

The Best (and Worst) Themes, Modules, Widgets, Extensions, and AI Tools For ADA Compliance

ALYSSA PANETTA

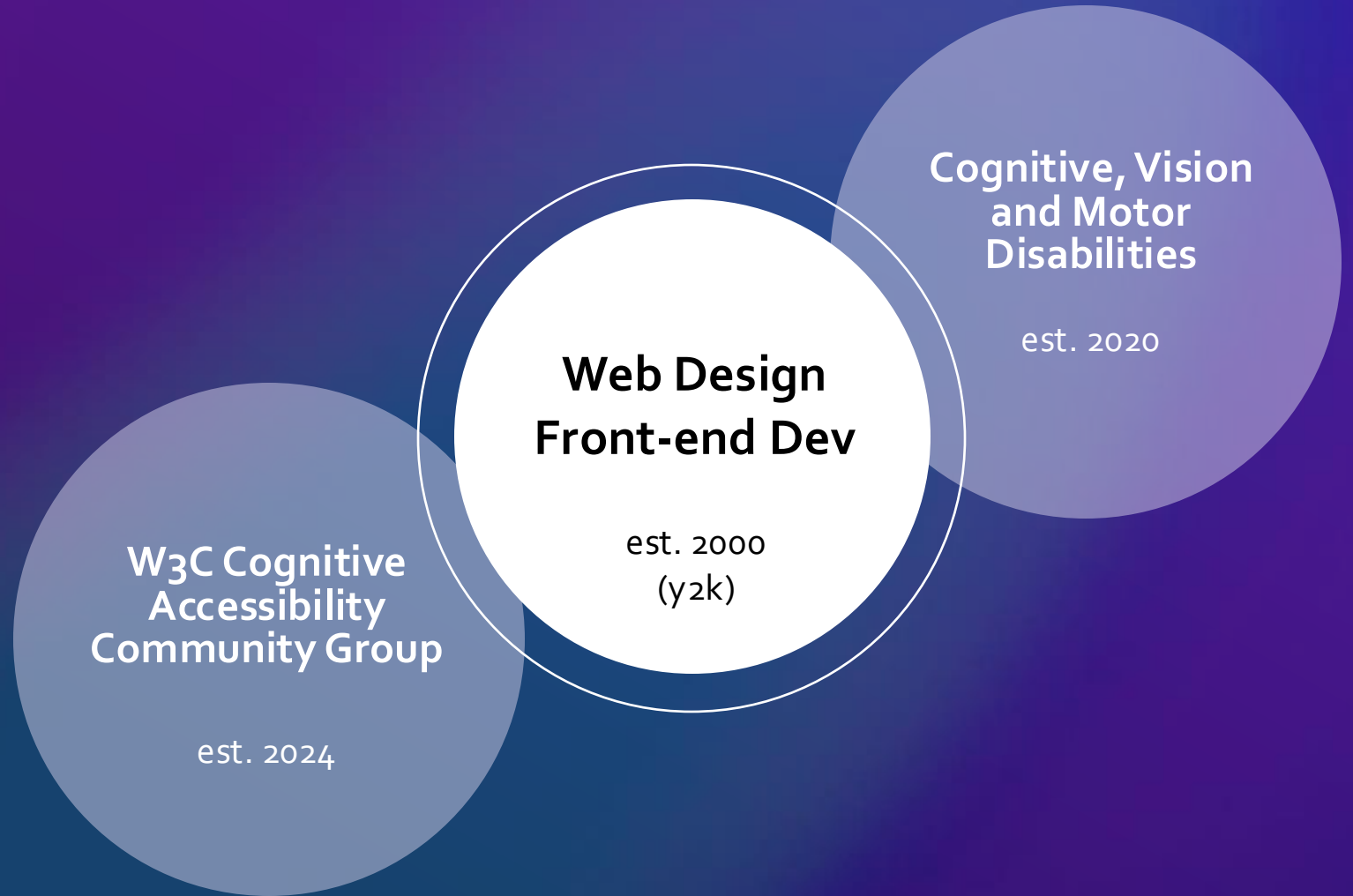
Web Designer/Front-End Developer

University Libraries, University at Albany

(she/her)

ABOUT ME

- 2000** Learned **HTML and CSS**
interning at math
software company
- 2016** Started current role @ UA
- 2020** Diagnosed and treated
for **brain cancer**
- 2024** Joined W3C
Cognitive Accessibility
Community Group



AGENDA

a11y = accessibility

These slides will use the common shorthand "a11y" in place of the word accessibility.

"11" represents the number of letters between the letters A and Y

1

Why comply now?

2

Accessibility (a11y) Testing Tools

Widgets, Extensions, AI, Drupal Themes/Modules

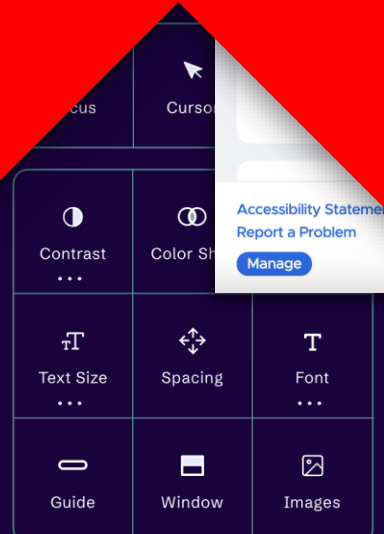
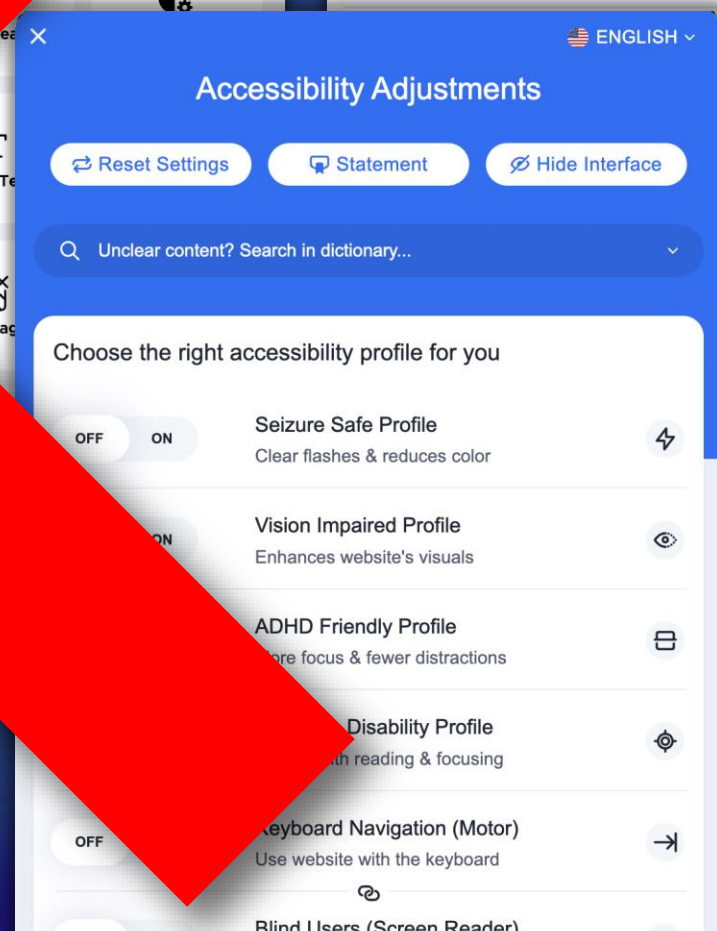
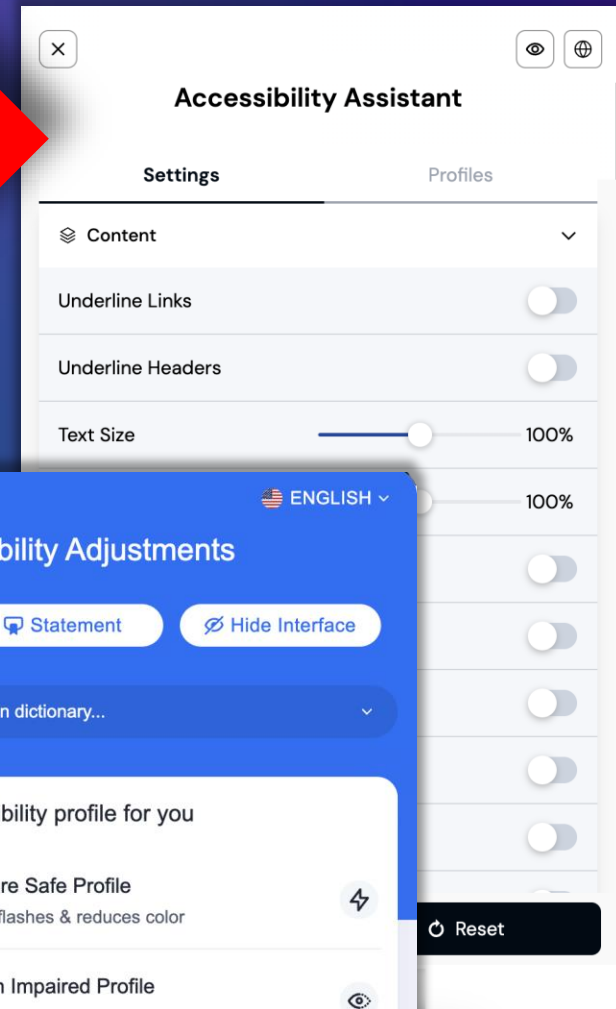
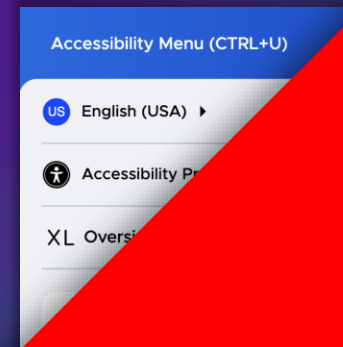
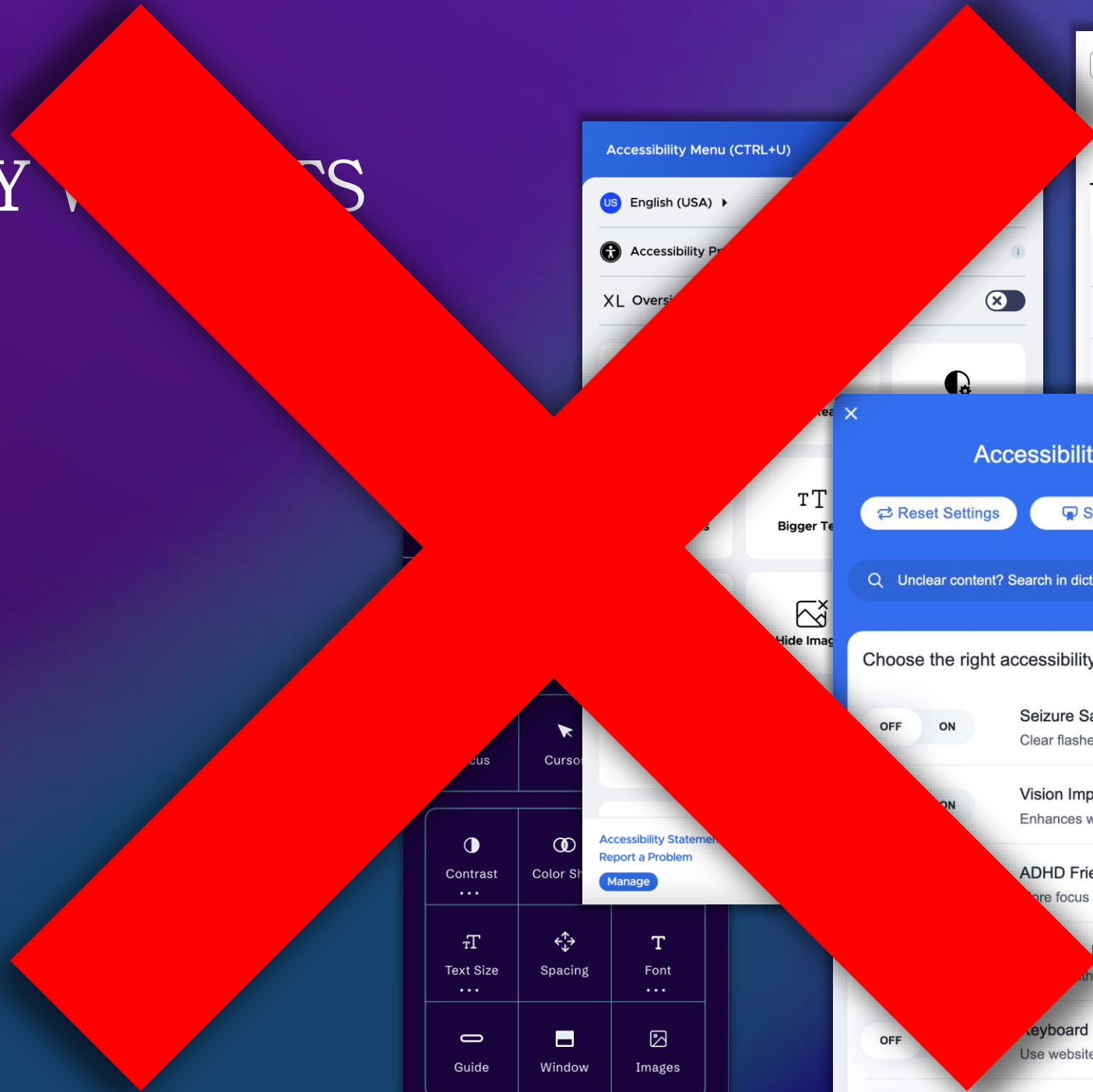
3

Hype vs. Help

SPOILER ALERT!

OVERLAY

Look out for
this symbol in a
bottom corner!



TL;DR

“Too long, didn’t read”

1

Stay Away from Overlay Widgets

“One line of code” = potential lawsuit

2

Watch Out for Overlay Widget Vendors

They want your money and know you want a quick, easy fix

3

Only Trust A11Y Experts

Stick to the tools offered/used by trusted accessibility experts

WHY?

Why do I need to **comply with ADA requirements**,
and why is it so important right **now**?

“

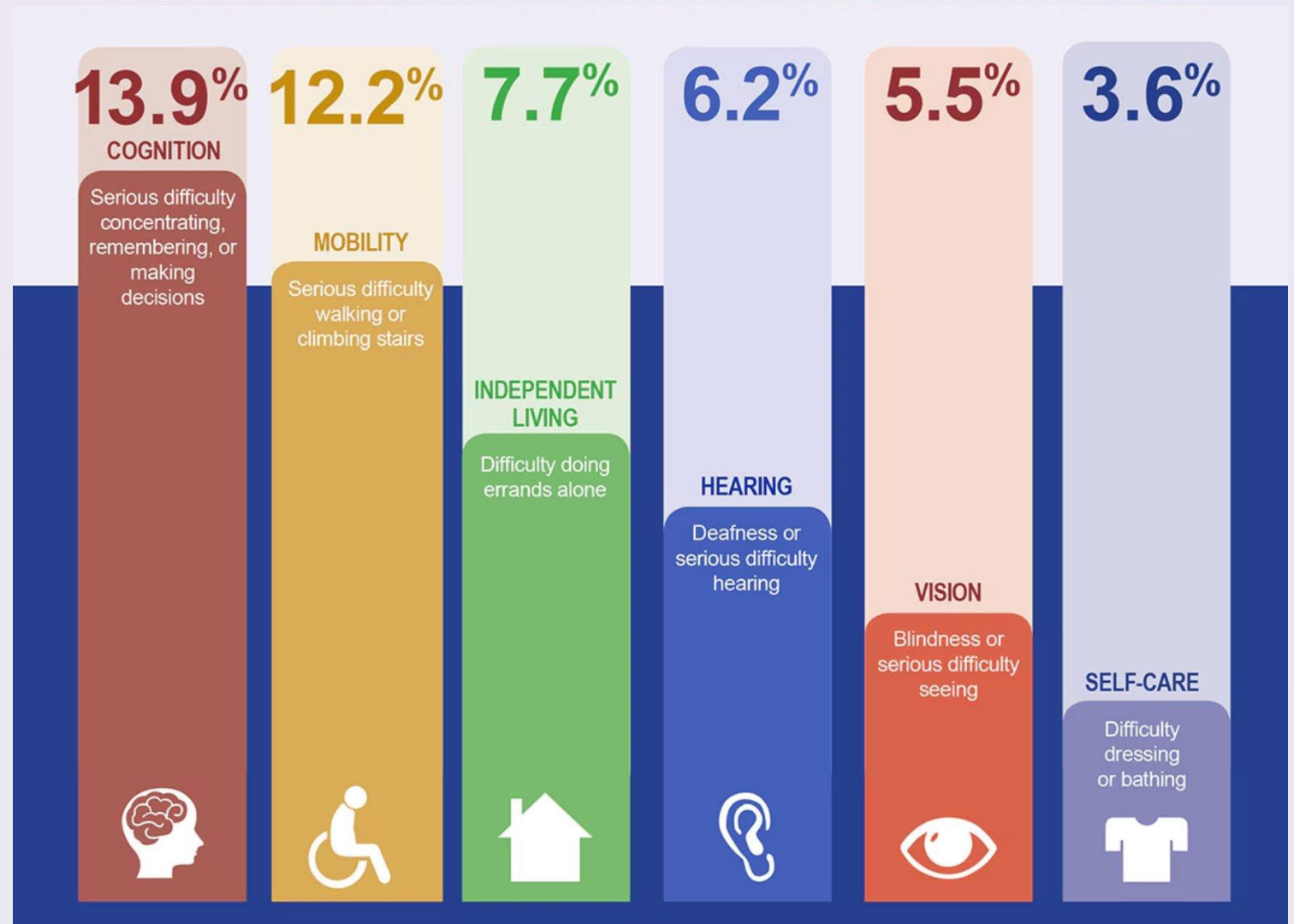
We're all just
temporarily abled

- Cindy Li
Designer

”

FUNCTIONAL DISABILITIES

- Vision
- Hearing
- Mobility
- Cognition



US SECTION 508 + TITLE II

- **Updated Title II** of the ADA published April 24, 2024

Requires **Level AA** compliance with Web Content Accessibility Guidelines (WCAG) 2.1 for all **state** and **local government web content** and **mobile applications**.

- **Compliance deadlines by **size of government****

0 to 49,999 persons	April 26, 2027
50,000 or more persons	April 24, 2026

“

The **impact** of the European Accessibility Act (**EAA**) will **mirror** how General Data Protection Regulation (**GDPR**) changed global data privacy rights.

- Preety Kumar
Deque

”

WCAG 2.1 BASICS

How to Meet WCAG 2.1

A customizable quick
reference to WCAG
2.1 requirements
(success criteria) and
techniques published
by the W3C



Legible Text +
Headings



Keyboard Only
Navigation



Screen Reader
Only Navigation



Color Contrast



Multimodal
Media



Forms and
Inputs

[WCAG Compliance Checklist – The A11Y Project](#)

A11Y TESTING TOOLS

How do I find **available testing tools**?

What are **automated tests** good for?

What can only be found by **manually testing**?

DISCLAIMER:

- You and I are **NOT** the same person.
- We are **NOT** working on the same site.
- We do **NOT** have the same workflows.
- We will (probably) **NOT** use the same set of tools.

I can only **help you find what works for you.**

FINDING TESTING TOOLS

- Avoid **Search Engines**
- Ask **AI**
- Start at **WCAG Source: Web Accessibility Initiative (WAI)**

WAI Evaluation Tools Overview

AVOID SEARCH
ENGINES

Section 508
ADA
WCA

Compliance
Checker
Verification

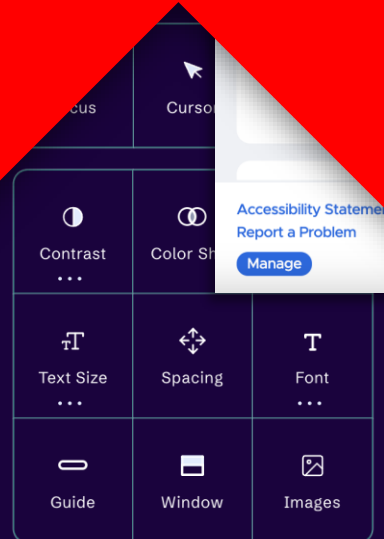
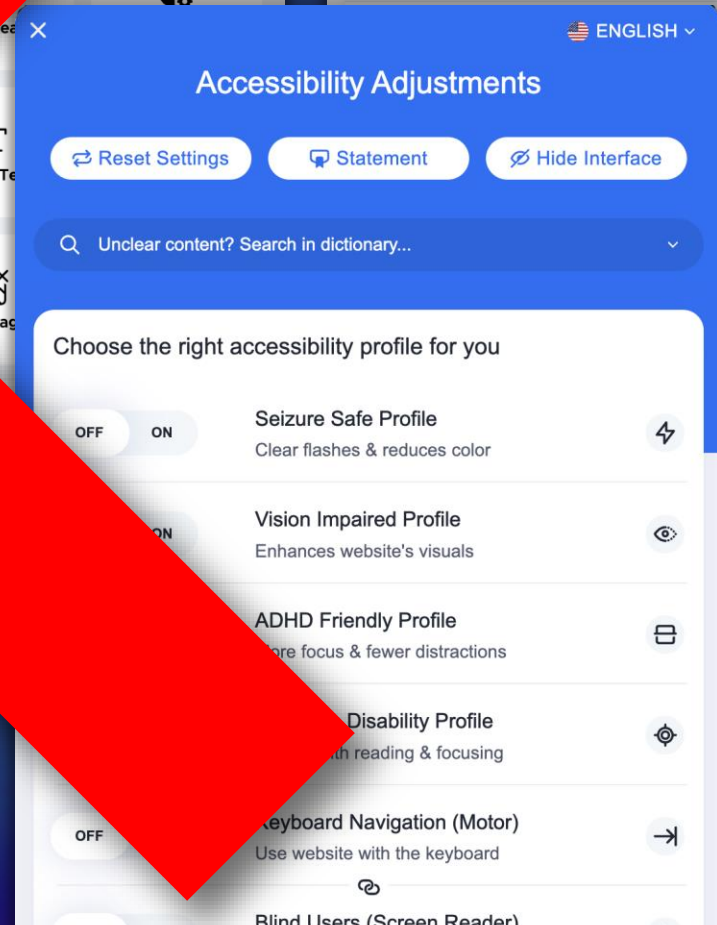
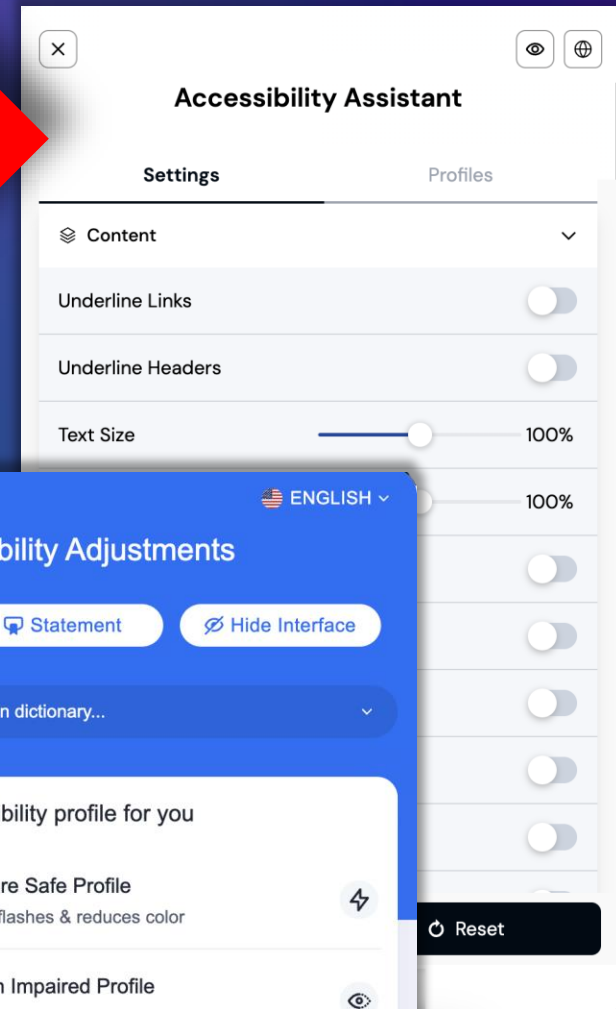
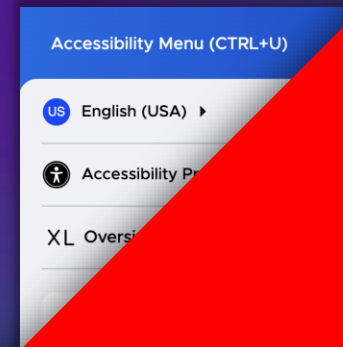
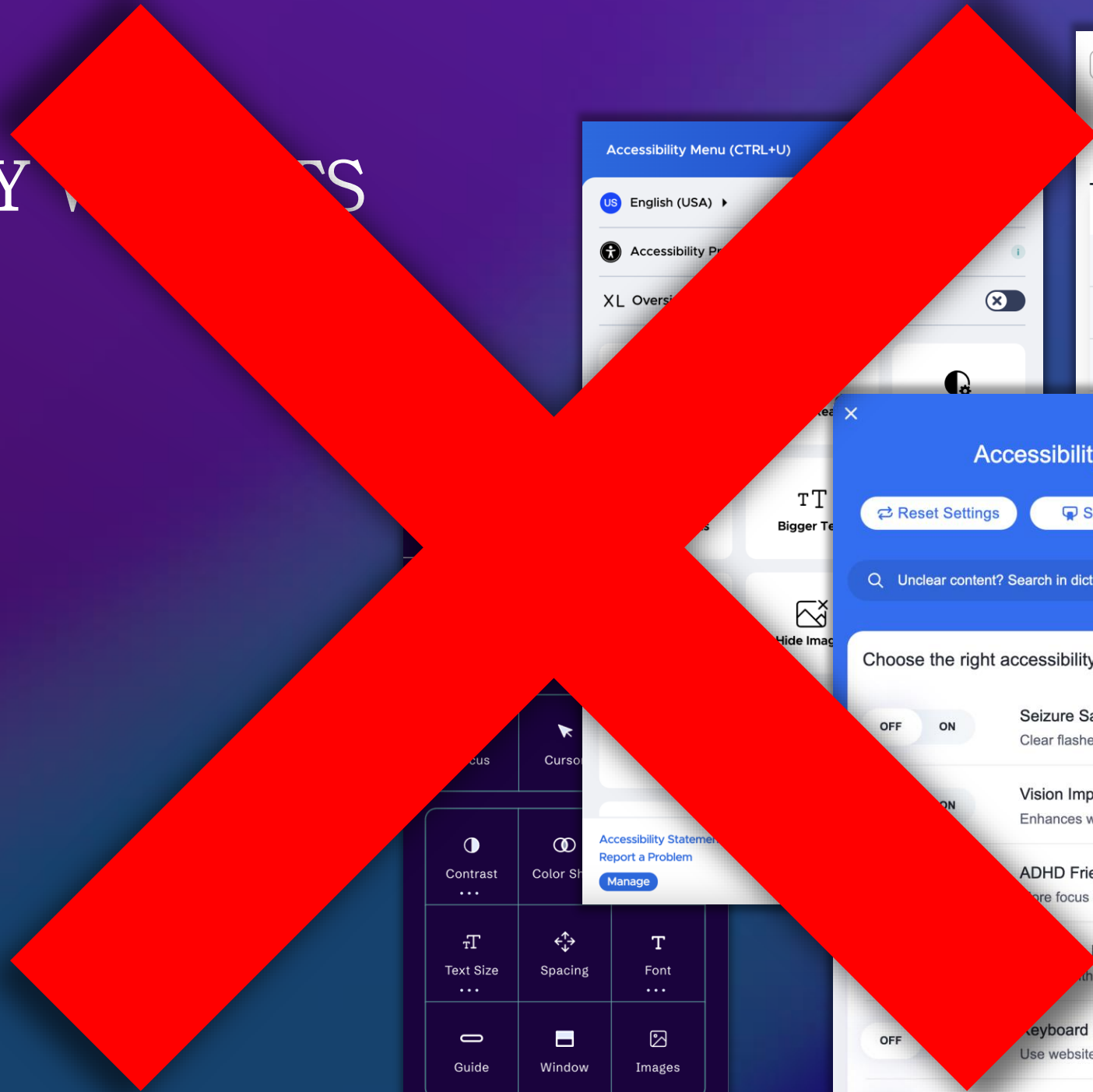
Fast

Easy
(good)



OVERLAY

Look out for
this symbol in a
bottom corner!



AVOID SEARCH ENGINES

Section 508
ADA
WCAG



Compliance
Checker
Verification

- Common terms means **SEO** is **easily-exploited**
- So many **ads for overlay widgets**
- Articles and site checkers in **top results** are likely from **overlay widget vendors**

ASK AI: WHAT TOOLS CAN I USE?

What tools are available for me to test my website's WCAG compliance level?

ASK AI: WHAT TOOLS CAN I USE?

ChatGPT 4.x

Pretty good! Good general advise (suggests combining tools, performing manual and user testing). Provides decent tool options with features and links. *[see slide Notes for full output]*

Copilot (Office 365)

Practically worthless! “you’ll need to ensure it is accessible to people with disabilities.”

Provides five tools, two of which link to W3C list, and a site checker run by an overlay vendor.

Claude 3.5 Haiku

Meh. Haiku’s response promises a “comprehensive overview,” but it only gives bullet points (likely full in Sonnet). It does provide actual code but lists an overlay vendor as a paid tools.

W3C WAI EVALUATION TOOLS

Everyone's testing setup will be different.

The right tools depend on your website, level of a11y knowledge and development workflows.

Web Accessibility Evaluation Tools List

- Many **filters**, including Cost, Type, Scope and Language.
- Info is provided by tool developers, vendors, or others.
Not verified or endorsed by W3C.

Guide: Selecting Web Accessibility Evaluation Tools

- Video and transcript. Gives advice on **choosing the right tool** for you and considerations, like your development process.

BASIC A11Y TESTING TOOL SETUP

MANUAL



Desktop Browsers



Keyboard



Screen-Readers

Windows: JAWS, NVDA

Android: TalkBack

Mac and iOS: VoiceOver

AUTO & SEMI-AUTO



Built-in Browser DevTools



Browser Extensions/Add-ons



Browser Bookmarklets



Site/Page Checkers

MANUAL TESTING

Will take time,
but is **necessary** to
capture all issues.

- Browser **Zoom** and **Viewport Resizing**
- Visible **Keyboard Focus** and **Focus Order**
- **Screen Reader** Output
- Accuracy of Content **Generated by Artificial Intelligence**
Captions, transcripts, and descriptions
- Test with **Real Users** of Assistive Technologies

AUTOMATED TESTING

Is **good** for some issues but
is **not enough** on its own.

In 2024, Deque's **axe-core**
testing platform reached
57% automation.



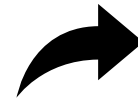
Alternative Text



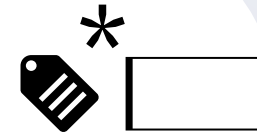
Page Title &
Headings



Color Contrast



Skip Links



Form Labels +
Required Fields



Language
of Page

AUTOMATED TOOL TYPES



Built-in Browser DevTools



Site/Page Checkers



Browser Extensions/Add-ons



CI/CD Pipeline Tools



Browser Bookmarklets



Drupal Modules

HYPE vs HELP

IMHO...

HYPE



IMHO...

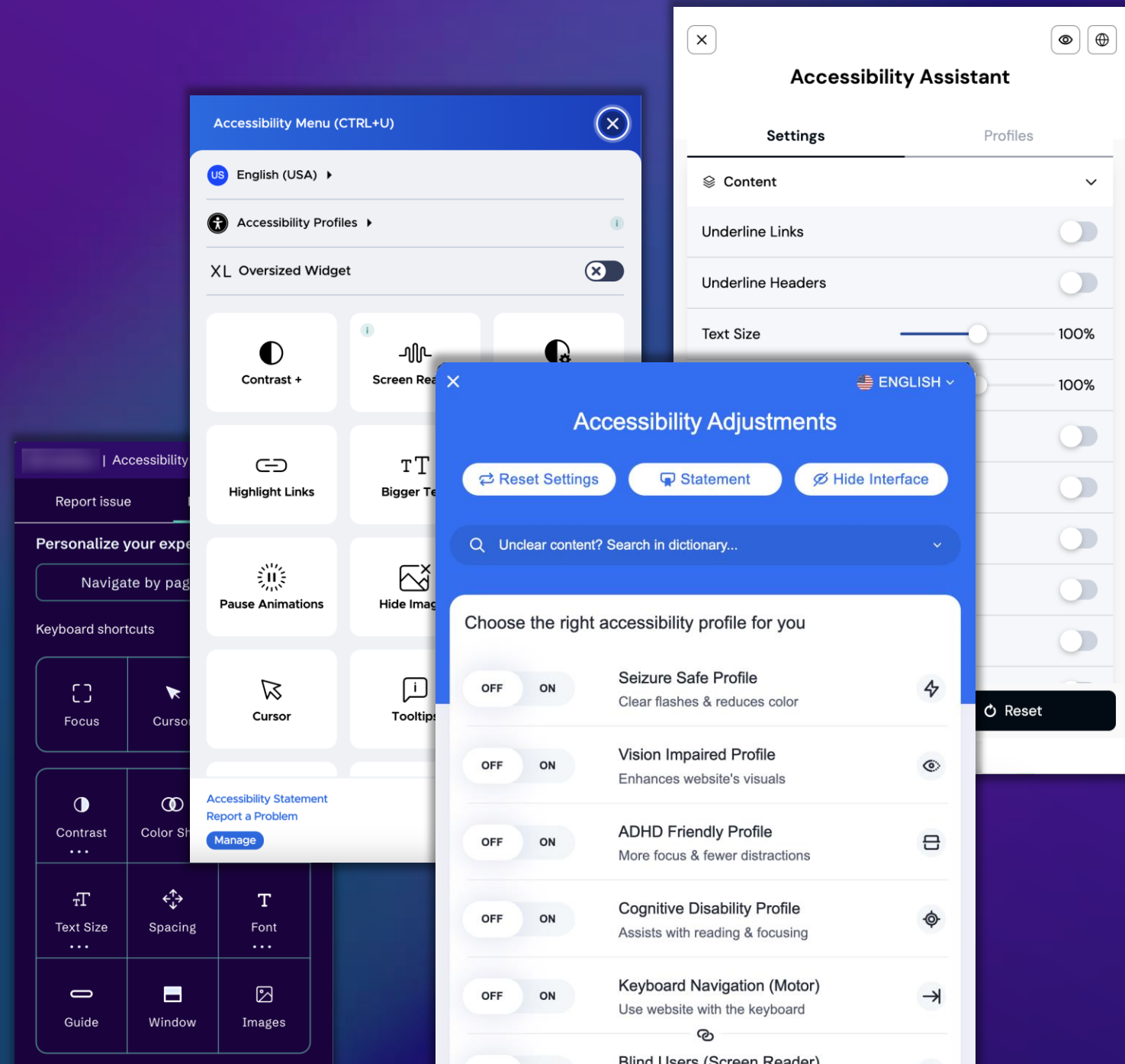
OVERLAY WIDGETS

ONE LINE OF CODE

Javascript snippets you can install on your website that allow **users** to **adjust** the site's **appearance**, offering "quick fixes" for compliance.



Look out for this symbol in a bottom corner!



OVERLAY WIDGET MARKETING LIES

- They are **NOT endorsed** by professional **a11y community** or **disabled users**

[Overlay Fact Sheet](#) [WebAIM Survey of Web Accessibility Practitioners](#)

- They do **NOT** offer **lawsuit protection**

[UseableNet ADA Accessibility Lawsuit Tracker](#)

- Their sites are **FULL** of **false claims**

[Overlay False Claims](#) disproves many specific claims made by overlay vendors

“

The warnings are clear: if you want your online presence to work for everyone, and if you want to protect against web accessibility lawsuits, **a one-line-of-code solution will not meet your needs.**

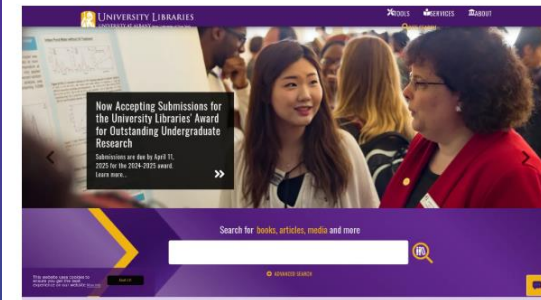
- *Lainey Feingold*

”



[Another Web Access Overlay Company Sued by a Small Business](#) [Feb 16, 2025]

OVERLAY WIDGETS ARE HIDING EVERYWHERE...

- Online Site/Page Checkers
 - accessibilitychecker.org
- Drupal Modules
 - [All in One Accessibility](#)
 - [Accessibility menu](#)
 - [AudioEye Drupal Accessibility & ADA Compliance Module](#)



 <https://library.albany.edu>

 Not compliant under  United States law

 **Fix 23 Issues with:**

Overlay Widget 1



Overlay Widget 2



or



Fix It Yourself

Run a full site scan and tackle the issues with easy-to-follow guidance

ARTIFICIAL INTELLIGENCE

Artificial Intelligence is a **hot topic** today. When it comes to a11y, what can it really do?

■ **Generative AI** for an Individualized UX

User interface generated on the fly per user.

■ **Autonomous AI Agents**

AI interacts with the webpage for the user.



AI Code Assistants

AI code assistants will write accessible code for the developer.

HELP



IMHO...

WHAT TO LOOK FOR IN AUTOMATED TOOLS

Signs the testing
product is legit.

- **Uses reputable engine “under the hood”**
MS Accessibility Insights + Chrome Lighthouse use axe-core engine
- **Backed by a reputable accessibility firm – ones that includes disabled people in their process**
IMO like Deque, TPGi, PopeTech, Tetralogical
- **100% NOT backed by an overlay widget vendor**
Watch out! Does the site HAVE a widget? Did you check the “About” page to see who owns the site? Did you do a web search for them?

CHROME EXTENSIONS

[Chrome Webstore](#)
[Keyword Search for](#)
["Accessibility"](#)

Just a11y:

- [IBM Equal Access](#) FREE
- [ARIA DevTools](#) FREE
- [WAVE](#) FREE
- [ARC toolkit \(TPGi\)](#) FREE-MIUM
- [AxeDevTools](#) FREE-MIUM
- [Accessible Web Helper](#) FREE-MIUM

Test Suites w/ a11y:

- [BrowserStack](#)
- [SiteImprove](#)
- [Stark](#)
- [AAardvark](#)
- [Silktide](#)

BOOKMARKLETS

Bookmarklets are bookmarks for your browser that **execute JavaScript** instead of opening a webpage.

Comprehensive:

- [**Sa11y Bookmarklet**](#)
[Sa11y project](#)
- [**ANDI**](#)
[Social Security Administration](#)

'Bespoke' (pro collections):

- [**CSS Bookmarklets for Testing and Fixing**](#)
[Adrian Roselli](#)
- [**A11y audit bookmarklets**](#)
[A11yTools](#)

GETTING STARTED DRUPAL A11Y

[Getting Started](#)
[> Accessibility](#)

Core/General:

- [Drupal Core themes:](#)
[Olivero](#) (default public)
[Claro](#) (default admin)
- [Drupal Accessibility Features](#)
[drupal.org](#)
- [How to do an accessibility review?](#)
[drupal.org](#)

Modules:

- [Quality Assurance Modules](#)
[\(Contributed Modules for Extending Accessibility in Drupal\)](#)
[drupal.org](#)
- [Experimental Modules](#)
[\(Contributed Modules for Extending Accessibility in Drupal\)](#)
[drupal.org](#)

DRUPAL THEMES

What to look for:

- Published/used by a **federal government**
- **a11y statement** includes language like “**tested** by”, “**committed** to”
- **a11y feedback link**

508-Ready Themes (Thanks .gov!)

- [U.S. Web Design System \(USWDS\)](#)
- [Gesso USWDS](#)

Other Government Themes

- [GOV.UK Theme](#)
- [CivicTheme Design System \(Australia\)](#)

A11y-Focussed Themes

- [Gesso](#)
- [Emulsify](#)
- [LightShip](#)
- [Olivero](#)

DRUPAL MODULES

Testing (Q/A) Modules

- [A11Y Project Checklist](#)
- [Web accessibility](#)
- [Sa11y](#)
- [Acquia Optimize](#) Account required
- [SiteImprove](#) Account required
- [DubBot](#) Account required

Other a11y modules

- [AI Image Alt Text](#)
Part of Drupal AI module ecosystem
- [Editoria11y](#) For authors
Checks content before publishing
- [StyleSwitcher](#) For end-users
Add links to switch between defined stylesheets

MANUAL TESTING RESOURCES

Helpful Links.

- **Keyboard**

- [Testing Accessibility with the Keyboard](#)

Shruti Kapoor

- [Keyboard Compatibility](#)

WAI Perspectives Video

- **Screen Reader**

- [Setting up a screen reader testing environment on your computer](#)

Sara Soueidan

- [Testing Accessibility with Screen Readers](#)

Shruti Kapoor

- [Assistiv Labs](#)

Remote tool, PAID w/ discounts for .edu, 501c3, open source

- [Videos: Demos of blind and low vision users](#)

University of Colorado, Boulder

MANUAL TESTING RESOURCES

Helpful Links.

- **AI Generated content**

- Users say: Even **bad generated** text is **better than none**.
- Video **Captions** and **Transcripts**: [3Play Media](#)
- Image **Alt-Text**: [Comparing local large language models for alt-text generation](#)
Dries Buytaert

- **Test with Real Users of Assistive Technologies**

- [Involving Users in Evaluating Web Accessibility](#) (W3C WAI)
- [Perkins Access](#) (Perkins School for the Blind)
- [Fable Tech Labs](#)
- [AccessWorks](#) (by Knowbility)

MY PICKS

DISCLAIMER: *(again)*

You and I are NOT the same person, we are NOT working on the same site, we do NOT have the same workflows – we will (probably) NOT use the same set of tools.

Free:

- Firefox DevTools + [IBM Equal Access](#) | [ARC Toolkit](#)
- [WAVE \(website\)](#)
- [ARIA DevTools \(extension\)](#)
- [ANDI \(bookmarklet\)](#)
- [Editoria11y \(Drupal Module\)](#)

Paid Tools:

- [Polypane](#)
All the browsers, devices and breakpoints + DevTools
- [Assistiv Labs](#)
Screen-reader sim in your browser + private VM
- [SiteImprove](#)
Ongoing monitoring and reporting (campus license)

PROFESSIONAL HELP

Stick with the Pros
that you can trust!

Lists provided by
a11yproject.com
(not me)

- [Hire an Agency or Specialist](#)
- [Hire Professional Testers](#)

THANK YOU!

Reach out anytime

email: `apanetta@albany.edu`

bluesky: `apanetta.bsky.social`

drupal: `alyssapanetta`

ALYSSA PANETTA

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(she/her)

Download Slides



<https://github.com/alyssapanetta/a11y-testing-tools>