

Digital Accessibility: Beyond Compliance Toward Best Practice

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CREATING THE NEXT®

The AccessGA Project

What is AccessGA?

[AccessGA](#) is a joint initiative of the State of Georgia ADA Coordinator's Office, CIDI, and the [Georgia Technology Authority](#) (GTA).

The objective is to support Georgia state agencies that strive to provide equitable and timely access to their employees, students, and clients with a wide range of disabilities.

Benefits and Services Include...

- Access to live webinars and archived [webinars](#)
- Technical assistance and hands-on training
- Web accessibility evaluations and resources
- Periodic [newsletters](#)
- Up-to-date [wiki](#) of ICT accessibility resources and information
- Special events



- Center for Inclusive Design & Innovation (CIDI) provides practical solutions for challenges faced daily by individuals with disabilities.
- We focus on solutions that offer utility, usability, and durability.
- CIDI offers services including disability compliance consultation, braille, captioning, accessible digital content, and assistive technology.



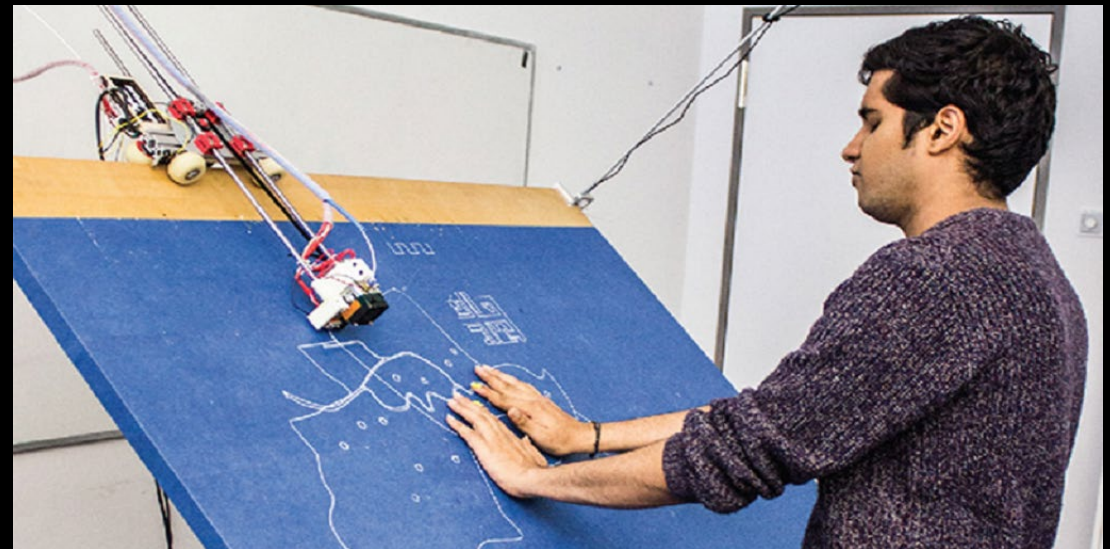
Across the Street, and Around the Globe

- Georgia Tech
- University System of Georgia (USG)
- Higher Ed institutions Across the Country
- State and Federal Governments
- National and International Non-Profits and For Profits



Braille Services

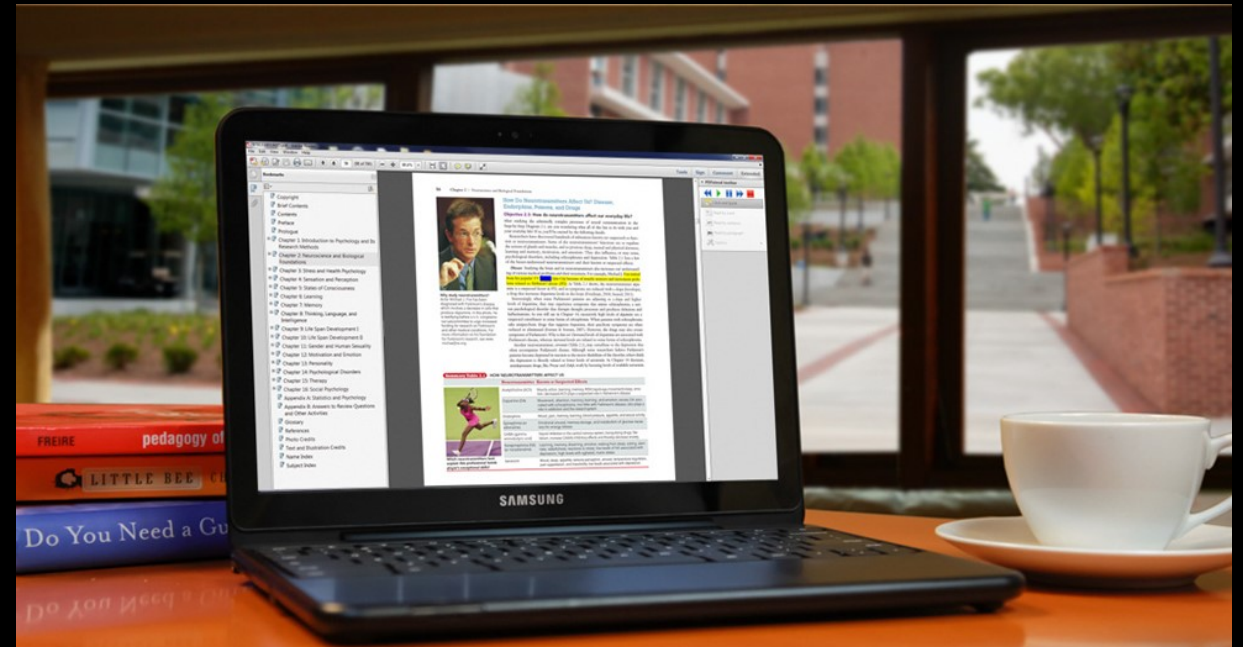
- Braille Transcription
- Embossing
- Tactile Graphics
- Braille Library



E-Text Services

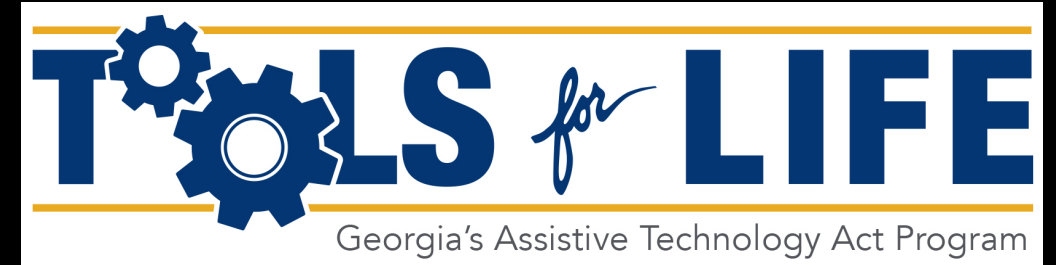
E-text Services produce and provide high-quality e-text in formats including:

- PDF
- DOC
- PPT
- DAISY
- EPUB
- HTML



Tools for Life

- The [Certified Assistive Technology Team](#) conducts on-site or remote assessments and offers demonstrations, training, and assistive technology for learning, work, and daily living.
- The AT team hosts Georgia's [Assistive Technology Act](#) program, [Tools for Life](#).



Digital Accessibility and UX Testing

- Digital Accessibility Compliance Testing (manual and automated)
- Technical assistance
- Accessibility Training (onsite and remote)
- Usability Testing by people with disabilities for people with disabilities



Accessibility Research

- Our research initiatives include students with disabilities who are traditionally underrepresented in higher education.
- Disability spans across all age, gender, ethnic, racial, cultural, and socio-economic boundaries.
- CIDI also studies how corporate, government, and non-profit organizations support customers and employees with disabilities.



Digital Accessibility Compliance

How Compliance is Often Defined

- Americans with Disabilities Act (ADA)
- WCAG 2.0 (Level A/AA)
- Revised Section 508 (ICT Refresh)
- Section 504



Lack of IT Accessibility in the ADA

- ADA was not intended by disability advocates or its framers to apply to information technology.
- Most information technology at the time was text-based, and largely accessible.
- The ADA signed into law six months before creation of the internet
- Title II of the ADA requires that state and local governments provide “program access” for people with disabilities.
- If state and local government websites are a “program,” it can be argued that they would need to be accessible, absent an undue burden.



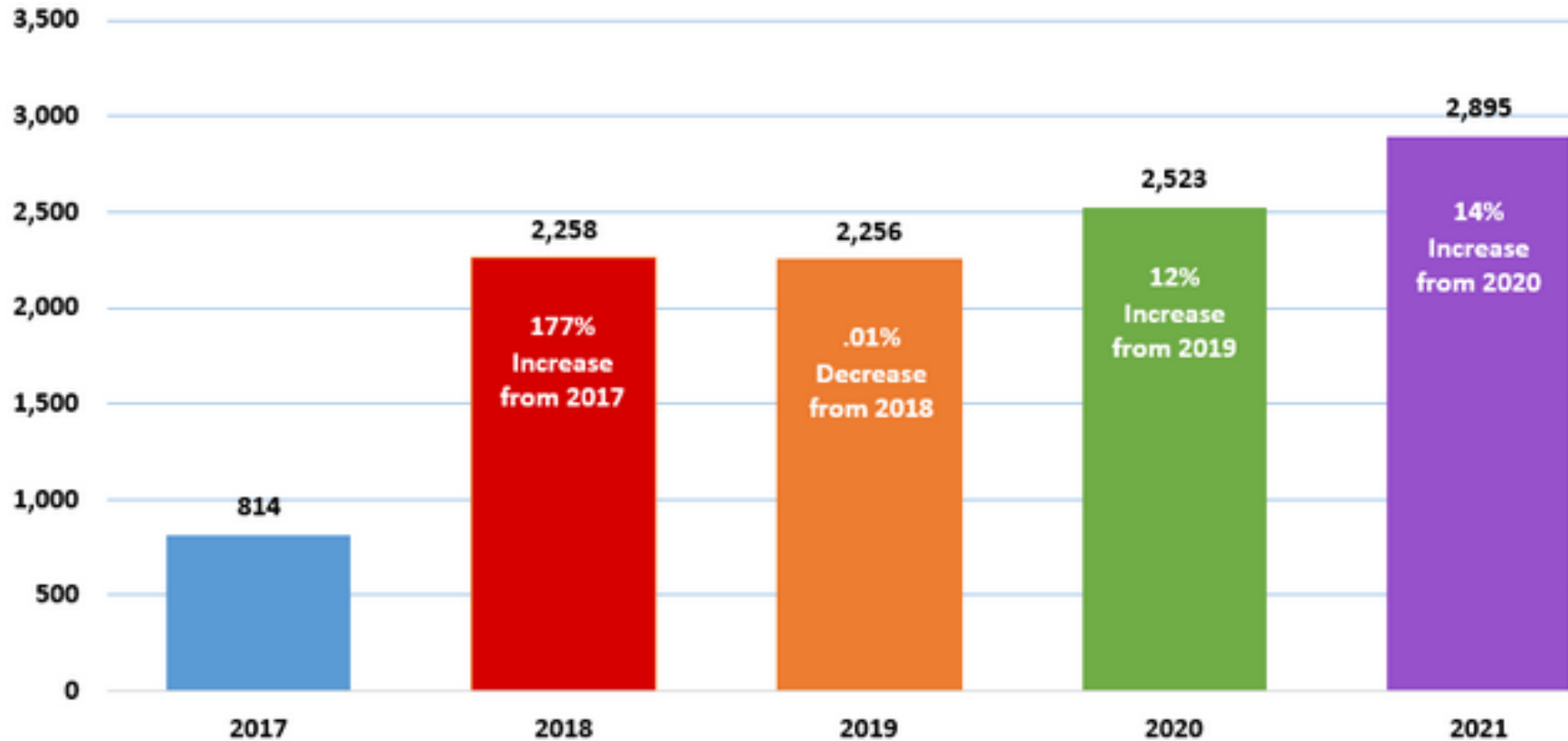
Web Accessibility and the ADA

- As early as 1996 the United States Department of Justice recognized the importance of web accessibility.
- In 2000 the DOJ told an appellate court that “Commercial business providing services solely over the internet is subject to the ADA’s prohibition against discrimination on the basis of disability.”



ADA Title III Website Accessibility Lawsuits

ADA Title III Website Accessibility Lawsuits in Federal Court
2017-2021



- 2017: 814
- 2018: 2,258
 - 177% Increase
- 2019: 2,256
 - .01% Decrease
- 2020: 2,523
 - 12% Increase
- 2021: 2,895
 - 14% Increase

Source: Seyfarth Shaw LLP

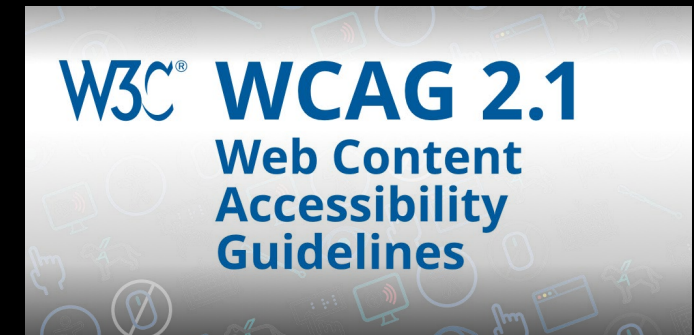
ICT Refresh (Section 508 Refresh)

- U.S. Access Board Final Rule published Jan. 18, 2017
- Harmonized with WCAG 2.0
- Many state and local governments have adopted the ICT Refresh and/or the WCAG standards as statutes, regulations, or policies



WCAG 2.0 (Level A/AA)

- The World Wide Web Consortium's Web Accessibility Initiative (W3C-WAI) developed Content Accessibility Guidelines (WCAG).
- WCAG 2.0: published as a final W3C recommendation in December, 2008
- WCAG 2.1 published in June, 2018 - incorporates WCAG 2.0 with updates related to mobile accessibility, people with low vision, and people with cognitive and learning disabilities
 - Level A: Essential requirements to meet, otherwise it will be impossible for one or more groups to access the web content.
 - Level AA: Necessary requirements to meet, otherwise some groups will find it difficult to access the web content.



Section 504

- Civil Rights Law: a part of the Rehabilitation Act of 1973 that prohibits discrimination based upon disability.
- Requires the needs of students with disabilities to be met as adequately as the needs of non-disabled students .
- U.S. Department of Justice (DoJ)
- Specific to Education Programs and Activities



Live Demonstration of Best Practices

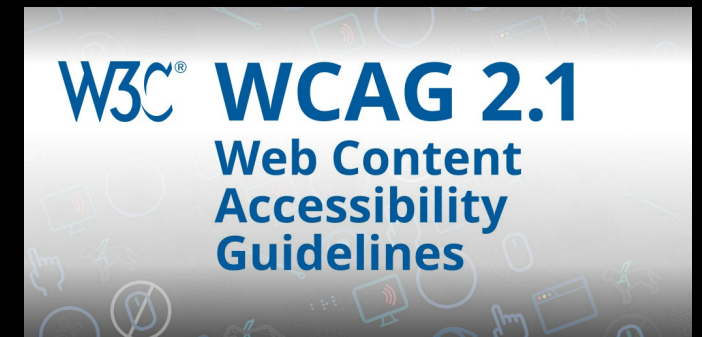
Best Practice

- WCAG 2.0 (Level AAA)
- WCAG 2.1 (Level A, AA, AAA)
- WCAG 3.0 (draft version)
- Input from Users that may not be included in existing guidelines



WCAG 2.0 (Level AAA) and WCAG 2.1

- WCAG 2.0
 - Level AAA: Best practice: In order to make it easier for some groups to access the web content.
- WCAG 2.1
 - Level A/AA/AAA: Best practice, depending on requirements/standards set for particular organization



White House Accessibility Statement

White House Accessibility Statement

“Our ongoing accessibility effort works towards conforming to the Web Content Accessibility Guidelines (WCAG) version 2.1, level AA criteria. These guidelines not only help make web content accessible to users with sensory, cognitive and mobility disabilities, but ultimately to all users, regardless of ability.”



WCAG Quick Reference Guide

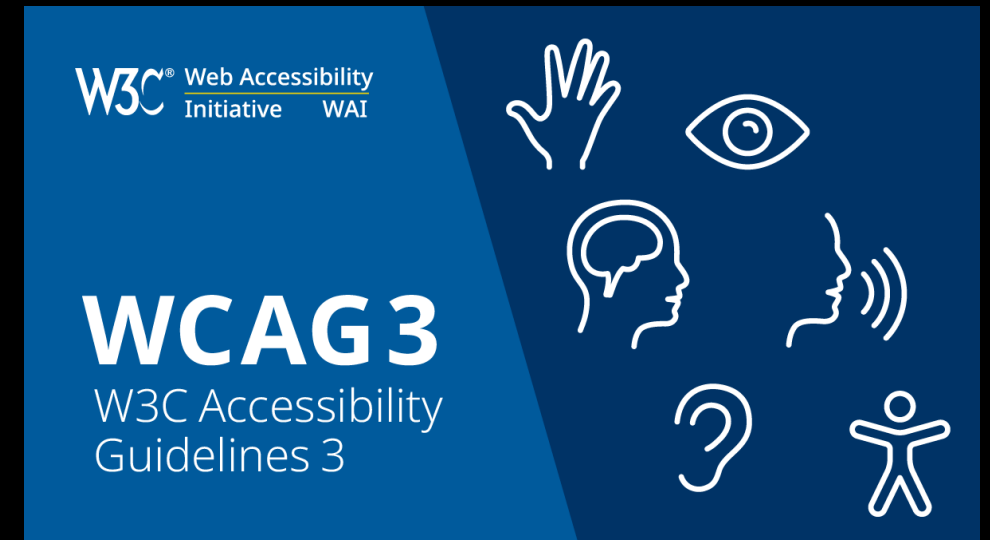
Customizable quick
reference to WCAG
(Level A, AA, AAA)

The screenshot shows the WCAG Quick Reference Guide interface. On the left, there is a sidebar with a 'Filter' tab selected. Under 'Visual Design', there are buttons for animation, audio, auto complete, autoplay, buttons, captcha, carousels, and changing content, with a 'SHOW ALL TAGS' link. Below this, the 'Levels' section has checkboxes for Level A, Level AA, and Level AAA, all of which are checked. The 'Techniques' section has a checkbox for 'Sufficient Techniques' which is also checked. On the right, a yellow banner states 'Selected Filters: WCAG 2.1: success criteria for levels A and AA and all techniques.' The main content area displays 'Principle 1 - Perceivable' with the text 'Information and user interface components must be presentable to users in ways'. Below this is 'Guideline 1.1 - Text Alternatives' with the text 'Provide text alternatives for any non-text content so that it can be changed into other language.' Underneath is '1.1.1 Non-text Content — Level A' with the text 'All non-text content that is presented to the user has a text alternative that is equivalent to the content in the situations listed below.' and a 'Show full description' link. At the bottom, there is a 'Show techniques and failures for 1.1.1' link.

The WCAG Quick Guide – <https://www.w3.org/WAI/WCAG21/quickref/>

WCAG 3 (Working Draft)

- WCAG 3
 - Level A = Bronze
 - Level AA = Silver
 - Level AAA = Gold
 - According to W3C, it will not develop into a standard until at least “a few years.”
 - Rating system of 0 (very poor) to 4 (excellent)
 - Based on “outcomes” rather than the binary “true/false” statements of previous version



Best Practice: Accessibility and Usability by End User

- Include people with disabilities throughout every aspect of the project for testing and feedback, including the design, development and implementation stages
- Ensure that continued feedback is received by people with disabilities on a regular basis as content is uploaded and new features are added
- Provide an easy and effective means for all users to provide additional feedback on barriers and challenges they may experience, and respond to those needs.



Real World Examples of Best Practice

Thinking about Best Practice Early

Best practices are easier to meet in when considered in the design phase

Examples:

- Color Contrast
 - Pick a color scheme to enhance visibility
 - Pick a minimum contrast ratio
- Plain Language
 - Understand your audience
 - Target your audience with specific language



Color Contrast

1.4.3 Contrast (Minimum) – Level AA guideline

- Contrast Ratio of 4.5:1 for all text and images of text
- Contrast Ratio of 3:1 for large text
- Excludes inactive UI components, decorative images, and logos

1.4.6 Contrast (Enhanced) – Level AAA guideline

- Contrast ratio of 7:1 for all text and images of text
- Contrast ratio of 4.5:1 for large text
- Excludes inactive UI components, decorative images, and logos

Tools for Testing Color Contrast

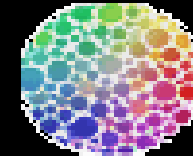
Colour Contrast Analyzer

- Provides precise pixel control
- Calculates contrast ratios



Color Oracle

- Alters the entire screen
- Helpful for demonstrations



Simplified Color Contrast

Simplified best practices for color contrast:

- Dark text on light backgrounds
- 16 point minimum font size
- Use relative size units in CSS
- Use a 4.5:1 contrast ratio for everything else
- Logos and decorative images can still be excluded
- Offer a high contrast and “dark mode” color scheme

Mozilla Developer Article, “[High Contrast Mode](#)”

W3Schools How-to Article, “[Toggle Dark Mode](#)”



Plain Language

[3.1.3 Unusual Words](#), [3.1.4 Abbreviations](#), [3.1.5 Reading Level](#), [3.1.6 Pronunciation](#)

All these guidelines encourage the creation of additional content to help users understand things like unusual words, abbreviations, advanced reading level, and difficult pronunciation. A simpler tactic is to implement content writing standards that avoid them unless they are essential to the content.

[Federal Plain Language Guidelines](#)

[Hemingway Editor](#)

The general public as an audience:

- 8th grade reading level
- Only reads about 18 to 20 percent of content
- Scans for keywords
- Pays more attention to lists than paragraphs
- Rarely reads an FAQ

Considering the User's Perspective

Some best practices may even be considered essential despite their designation as best practice.

Examples:

- Contextual links
 - Link text describes the purpose of the link
 - All link text is unique and never duplicates
- Skip-to-links
 - Includes visible focus
 - Moves to the content, not just the container



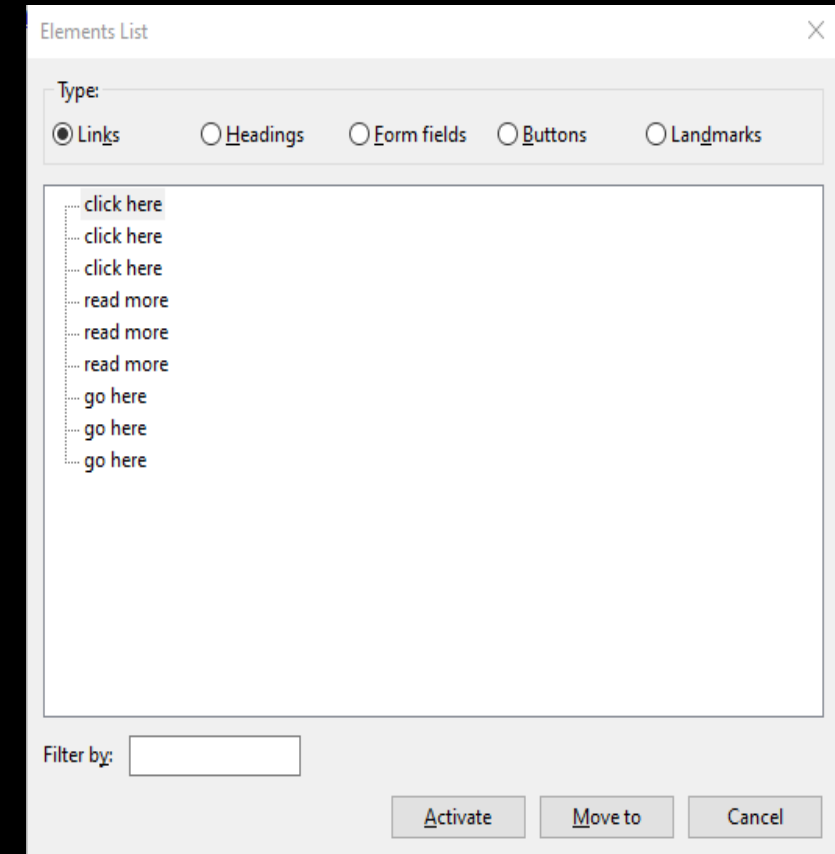
Contextual Links

2.4.4 Link Purpose (In Context) Level A

Users can determine the purpose of a link using the link text alone or by using the link text and the surrounding text.

2.4.9 Link Purpose (Link Only) Level AAA

Users can determine the purpose of each link from link text alone.



Skip-to-links

2.4.1 Bypass Blocks Level A

Content repeated on multiple webpages can be skipped using a link or UI control at the top of the page.

The screenshot shows the WebAIM website with several skip-to-links at the top. The navigation bar includes links for 'accessiBe', 'Product', 'Pricing', 'Testimonials', 'Compliance', 'Company', 'Support', 'Partners', 'AGENCY?', 'LOGIN', 'Start Free Trial', and 'GET DEMO'. Below the navigation bar, there is a '3 Minute Demo' link. The main content area features a search bar and three skip-to-links: 'Introduction to Web Accessibility' and 'WebAIM Training'. The footer contains a 'Current Features' section with links for 'Accessibility Training', 'Technical Assistance', 'Accessible Site Certification', and 'Evaluation and Reporting'. A 'Community' section on the right includes links for 'WebAIM Blog', 'Newsletter', 'E-mail Discussion List', and 'Twitter'. A 'WebAIM Trainings' section is also present at the bottom right.

accessiBe Product Pricing Testimonials Compliance Company Support Partners AGENCY? LOGIN Start Free Trial GET DEMO

Web Accessibility is accessiBe

The #1 Fully Automated Web Accessibility Solution for ADA & WCAG Compliance

3 Minute Demo

WebAIM web accessibility in mind

services articles resources projects community

Search: [input field]

Introduction to Web Accessibility

WebAIM Training

We have web accessibility in mind

Expanding the potential of the web for people with disabilities by empowering individuals and organizations to create accessible content.

Accessibility Training

Whether here in Utah or on-site at your organization, WebAIM can provide web and document training to fit your needs.

Accessible Site Certification

As a respected third party accessibility expert, WebAIM can evaluate and certify your site to established web accessibility guidelines.

Community

WebAIM Blog

Newsletter

E-mail Discussion List

Twitter

Technical Assistance

Need assistance implementing accessibility? WebAIM's expert staff can provide the assistance you need.

Evaluation and Reporting

We can provide reports to help you know how accessible your site is and how to make it better.

Current Features

WebAIM Trainings

Best Practice may become Standard Practice in the Future

WCAG was only recently updated to include guidelines specific to mobile devices.

[What's new in WCAG 2.1](#)

1.4.10 Reflow and 2.5.2 Pointer Cancellation are now Level AA guidelines.


















Guidelines Can't Keep Up with the Rate Technology Changes

- Many WCAG articles specifically mention technologies like Flash and Silverlight and design techniques like images maps.
- Popular new technologies and new web design techniques aren't mentioned at all.
- You can always fall back on the underlying principles of accessibility to guide you. Understanding and applying these is more important than meeting a checklist.

[Principles of Accessibility](#)

DOES MY BROWSER SUPPORT FLASH?

| | | | |
|---|---|---|--|
|  CHROME |  DISABLED BY DEFAULT |  CAN BE MANUALLY TURNED ON |  NEEDS APPROVAL ON EACH WEBSITE TO RUN |
|  SAFARI |  DISABLED BY DEFAULT |  CAN BE MANUALLY TURNED ON |  NEEDS APPROVAL ON EACH WEBSITE TO RUN |
|  FIREFOX |  DISABLED BY DEFAULT |  ONLY USERS RUNNING THE FIREFOX EXTENDER SUPPORT RELEASE (ESR) CAN USE FLASH | |
|  EXPLORER & EDGE |  DISABLED BY DEFAULT |  CAN BE MANUALLY TURNED ON |  EDGE NEEDS APPROVAL ON EACH WEBSITE TO RUN |

BROWSERS WILL NO LONGER SUPPORT FLASH BY THE END OF 2020

Questions?

Resources

- WCAG 2.0: <https://www.w3.org/TR/WCAG20/>
- WCAG 2.1: <https://www.w3.org/TR/WCAG21/>
- WCAG 3 Working Draft: <https://www.w3.org/TR/wcag-3.0/>
- The WCAG Quick Guide – <https://www.w3.org/WAI/WCAG21/quickref/>
- W3C-WAI Accessibility Principles:
<https://www.w3.org/WAI/fundamentals/accessibility-principles/>
- Colour Contrast Analyser:
<https://developer.paciellogroup.com/resources/contrastanalyser/>