Welcome to WAG Meeting
an AMAC Accessibility Webinar

WCAG 2.1 Discussion

Janet Sylvia, WAG Coordinator

June 6, 2018
To Show Closed Captioning

- From Menu: Window>Show Closed Captioning
- Keyboard: CTRL or CMD + F8
- Closed Captioning Provided by AMAC
Comments or Questions

- During presentation type comments or questions in Chat
  - Mouse: click in Chat Box
  - Keyboard: CTRL or CMD + M
  - Type your message
  - Press Enter on keyboard

- Q/A and Discussion at end of the presentation
Today’s Presenter

• Janet Sylvia
  • WAG Coordinator and Accessibility Specialist
  • AMAC Accessibility Solutions
Discussion
WCAG 2.1
Current Status

- WCAG 2.1 Recommendation published June 5, 2018
Reasons for Updating WCAG

• Web Content Accessibility Guidelines (WCAG) 2.0
  • Published 2008

• Updated to fill known gaps
  • Cognitive
  • Low Vision
  • Mobile

• Previously W3C released WCAG 2.0 Extensions
  • Conformance with existing format
    • Success Criteria
    • How to Meet
    • Understanding
Section 508 and WCAG

• Section 508 “incorporates by reference” WCAG 2.0
  • WCAG 2.0 *Extensions* part of WCAG and the basis for WCAG 2.1

• Section 508
  • E101.2 Equivalent Facilitation
Difference WCAG 2.0 and WCAG 2.1

- 17 Success Criteria (Newly Proposed)
  - 5 Level A
  - 7 Level AA
  - 5 Level AAA
WCAG 2.0 Guidelines

1 Perceivable
   1.1 Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.
   1.2 Provide alternatives for time-based media.
   1.3 Create content that can be presented in different ways (for example simpler layout) without losing information or structure.
   1.4 Make it easier for users to see and hear content including separating foreground from background.

2 Operable
   2.1 Make all functionality available from a keyboard.
   2.2 Provide users enough time to read and use content.
   2.3 Do not design content in a way that is known to cause seizures.
   2.4 Provide ways to help users navigate, find content, and determine where they are.

3 Understandable
   3.1 Make text content readable and understandable.
   3.2 Make Web pages appear and operate in predictable ways.
   3.3 Help users avoid and correct mistakes.

4 Robust
   4.1 Maximize compatibility with current and future user agents, including assistive technologies.
0.5.1 New Features in WCAG 2.1

The following Success Criteria are new in WCAG 2.1:

- 1.3.4 Orientation (AA)
- 1.3.5 Identify Input Purpose (AA)
- 1.3.6 Identify Purpose (AAA)
- 1.4.10 Reflow (AA)
- 1.4.11 Non-Text Contrast (AA)
- 1.4.12 Text Spacing (AA)
- 1.4.13 Content on Hover or Focus (AA)
- 2.2.6 Timeouts (AAA)
- 2.3.3 Animation from Interactions (AAA)
- 2.5.1 Pointer Gestures (A)
- 2.5.2 Pointer Cancellation (A)
- 2.5.3 Character Key Shortcuts (A)
- 2.5.4 Label in Name (A)
- 2.5.5 Target Size (AAA)
- 2.5.6 Concurrent Input Mechanisms (AAA)
- 2.5.7 Motion Actuation (A)
- 4.1.3 Status Messages (AA)
1. Perceivable - **Adaptable**

- 1. Perceivable
  - Guideline 1.3 Adaptable – create content that can be presented in different ways without losing information or structure
    - 1.3.4 Orientation (AA)
    - 1.3.5 Identify Input Purposes (AA)
    - 1.3.6 Identify Purpose (AAA)
1.3.4 Orientation (AA)

- Content **does not restrict its view and operation to a single display orientation**, such as portrait or landscape, unless a specific display orientation is **essential** (bank check, piano keys, etc.)

- **Intent**
  - To ensure all content and functionality is **available in fixed display orientations**, whether fixed in portrait or fixed in landscape.
1.3.5 Identify Input Purpose (AA)

• The purpose of each **input field** collecting information about the user can be programmatically determined when:
  • The input field serves a **purpose identified in** the [Input Purposes for User Interface Components](#) section; and
  • The content is **implemented** using technologies with **support for identifying** the **expected meaning** for form input data.

• **Intent:**
  • Include **metadata with** the identified **form inputs** to help people recognize and understand the intention of the input fields.
1.3.6 Identify Purpose (AAA)

- In content implemented using **markup languages**, the **purpose** of User Interface Components, icons, and regions can be programmatically determined.

**Intent:**
- To allow user agents to supply information that can be **customized** based on need.
1. Perceivable - *Distinguishable*

- 1. Perceivable
  - Guideline 1.4 Distinguishable - Make it easier for users to see and hear content including separating foreground from background.
    - 1.4.10 Reflow (AA)
    - 1.4.11 Non-Text Contrast (AA)
    - 1.4.12 Text Spacing (AA)
    - 1.4.13 Content on Hover or Focus (AA)
1.4.10 Reflow (AA)

• Content can be presented **without loss of information** or **functionality**, and **without requiring scrolling in two dimensions** for:
  • Vertical scrolling content at a width equivalent to 320 CSS pixels;
  • Horizontal scrolling content at a height equivalent to 256 CSS pixels;

• **Intent:**
  • Allow browser zoom to increase to 400% **without requiring scrolling in more than one direction**. Content will reflow (i.e. wrap) to stay within windows boundaries.
1.4.11 Non-Text Contrast (AA)

- The visual presentation of the following have a contrast ratio of at least 3:1 against adjacent color(s):
  - User Interface Components
  - Graphical Objects

- **Intent:**
  - To ensure active interface components (buttons, forms, fields, etc.) and meaningful graphics (print icon, line graph, images, etc.) can be distinguished by people with low vision.
1.4.12 Text Spacing (AA)

• In content implemented using markup languages that support the following text style properties, no loss of content or functionality occurs by setting all of the following and by changing no other style property:
  • **Line height** (line spacing) to at least 1.5 times the font size;
  • **Paragraph** spacing to at least 2 times the font size;
  • **Letter** spacing to at least 0.12 times the font size;
  • **Word** spacing to at least 0.16 times the font size.

• **Intent**
  • User can **override** author settings without breaking content.
1.4.13 Content on Hover or Focus (AA)

• Where receiving and then removing (pointer, hover or keyboard focus) triggers additional content to become visible and then hidden, the following are true:
  • Dismissible
  • Hoverable
  • Persistent

• Intent
  • Content is designed to allow the option to perceive the additional content and dismiss it without interrupting the page experience.
2. Operable – Keyboard Accessible

• 2. Operable
  • Guideline 2.1 Keyboard Accessible: Make all functionality available from a keyboard.
    • 2.1.4 Character Key Shortcuts (A)
2.1.4 Character Key Shortcuts (A)

- If a **keyboard shortcut** is implemented in content using only letter (including upper- and lower-case letters), punctuation, number, or symbol characters, then at least one of the following is true:
  - Turn off
  - Remap
  - Active only on focus

- **Intent**
  - Allow speech input users to turn off single-key shortcuts to avoid accidentally firing batches of them at once.
2. Operable – Enough Time

• 2. Operable
  • Guideline 2.2 Enough Time: Provide users enough time to read and use content.
    • 2.2.6 Timeouts (AAA)
2.2.6 Timeouts (AAA)

- Users are **warned** of the duration of any **user inactivity** that could cause data loss, **unless** the data is preserved for more than 20 hours when the user does not take any actions.

- **Intent**
  - Content that **cannot be completed** in a single sitting can be left **without losing their place**.
2. Operable – Seizures and Physical Reactions

- 2. Operable
  - Guideline 2.3 Seizures and Physical Reactions - Do not design content in a way that is known to cause seizures or physical reactions
    - 2.3.3 Animation from Interactions (AAA)
2.3.3 Animation from Interactions (AAA)

- **Motion animation triggered by interaction** can be **disabled**, unless the animation is **essential** to the functionality or the information being conveyed.

- **Intent**
  - Avoid **user-initiated animations** that occur **unexpectedly**.
New Guideline 2.5

2. Operable

Guideline 2.5 Input Modalities - Make it easier for users to operate functionality through various inputs beyond keyboard

- 2.5.1 Pointer Gestures (A)
- 2.5.2 Pointer Cancellation (A)
- 2.5.3 Label in Name (A)
- 2.5.4 Motion Actuation (A)
- 2.5.5 Target Size (AAA)
- 2.5.6 Concurrent Input Mechanisms (AAA)
2.5.1 Pointer Gestures (A)

- All functionality that uses **multipoint or path-based gestures** for operation **can be operated with a single pointer** without a path-based gesture, unless a multipoint or path-based gesture is **essential**.

- **Intent**
  - To ensure content can be operated through a **single point activation** and **not complex gestures**.
2.5.2 Pointer Cancellation (A)

• For functionality that can be operated using a single pointer, at least one of the following is true:
  • No Down-Event
  • Abort or Undo
  • Up Reversal

• Intent
  • To make it easier to prevent accidental or erroneous pointer input
2.5.3 Label in Name (A)

- For **user interface components** with **labels** that include text or images of text, the **name** contains the text that is presented visually.

- **Intent**
  - Ensure **visible labels**, including hover labels of icons, **match hidden labels**.
2.5.4 Motion Actuation (A)

- **Functionality** that can be operated by *device motion* or *user motion* can also be operated by *user interface components* and responding to the motion can be disabled to prevent accidental actuation, except when:
  - Accessibility Supported Interface
  - Essential

- **Intent**
  - Avoid relying on motion, which some people *cannot perform* and that other people may *inadvertently perform* and thus activate the functionality without intention.
2.5.5 Target Size (AAA)

- The **size** of the **target** for **pointer inputs** is at least 44 by 44 CSS pixels except when:
  - Equivalent
  - Inline
  - User Agent Control
  - Essential

- **Intent**
  - To help users who have **difficulty activating a small target** due to motor impairment, tremors, etc.
2.5.6 Concurrent Input Mechanisms (AAA)

- Web content **does not restrict** use of **input modalities** available on a platform except where the restriction is *essential*, required to ensure the security of the content, or required to respect user settings.

- **Intent**
  - Users can interact with web content with **whichever input mechanism** is **preferred**. They can also **switch mechanisms** as needed, and add/remove mechanisms at any point in a task or interaction.
4. Robust - Compatible

- 4. Robust
  - Guideline 4.1 Compatible - Maximize compatibility with current and future user agents, including assistive technologies.
    - 4.1.3 Status Messages (AA)
4.1.3 Status Messages (AA)

- In content implemented using markup languages, **status messages** can be programmatically determined through **role** or **properties** such that they can be presented to the user by assistive technologies **without receiving focus**.

- **Intent**
  - To ensure more users can be made **aware of important changes** in content that are not given focus, in a way that **doesn’t** unnecessarily **interrupt** their work.
Next Major Revision of WCAG
WCAG Silver Task Force

• WCAG 2.1 is a .dot release

• W3C Accessibility Guidelines Working Group
  • Preliminary work on successor to WCAG 2.1
  • Guidelines will have a new name that reflects broader scope beyond web content

• Code name: Silver
Questions and Comments

1) Type questions in Chat
   - Mouse: click in Chat box
   - Keyboard: (CTRL or CMD) M
   - Type your message
   - Press Enter on your keyboard to send message to Main Room

2) Ask Questions via Microphone
   - Raise your Hand to be part of the question queue
     - Select Hand icon (above participant names)
     - We will take questions in order received
Contact Information

Janet Sylvia
WAG Coordinator

Join WAG Listserv or Request Training
wag@amac.gatech.edu

Thanks for Joining us Today!