



WHAT IS WEB ACCESSIBILITY?

- Web accessibility is building a website that's useable by all people.
- Building accessible websites is about the experience provided by the designer and coder to folks with a variety of challenges, including visual, auditory, physical, speech, cognitive, and neurological challenges (e.g. blindness, multiple sclerosis, paralysis, color blindness).
- Web accessibility techniques try to overcome these challenges to make web content available to all people.

WHAT DOES IT MEAN TO HAVE AN ACCESSIBLE WEBSITE?

- People with disabilities can perceive, understand, navigate, and interact with the site. Interaction includes being able to read and write.
- Building accessible websites is about the experience provided by the designer and coder to folks with a variety of challenges, including visual, auditory, physical, speech, cognitive, and neurological challenges.

THE BIG PICTURE

- Hierarchical Structure to Content
- Meaningful Link Text
- Semantic HTML
- Alternative Text for Images
- Utilizing :focus
- Form labels

EXAMPLES

- <https://www.lynda.com/WordPress-tutorials/Diversity-user-experience-keyboard-navigation/374185/421831-4.html>
- <https://www.lynda.com/WordPress-tutorials/Diversity-user-experience-low-vision/374185/421832-4.html>

IT'S ABOUT BEING INCLUSIVE THUS
BROADENING THE SCOPE OF YOUR
AUDIENCE.

MAKING THE CASE FOR ACCESSIBILITY

- **Inclusiveness:** The most important case for building accessible websites is inclusiveness and to aid folks who need the help.
- **Avoid Fines:** Did you know that if you accept federal dollars you must make, not only your website, but all digital documents accessible? The fees for non-compliance can be hefty.
- **Content Organization:** Building accessible websites encourages the organization and optimizing of your content.
- **SEO:** Accessible websites are inherently optimized for search engines.



THE STANDARD

- Web Content Accessibility Guidelines (WCAG)
Guidelines for web developers
- User Agent Accessibility Guidelines (UAAG)
For the developers of user agents, these address the needs of browsers, browser extensions, media players, readers, etc.
- Authoring Tool Accessibility Guidelines (ATAG)
Guidelines for authoring tools. These tools include tools like Adobe's Dreamweaver and Automatic's WordPress CMS

PERCEIVABLE

- Provide text alternatives for non-text content.
- Provide captions and other alternatives for multimedia.
- Create content that can be presented in different ways, including by assistive technologies, without losing meaning.
- Make it easier for users to see and hear content.

OPERABLE

- Make all functionality available from a keyboard.
- Give users enough time to read and use content.
- Do not use content that causes seizures.
- Help users navigate and find content.

UNDERSTANDABLE

- Make text readable and understandable.
- Make content appear and operate in predictable ways.
- Help users avoid and correct mistakes.

ROBUST

- Maximize compatibility with current and future user tools.

Source: <https://www.w3.org/WAI/WCAG20/glance/>

ISSUES TO CONSIDER IN PRE-PRODUCTION

- **What are the main sections of my website?**
These main sections might include the header, nav, main content, aside, and footer.
- Once you have that laid out in your html, **add aria labels** to your sections.
- **Is the code semantic?** Having semantic code means that when viewing the code sections are named for their purpose. HTML5 does a great job of this, but there are cases when the guidelines suggest you also use the aria labels. For example, the header of the page should also include the aria="banner" attribute.
- **Are there sections of the page that a visitor might like to skip?**
Including skip links at the top of the page to guide folks to the main content and/or the navigation can be very helpful for folks using a keyboard for navigating. This advantage is even more pronounced for folks using more tailored assistive technology.

ARIA ROLES

- Accessible Rich Internet Applications or ARIA are a guidelines for accessible programming. The documentation includes usage guidelines on page roles.
- There are specific names for roles of different page parts.
- Remember that there should be only one role per page. For example there should only be one item with the role of navigation, even though you might have multiple navigations on your page.
- By adding landmark roles to your code you can potentially make life much easier for people using screen readers.

ARIA ROLE TYPES

- **Banner:** A region that contains the prime heading or internal title of a page.
- **Complementary:** Any section of the document that supports the main content, yet is separate and meaningful on its own.
- **Content info:** A region that contains information about the parent document such as copyrights and links to privacy statements.
- **Form:** A region of the document that represents a collection of form-associated elements, some of which can represent editable values that can be submitted to a server for processing.
- **Main:** Main content in a document. In almost all cases a page will have only one role="main".
- **Navigation:** A collection of links suitable for use when navigating the document or related documents.
- **Search:** The search tool of a Web document.

Source: https://www.w3.org/WAI/GL/wiki/Using_ARIA_landmarks_to_identify_regions_of_a_page

ALT(ERNATIVE) TEXT

- Add an alt tag to your images,
ex. ``
- That's the start, but for accessibility it should include all non-text content.
This includes controls, time-based media, test, sensory, and captcha.
- For decorative content, the guideline recommends that it is used in a way that, if disabled, does not interfere with the usage of the site (i.e. it can safely be ignored).

SKIP LINKS

- Skip links are links that are hidden from visitors, unless those visitors are using assistive technology.
- The newer web readers utilize the aria roles to skip around the page, but these links are good for backward compatibility.
- There's nothing particularly fancy about it. They're just a navigation ul that is hidden with css (using a negative margin). When focused the negative margin is removed.

TAB INDEX

- The tabindex attribute specifies the tab order of an element (when the "tab" button is used for navigating).

- Example:

`W3Schools`

`Google`

`Microsoft`

Source: https://www.w3schools.com/tags/att_global_tabindex.asp

WCAG 2.0 RESOURCES

How to Meet WCAG 2.0

<https://www.w3.org/WAI/WCAG20/quickref/>

Web Content Accessibility Guidelines (WCAG) Overview

<https://www.w3.org/WAI/intro/wcag.php>

Understanding Techniques for WCAG Success Criteria

<https://www.w3.org/TR/2014/NOTE-UNDERSTANDING-WCAG20-20140916/understanding-techniques.html#understanding-techniques>

ACCESSIBILITY TO WEB CONTENT IS MORE THAN A TREND.

It's a human rights issue, and a very big deal.