

Accessibility Gotchas

COMMON BARRIERS TO WEB ACCESS
AND WHAT YOU CAN DO TO FIX

Accessibility Gotchas: Hello World!



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Has 5 children! I know, right?

Restores classic arcade cabinets

Friends call him “Spell” (Hi New Friends!)

Accessibility Gotchas: *What is Web Accessibility?*

“Can we make our website accessible to blind people?”



[Here Are Stock Photos of Vince Vaughn That People Seem To Love](#)

Accessibility Gotchas: *What is Web Accessibility?*

*Web accessibility refers to the inclusive practice of making the Web usable by people of **all abilities and disabilities**.*

<https://www.w3.org/WAI/fundamentals/accessibility-intro/>

Accessibility Gotchas: What is Web Accessibility?

Vision

Blindness, low vision, color-blindness.

Motor

Inability to use a mouse, slow response time, limited fine motor skills.

Hearing

Deafness and hard-of-hearing.

Cognitive

Neurodiversity, learning disabilities, distractibility, inability to remember or focus on large amounts of information.

Accessibility Gotchas: What is Web Accessibility?

Worldwide

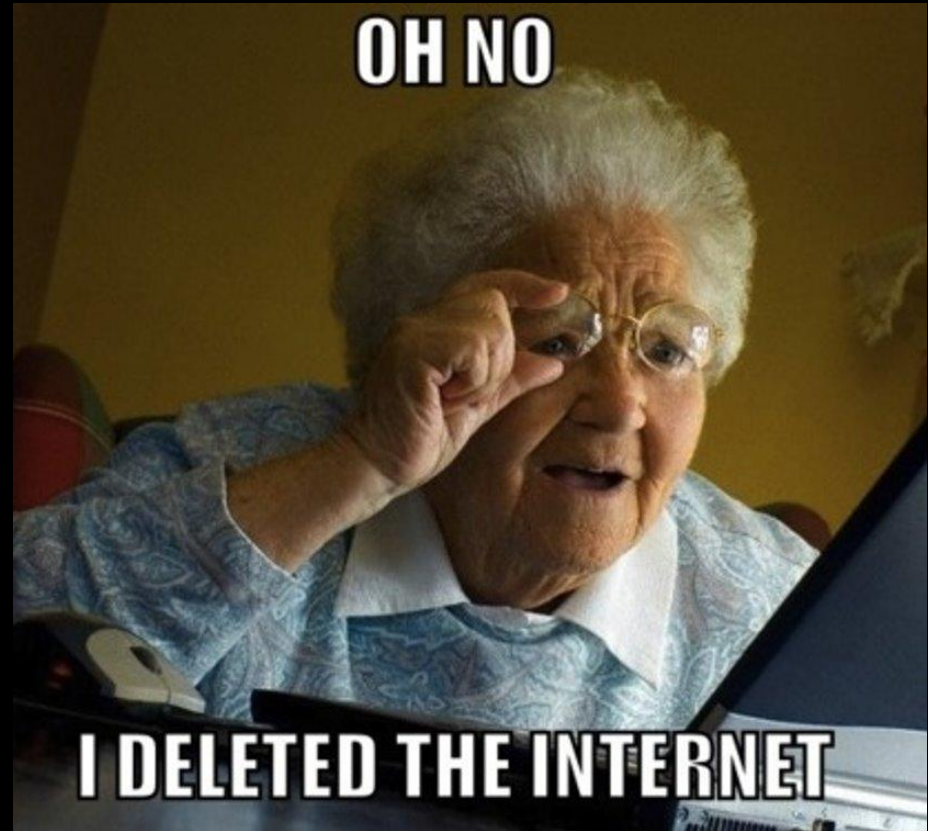
20% of the population have a disability.
Nearly 1 billion people!

United States

63 Million People!

Accessibility Gotchas: *What is Web Accessibility?*

Aging



Accessibility Gotchas: **What is Web Accessibility?**

Temporary Barriers



Accessibility Gotchas: *What is Web Accessibility?*

Situational Barriers



Accessibility Gotchas: *What about the law?*

- Section 508 mandates that all electronic and information technology used by federal government be accessible.
- Vendors must also be compliant.
- Section 508 now embraces WCAG (Web Content and Accessibility Guidelines)

Accessibility Gotchas: What about the law?

- Private/Public sector websites have no accessibility requirements.
- Litigation is on the rise.
- Civil Rights: Are digital experiences extensions of physical locations. (Yes.)

Accessibility Gotchas: WCAG

- Current version: 2.1
- 3 levels of conformance: A, AA, and AAA
- 78 Success Criteria (Guidelines)
- Also organized as principles: Perceivable, Operable, Understandable, and Robust (POUR)

Accessibility Gotchas: WCAG

- **Level A:** Essential - If not met, certain users may not be able to read, understand, or fully operate your website.
- **Level AA:** Ideal - Required for many government and public websites. Often seen as the gold standard in compliance.
- **Level AAA:** Specialized - Typically reserved for websites that serve a specialized audience.

Accessibility Gotchas: Testing

- **Automated:** Third-party apps and services that scan a website for barriers. Only account for about 40-50% of all known accessibility issues.
- **Manual:** Everything else. Testing with various assistive technologies, keyboard only and manual inspection by well-versed professionals (and disabled professionals, if you are lucky).

Accessibility Gotchas: Zing!

Common Gotchas

(And what you can do to fix them)

Accessibility Gotchas: Zing!

The Most Common Gotchas:

- Missing Accessible Text (Non-text Content)
- Missing Captions
- Missing Keyboard Access
- Focus Suppression
- Poor Contrast

Accessibility Gotchas: *Missing Accessible Text*

1.1.1 *Non-text Content, Automated and Manual*

- Ensure that important images have equivalent alternative text.
- Decorative images require an alt attribute, but the value can be left empty, which is also called a “null alt” (alt=“”).
- CSS backgrounds require no alternative text, but consider using inline image if important.
- Linked images **must** have alternative text. Usually of a functional nature.
- Complex image (graphs, infographics) descriptions are provided in context or on a separately linked page .

Accessibility Gotchas: *Missing Accessible Text*

1.1.1 Non-text Content, Automated and Manual

Question: When are images important?

Answer: When they are contextually or emotionally important to your content.

Accessibility Gotchas: *Missing Accessible Text*

1.1.1 *Non-text Content, Automated and Manual*

Writing Good Alternative Text:

- Be concise, but descriptive.
- Avoid terms like “Picture of...” or “Image of...”
- Avoid using keywords. Websites are for people, not search engines.
- Images with embedded text in them, should contain verbatim alternative text.

Accessibility Gotchas: *Missing Accessible Text*

1.1.1 *Non-text Content, Automated and Manual*

- Form buttons have a descriptive value. Be explicit.
- Form inputs have associated text labels (not placeholders).
- Multimedia is identified via accessible text (e.g., HTML video or audio).
- Inline frame (iframe) are appropriately titled and describe contents of frame.
- Lesson: <https://codepen.io/Spell/pen/dyOgQMe>

Accessibility Gotchas: *Missing Captions*

1.2.2 Captions (Pre-recorded), Manual Test

- Ensure synchronized captions are provided for non-live video.
- Ensure accuracy in captions. Don't depend on "auto-captions".
- Use a third-party to produce captions for you. ([Rev.com](https://www.rev.com))
- Transcripts also important. HTML can be converted to braille.
- WebVTT Example: <https://codepen.io/Spell/pen/dyOgQMe>

Accessibility Gotchas: *Missing Keyboard Access*

2.1.1 *Keyboard, Manual Test*

- All page functionality is available using the keyboard, unless the functionality cannot be accomplished in any known way using a keyboard (e.g., free hand drawing).
- Using correct elements for the job can help here. Instead of using a div or hyperlink, use a button. Golden rule: Buttons do things; links take us places.
- Lesson: <https://codepen.io/Spell/pen/dyOgQMe>

Accessibility Gotchas: Focus Suppression

2.4.7 Focus Visible

- All interactive elements must have a visible outline. They aid low vision, limited mobility and power users.
- All browsers have their own default outline styling. Some suck.
- Outlines must never be removed unless replaced with adequate alternative.
- New outline or focus state must have contrast ratio of 3:1.
- Be careful that new custom outline does not match background color.
- Lesson: <https://codepen.io/Spell/pen/dyOgQMe>

Accessibility Gotchas: Color Contrast

1.4.3 Contrast (Minimum)

- Text and images of text have a contrast ratio of at least 4.5:1
- Large text - at least 18 point (24px) or 14 point (19px) and bold - has a contrast ratio of at least 3:1
- Incidental text (e.g., disabled button text) and logotypes are exempt.

Accessibility Gotchas: Honorable Mentions

- 1.3.1 Info and Relationships - Semantic markup, logical headings, etc.
- 1.4.1 Resize Text - Page is readable (and usable) when zoomed in to 200%.
- 2.2.2 Pause, Stop, Hide - Avoid auto-playing or scrolling content.
- 2.3.1 Three Flashes or Below - Avoid content blinking more than 3x per second.
- 2.4.1 Bypass Blocks - Skip Links!
- 2.4.2 Page Titled - Ensure page has proper <title>
- 4.1.1 Parsing - Validate your work! Fix all major issues!

Accessibility Gotchas: Testing Your Work

Resources, Tools and Tips

- Not sure when to include alternative text? Use the [Alt Decision Tree](#)
- Automated: [axe DevTools](#)
- Automated: [Web Developer Toolbar](#)
- Automated: [WAVE](#)
- Automated: [W3C Validator](#)
- Manual: Test with your keyboard.
- Manual : Listen to your work! Use a [screen reader](#).
- Manual : [Colour Contrast Analyser \(CCA\)](#)
- Manual & Automated: Your Browser DevTools

Accessibility Gotchas: Overlays

Should I Use An Accessibility Overlay?



Accessibility Gotchas: Remember

“The power of the Web is in its universality. Access by everyone regardless of disability is an essential aspect.”

Sir Tim Berners-Lee



Accessibility Gotchas

Thank you!

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