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Digital Accessibility Initiatives and the Legal Landscape

CREATING THE NEXT®

Today's Presenters

Rayianna Daniels, Digital Accessibility Specialist, CIDI

Rayianna Daniels has a BS of Science in Computer Science from the University of Tennessee at Chattanooga and an MBT from the University of Georgia. Along with these degrees, Rayianna has a background in web accessibility training, web accessibility evaluations, web development and IT support. She also provides training on a variety of applications and assistive technology solutions to Higher Ed institutions across the country.

Johan Rempel ICT-UX Quality Assurance Mgr, CIDI

Johan oversees the UX/ICT Accessibility unit at Center for Inclusive Design and Innovation. He has extensive experience as an AT Specialist, Vision Rehabilitation Therapist, Orientation & Mobility Specialist, and Digital Accessibility Specialist. John oversees a number of Information and Communication Technology (ICT) Accessibility initiatives, including the AccessGA Project.

CIDI Services

CIDI's Mission and Purpose

- Combining decades of service and research, CIDI's mission is to improve the human condition through equal access to technology-based and research-driven information, services, and products for individuals with disabilities.

Products and Services

- **Braille Services** produces customized projects from both print materials and electronic text including partial books and chapters or graphics only using cutting-edge technology.

- **Professional E-Text** provides high-quality e-text in many formats such as PDF, DOC, DAISY, and HTML.

- **Captioning and Audio Description Services** makes classrooms, meetings, labs and other audio environments fully accessible for deaf or hard-of-hearing, includes remote captioning and captioned media.

Additional Products, Services & Research

- **Tools for Life (TFL), Georgia's Assistive Technology Act Program**, offers access to, and acquisition of, assistive technology for Georgians of all ages and disabilities so they can live, learn, work, and play independently in the communities of their choice.

- **Accessibility Compliance, Best Practice and User Experience** focuses on individual and organizational accessibility and usability needs through evaluations, testing, training, technical assistance, and website accessibility.

- **Research** focuses on accessible environments for people with disabilities including students and aging individuals in the built and virtual environment.

Serving Customers Across the Street, and Across 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

- Fortunate 500's

What is AccessGA?

AccessGA is a joint project between 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

Georgia Agencies Served Under AccessGA

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More than 35 state agencies and
Higher Ed Institutions Served

AOC	DPH	GDCS	GTA
DBHDD	DPS	GA Dept. of Law	GVRA
DDS	EPD	GA Public Libraries	Jekyll Isl. Park Serv.
Dept. of Juv. Justice	GBA	GGG	ODSO
DNR	GCDD	GPB	Office of the AG of GA
DOAS	GDC	GSFC	Sec. of State's Office
DOL	GEMA	GSFIC	Univ. System of GA

Agency-Specific Deliverables

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- Georgia Technology Authority

  Evaluation and remediation recommendations of more than a dozen Drupal templates

- The USG Galileo Application

  Application accessibility evaluation and technical assistance of the Galileo portal

- Georgia Library System

  Application accessibility evaluations and technical assistance of the PINES public catalog and Web Client

  CDC

Disability Rights are Human Rights

Civil Rights Movement Placing Spotlight on Disability Rights

Judy Heumann (1947-2023)

"Disability only becomes a tragedy when society fails to provide the things we need to lead our lives — job opportunities or barrier-free buildings, for example. It is not a tragedy to me that I'm living in a wheelchair."

– Judy Heumann
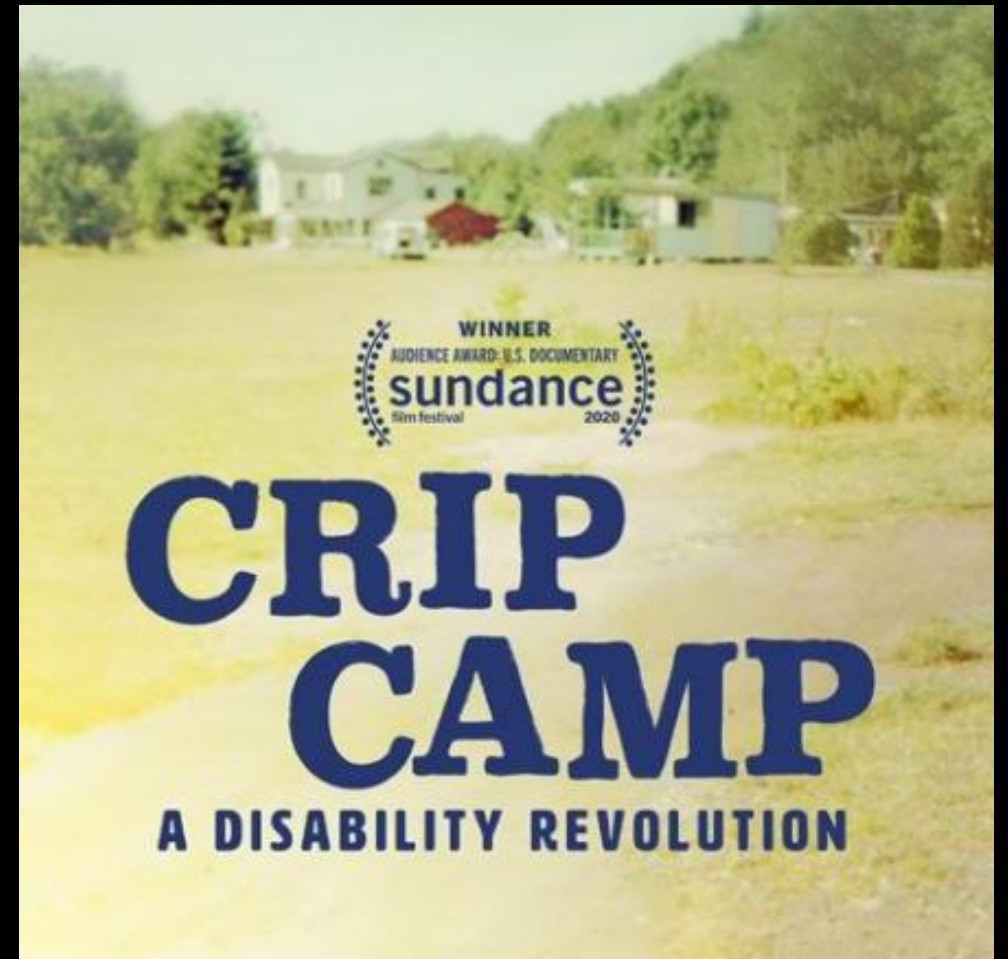
Living with a Disability

A disability can affect a person's

- Vision

- Movement

- Thinking

- Remembering

- Learning

- Communicating

- Hearing

- Mental health

- Social relationships

According to the CDC, approximately 1 in 4 (26%) of adults in the United States have some type of disability.

Hidden Disabilities

Some disabilities don't have physical signs so we cannot always tell if someone has one.

Hidden disabilities can include autism, mental health, acquired/traumatic brain injury, sensory processing, multiple sclerosis, epilepsy, partial sight and hearing loss.

Hidden Disabilities Sunflower

- Tool to voluntarily share that a person has a hidden disability and may need assistance when in shops, at work, on transport, or in public spaces

- Available in airports around the world, including at least 77 airports in the US

Personas on Disabilities: Solve for One Extend to Many

	Permanent	Temporary	Situational
Touch	One arm	Arm injury	New parent
See	Blind	Cataract	Distracted driver
Hear	Deaf	Ear infection	Bartender
Speak	Non-verbal	Laryngitis	Heavy accent

Inclusive
A Microsoft Design Toolkit

The Birth of the ADA

The ADA is a civil rights law that prohibits discrimination against individuals with disabilities in all areas of public life, including:

- Jobs

- Schools

- Transportation

- All public and private places that are open to the general public

Emphasis placed on the 'spirit' of the law, not just the 'letter' of the law

ADA Digital Accessibility Lawsuits

Number of cases between 2018 and 2022

2018	2019	2020	2021	2022
2314	2890	3503	4011	4061

- 2018: 2314 cases

- 2019: 2890 cases

- 2020: 3503 cases

- 2021: 4011 cases

- 2022: 4061 cases

Source: UsableNet

Section 504

Civil Rights Law Impacting
Education Programs and Activities

Section 504 was historic because for the first time people with disabilities were viewed as a class – a minority group. Previously, public policy had been characterized by addressing the needs of particular disabilities by category based on diagnosis.

The US Access Board

An independent agency of the United States government devoted to accessibility for people with disabilities. The US Access Board established the Section 508 standards that implement the law and provides the requirements for accessibility. Section 508 requires federal agencies to make their ICT such as technology, online training and websites accessible for everyone.

ICT Refresh (Section 508 Refresh)

- U.S. Access Board Final Rule published Jan. 18, 2017

- Harmonized with WCAG 2.0 (Level AA)

- Applies to US government agencies

- Many state and local governments have adopted the ICT Refresh and/or the WCAG standards as statutes, regulations, or policies
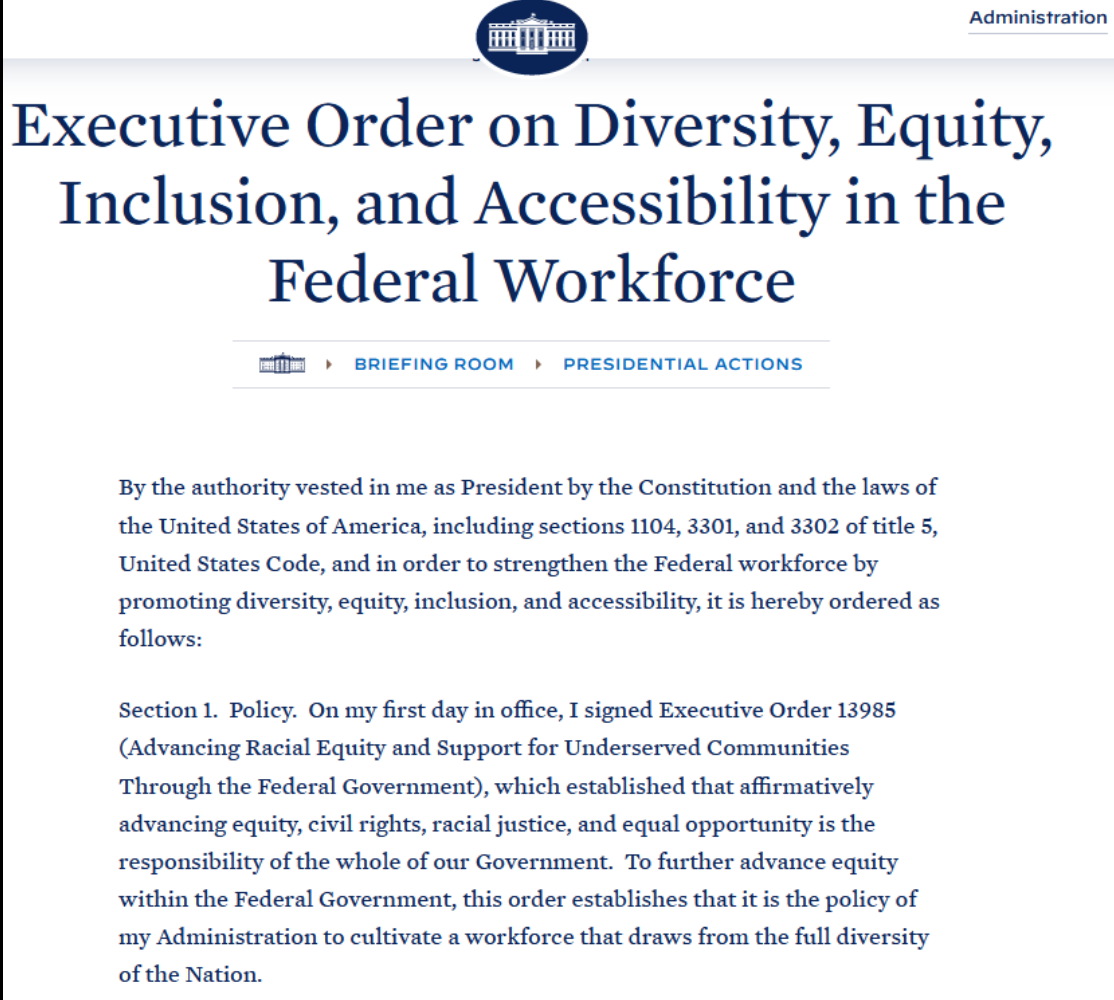
Websites and Software Applications Accessibility Act

- Proposed legislation introduced in the US Congress in September of 2022

- The law would require regulations to tell everyone how to make websites and software accessible to disabled people

White House DEIA Executive Order

- Executive Order on Diversity, Equity, Inclusion, and Accessibility in the Federal Workforce

- As the Nation's largest employer, the Federal Government must be a model for diversity, equity, inclusion, and accessibility, where all employees are treated with dignity and respect.

Administration

Executive Order on Diversity, Equity, Inclusion, and Accessibility in the Federal Workforce

BRIEFING ROOM ▸ PRESIDENTIAL ACTIONS

By the authority vested in me as President by the Constitution and the laws of the United States of America, including sections 1104, 3301, and 3302 of title 5, United States Code, and in order to strengthen the Federal workforce by promoting diversity, equity, inclusion, and accessibility, it is hereby ordered as follows:

Section 1. Policy. On my first day in office, I signed Executive Order 13985 (Advancing Racial Equity and Support for Underserved Communities Through the Federal Government), which established that affirmatively advancing equity, civil rights, racial justice, and equal opportunity is the responsibility of the whole of our Government. To further advance equity within the Federal Government, this order establishes that it is the policy of my Administration to cultivate a workforce that draws from the full diversity of the Nation.

Brief Overview of WCAG 2.0/2.1
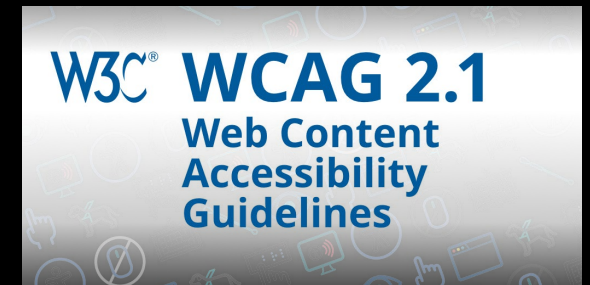
Web Content Accessibility Guidelines (WCAG)

The WCAG organizing principles for accessibility are summarized with the acronym POUR:

- **Perceivable:** Make your content easy to see and hear but include alternatives for people who cannot access content as intended.

- **Operable:** Make it possible to navigate and interact with your content using a variety tools.

- **Understandable:** Make your content predictable and consistent, avoid complicated or confusing language, and give help when possible.

- **Robust:** Accommodate a person's needs and preferences without regard to where they access content.

WCAG 2.0/2.1/2.2

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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

- **WCAG 2.2**: to be released in 2023 - adds to and updates the criteria for keyboard access and removes obsolete criteria

  - **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.

  - **Level AAA**: Achieving the best experience for all users

W3C® **WCAG 2.1**
Web Content Accessibility Guidelines

W3C®
WCAG 2.0

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 versions

"Web Content Accessibility Guidelines (WCAG) 2 is developed through the W3C process in cooperation with individuals and organizations around the world, with a goal of providing a single shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally."

Introduction to WCAG 2 – W3C.org

- WCAG is intended to be a living standard that changes as the web changes

- Content conforming to WCAG 2.1 or higher will also conform to WCAG 2.0

- WCAG 2.1 does not replace WCAG 2.0, WCAG 2.2 won't replace 2.1

- The W3C recommends using the most recent version when developing or updating content

WCAG Conformance Level

- Level A

  - Base level guidelines that all web content must meet to be usable

- Level AA

  - Guidelines that can be reasonably achieved by creators to make content more usable

- Level AAA

  - Guidelines that require a significant investment to achieve but provide a better experience

WCAG Quick Reference Guide

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

https://www.w3.org/WAI/WCAG21/quickref/

WCAG 3 (Working Draft)

- WCAG 3

  - A = Bronze

  - AA = Silver

  - AAA = Gold

  - According to W3C, it will not develop into a standard until at least "a few years."

  - Focus has shifted to digital products as well as websites

  - Rating system of 0 (very poor) to 4 (excellent)

  - Based on "outcomes" rather than the binary "true/false" statements of previous version

WCAG 3 Introduction: https://www.w3.org/WAI/standards-guidelines/wcag/wcag3-intro/
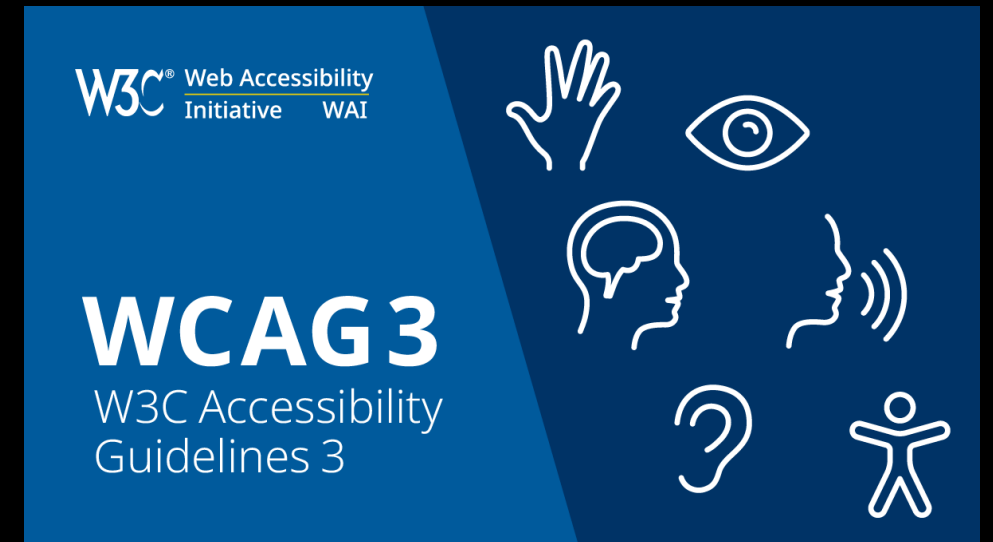
Automated Tools and Manual Testing Using Assistive Technology

Automated Tools

- Scan a webpage's code and flag issues that may cause problems with assistive technology

- Can be used by both testers and developers to quickly find low level accessibility issues

- Automated tools only find, at most, 50% of accessibility issues

Common Automated Testing Tools:

- axe from Deque (https://deque.com/axe/)

- Wave from Web AIM (https://wave.webaim.org/)

- ARC Toolkit form TPGi (https://www.tpgi.com/arc-platform/arc-toolkit/)

Assistive Technology and Manual Testing

Areas of accessibility to test:

1. **Keyboard Access**

   - Skip to main content link

   - Tab navigation

   - Activate on enter or space

   - Focus visible

2. **Site colors and Images**

   - Color contrast

   - Alternative text

   - Images of text

   - Text alternative for complex images

3. **Video and Audio Content**

   - Captions and Transcripts

   - Audio descriptions for complex video content

4. **Page Language and Instructions**

   - Language declarations

   - Understandable

   - Alternatives for complex text

   - Instructions

Test with and without Assistive Technology

Assistive Technology For Testing

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Common Screen Reader/Browser Combinations:

- Chrome & JAWS

- Firefox & NVDA

- Internet Explorer and JAWS

- Safari & Voice Over

Common Specialized AT:

- Voice-to-Text Software (Dragon Naturally Speaking)

- Switch Controls

- Voice Assistants (Alexa, Siri)
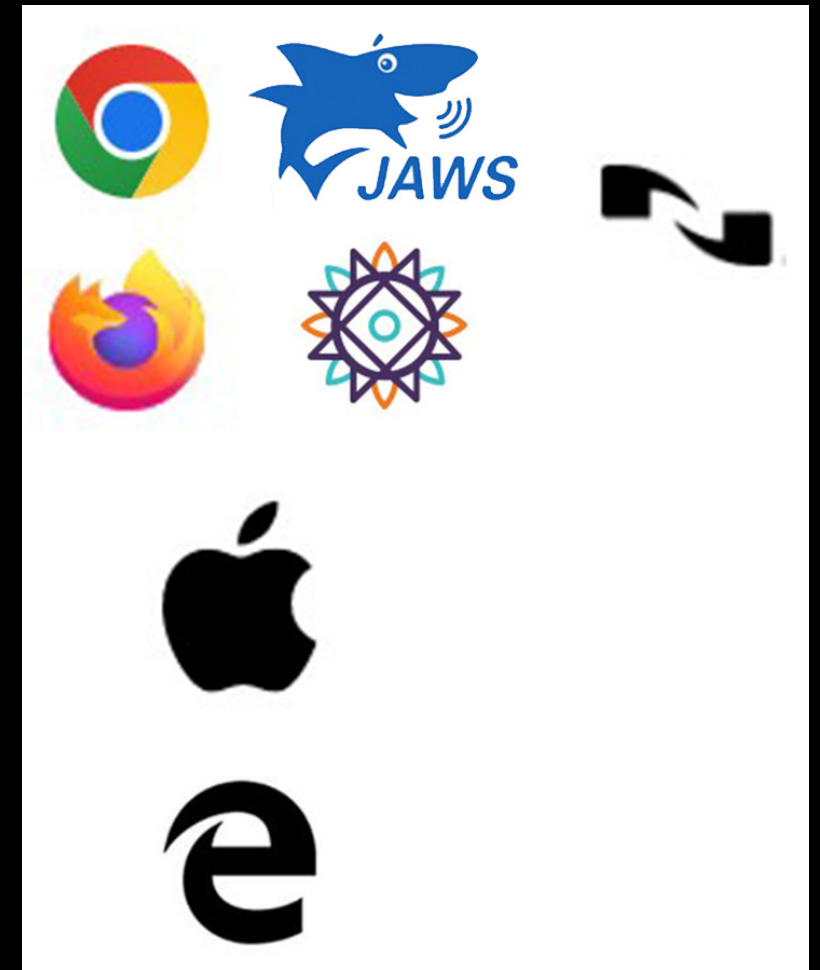
Accessibility Overlays

Overlays are a broad term for technologies that attempt to improve a website's accessibility, usually by inserting third-party code into its source code.

- Included features seem impressive but often duplicate already available assistive technology

- Rely on automated repair that may or may not meet specification

- May introduce compliance issues in other areas, like data protection

- Users with disabilities just don't like them

https://overlayfactsheet.com/

- "Companies selling overlays say they will protect a company from being sued. But lawsuits still happen when companies use overlays.",
https://www.lflegal.com/2021/11/overlay-legal-update/

Writing, Designing and Developing
for
Greater Accessibility

Writing for Web Accessibility

- Provide informative, unique page titles

- Use headings to convey meaning and structure

- Make link text meaningful

- Write meaningful text alternatives for images

- Create transcripts and captions for multimedia

- Provide clear instructions

- Keep content clear and concise

Designing for Web Accessibility

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- Provide sufficient contrast between foreground and background

- Don't use color alone to convey information

- Ensure that interactive elements are easy to identify

- Provide clear and consistent navigation options

- Ensure that form elements include clearly associated labels

- Provide easily identifiable feedback

- Use headings and spacing to group related content

- Create designs for different viewport sizes

- Include image and media alternatives in your design

- Provide controls for content that starts automatically

Developing for Web Accessibility

- Associate a label with every form control

- Include alternative text for images

- Identify page language and language changes

- Use mark-up to convey meaning and structure

- Help users avoid and correct mistakes

- Reflect the reading order in the code order

- Write code that adapts to the user's technology

- Provide meaning for non-standard interactive elements

- Ensure that all interactive elements are keyboard accessible

- Avoid CAPTCHA where possible

Best Practice: Accessibility and Usability by End User

- Include people with disabilities throughout every aspect of the project

- Ensure continued feedback is received by people with disabilities and/or AT users 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

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

New guidelines included in WCAG 2.1 like 1.4.10 Reflow and 2.5.2 Pointer Cancellation are now AA guidelines. Previous to WCAG 2.1, having your content reflow to screen size and programming page controls so users could easily cancel actions on touch screen devices were considered best practices.

By keeping up with best practices websites who rely heavily on mobile traffic will be able to avoid costly redesigns as WCAG 2.1 becomes more widely adopted.

Guidelines Can't Keep Up with the Rate Technology Changes

Following best practices may require you to innovate, not just follow guidelines. Many WCAG articles specifically mention technologies like Flash and Silverlight and design techniques like images maps. These are considered obsolete in 2023.

Popular new technologies like smart watches and new web design techniques like article cards 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 EXTENDED 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

Danatec.com

Cultural Shift Needed

Include People with Disabilities Throughout the Process

- Consider your workforce

- Establish basic understanding of disabilities

- Include implementation at the earliest stages

- Ensure a range of people with disabilities is included

A Change in Culture and Attitude

"The ADA was a wonderful achievement. But it was only the tip of the iceberg. You can pass a law but until you can change society's attitudes, that law won't mean much."

Denise Sherer Jacobson

Denise Sherer Jacobson

Denise Sherer Jacobson has spent decades working to promote education and awareness of the social and political rights of people with disabilities.

Contact Information

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