convert to HTML
- Learning content management system
- Wiki, Blog
- Social Networking tool
- Cloud based applications
- Software development toolkits



8

Authoring Tool Accessibility Guidelines

1. Ensuring that authoring tools are accessible to authors with disabilities
 - Recognizing that people with disabilities must be producers not just consumers of Web content
2. Supporting the creation of accessible Web content
 - Recognizing that many Web authors may not know or care about WCAG



9

W3C-WAI Model

- Web Content Accessibility Guidelines (WCAG) 2.0 Recommendation:
 - Guidelines for making Web content more accessible.
- Authoring Tools Accessibility Guidelines (ATAG) 2.0 Working Draft (1.0 is Rec):
 - Guidelines for: (1) making authoring tools more accessible to authors and (2) supporting the production of accessible content by all authors.
- User Agent Accessibility Guidelines (UAAG) 2.0 Working Draft (1.0 is Rec):
 - Guidelines for making user agents (browsers, media players) more accessible to end users.

10

ATAG 2.0

- Version 1.0 was published in 1999.
- Version 2.0 is nearing completion.
- Applies to:
 - WYSIWYG editors, plain text editors
 - conversion tools (e.g., "Save as HTML")
 - blogging tools, wikis, online forums, email clients
 - multimedia authoring
 - CMS systems,
 - Etc.

11

ATAG 2.0: Definition of Authoring Tool

- Any web-based or non-web-based application(s) that can be used by authors (alone or collaboratively) to create or modify web content for use by other people (other authors or end users).

12

ATAG 2.0: Supports WCAG 2.0

- ATAG 2.0 uses the Web Content Accessibility Guidelines (WCAG) as the determinant of Web content accessibility.
- ATAG 2.0 has special checkpoints related to checking, repair, etc. of content that take their level directly from WCAG.

13

ATAG 2.0: Accessible Authoring UI

- **Part A: Make the authoring tool user interface accessible**
- Principle A.1. Authoring tool user interfaces must follow applicable accessibility guidelines
 - A.1.1. (For the authoring tool user interface) Ensure that web-based functionality is accessible
 - A.1.2. (For the authoring tool user interface) Ensure that non-web-based functionality is accessible
- Principle A.2. Editing-views must be perceivable
 - A.2.1. (For the authoring tool user interface) Make alternative content available to authors
 - A.2.2. (For the authoring tool user interface) Editing-view presentation can be programmatically determined

14

ATAG 2.0: Accessible Authoring UI

- Principle A.3. Editing-views must be operable
 - A.3.1. (For the authoring tool user interface) Provide keyboard access to authoring features
 - A.3.2. (For the authoring tool user interface) Provide authors with enough time
 - A.3.3. (For the authoring tool user interface) Help authors avoid flashing that could cause seizures
 - A.3.4. (For the authoring tool user interface) Enhance navigation and editing via content structure
 - A.3.5. (For the authoring tool user interface) Provide text search of the content
 - A.3.6. (For the authoring tool user interface) Manage preference settings
 - A.3.7. (For the authoring tool user interface) Ensure that previews are as accessible as existing user agents
- Principle A.4. Editing-views must be understandable
 - A.4.1. (For the authoring tool user interface) Help authors avoid and correct mistakes
 - A.4.2. (For the authoring tool user interface) Document the user interface including all accessibility features

15

ATAG 2.0: Accessible content production

- We shouldn't rely on the average author to implement WCAG on their own because...
 - accessibility requirements can be complex to manage (e.g. keeping navigation consistent),
 - most authors are not (nor do they wish to be) accessibility experts (and WCAG is a technical document, on par with a format recommendation),
 - the delivery of Web content is becoming more complex,
 - and tools are being produced that hide many of the low-level details of the final content.

16

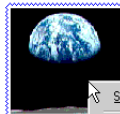
ATAG 2.0: Accessible content production

- **Part B: Support the production of accessible content**
- Principle B.1: Fully automatic processes must produce accessible content
 - B.1.1. Ensure automatically specified content is accessible
 - B.1.2. Ensure accessibility information is preserved
- Principle B.2: Authors must be supported in producing accessible content
 - B.2.1. Ensure accessible content production is possible
 - B.2.2. Guide authors to produce accessible content
 - B.2.3. Assist authors with managing alternative content for non-text content
 - B.2.4. Assist authors with accessible templates
 - B.2.5. Assist authors with accessible pre-authored content
- Principle B.3: Authors must be supported in improving the accessibility of existing content
 - B.3.1. Assist authors in checking for accessibility problems
 - B.3.2. Assist authors in repairing accessibility problems
- Principle B.4. Authoring tools must promote and integrate their accessibility features
 - B.4.1. Ensure the availability of features that support the production of accessible content
 - B.4.2. Ensure that documentation promotes the production of accessible content

17

ATAG 2.0: Automating Accessibility

- Authoring tools need to support accessibility in the same way as they support correct syntax and spelling:



Set alt="An earth rise as seen from the surface of the moon"

Enter different alt-text...

Check Accessibility...

Help...

18

Efficient Accessibility

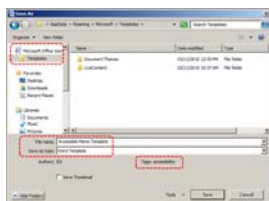
- Accessible reused components (e.g., image library, institutional logo, prescribed navigation bar)
- Accessible Templates
- Accessible Content Management System



22

Templates, templates, templates

- Done right once



23

Procure the Right Tools


- Provide vendors with detailed accessibility criteria rather than allowing general high-level statements.
- Clearly state the seriousness with which a false accessibility claim would be viewed.
- Have knowledgeable staff verify as many of the accessibility claims made by vendors as practically possible.



24

Developing Accessible Apps and Services

- Development Tools that Support Accessibility
 - Component Libraries
 - Toolkits
 - Design Pattern Libraries



25

Building Blocks that...

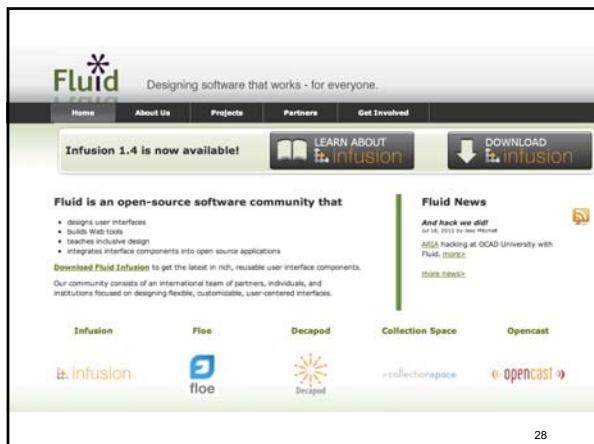
- Integrate accessible styling
- Enable full keyboard access
- Are screen reader compatible
- Include ARIA markup
- Reusable, flexible chunks of functionality
- <http://fluidproject.org>

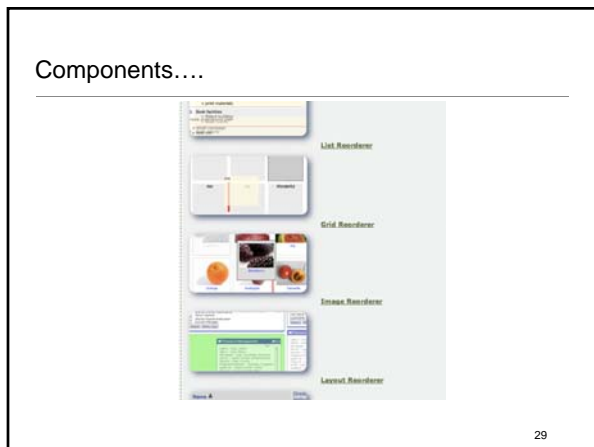
26

For Example: Fluid Infusion

- Flexible markup ensures you're free to change component designs as you see fit, without worrying about breaking JavaScript code
- Infusion uses a powerful events system to notify your code when something has happened, so that you can take interactions even further
- No black boxes: everything in Infusion is designed to be modified, reworked, and adapted to suit your needs
- Ideal for portals, mashups, and content management systems: Infusion is fully namespaced and plays nice with other code
- Infusion comes with a lightweight and convenient CSS library to help you quickly flesh out your layouts

27





Framework to Create Your Own Accessible Components

- Comprised of a number of low-level UI services intended to make user interface development in JavaScript and DHTML significantly easier.
- Framework services include drag-and-drop support, reusable AJAX connection strategies, DOM manipulation, keyboard handlers, and more.

Infusion Framework

- A rich set of APIs for creating loosely-coupled models and views using a declarative and event-driven style.
- Built on top of jQuery, and embraces unobtrusive, functional techniques that promote less code and greater flexibility.
- Modular and interoperable,
- Everything about Infusion is open: its architecture, source code, and community
- <http://wiki.fluidproject.org/display/fluid/Infusion+Framework>

31

To...
integrated, habitual, efficient, easy, accessible
Web content authoring that is accessible to all
potential authors

32

Questions, thoughts, suggestion...

33



Thank You

Thank you for participating in today's session.

Next scheduled session:

OCTOBER 9, 2012 » WAVE WEB ACCESSIBILITY EVALUATION TOOL

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34
