



Web Services Updates

May 29, 2025



Agenda

- What is digital accessibility?
- Why does it matter to me?
- What does it involve?
- What should I do (or stop doing)?
- What are we doing?
- What's next?

DCM Web Services



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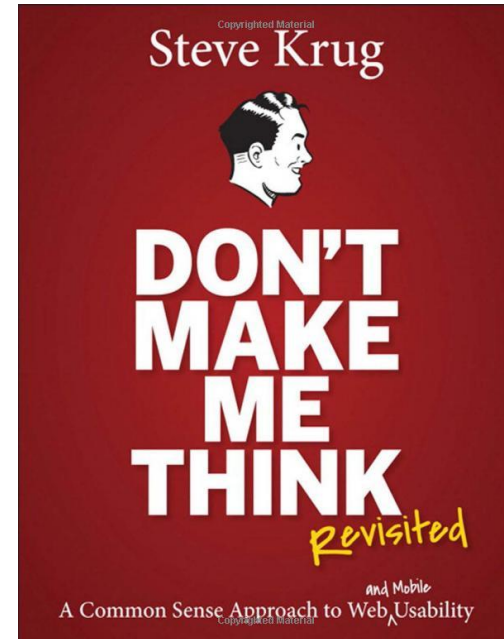


What is digital accessibility?

Individuals with disabilities are able to **independently** acquire the **same information**, engage in the **same interactions**, and enjoy the **same services** within the **same timeframe** as individuals without disabilities, with **substantially equivalent** ease of use.

Accessibility is the right thing to do.

“...Blind people with access to a computer can now read the daily newspaper on their own. Imagine that. [...] How many opportunities do we have to dramatically improve people’s lives just by doing our job a little better?”

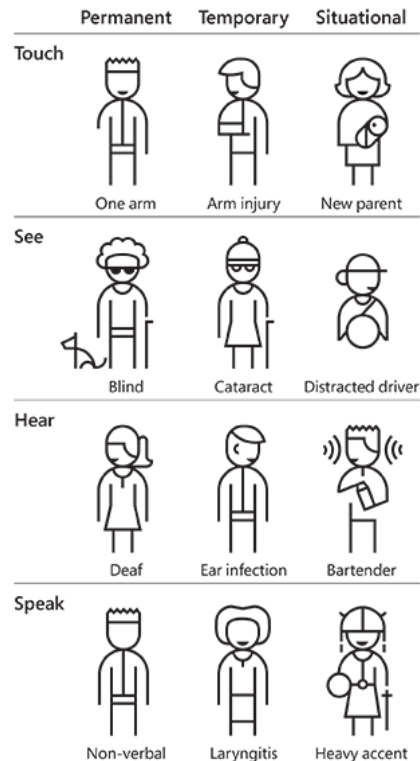


- **Steve Krug**, *Don't Make Me Think* (2000)

Accessibility is usability.

“We use the Persona Spectrum to understand related mismatches and motivations across a spectrum of **permanent**, **temporary**, and **situational** scenarios. It's a quick tool to help foster empathy and to show how a solution scales to a broader audience.”

- [Microsoft Inclusive Design](#)





Accessibility is a legal requirement.

- **Kansas**
 - [ITEC 1210-P Revision 4](#) – Information and Communication Technology Accessibility Policy
- **Federal**
 - Rehabilitation Act of 1973, as amended
 - [Section 504](#) (nondiscrimination)
 - [Section 508](#) (electronic and information technology)
 - Americans with Disabilities Act of 1990 (ADA)
 - [Title II](#) (state and local governments)



ITEC Policy 1210 Revision 4

- 6.1 All entity ICT [information and communication technology] shall be accessible to and usable by individuals with disabilities in accordance with federal and state law.
- 6.2 ICT that is **procured, developed, maintained, or used by entities**—including that provided or made available directly or through contractual, licensing, or other arrangements—shall conform to the following:
 - 6.2.1 Revised Section 508 Standards, as qualified
 - 6.2.2 ADA Title II Regulations Subpart H
 - 6.2.3 WCAG 2.1 levels A and AA



Section 504 of the Rehabilitation Act of 1973

Section 504 states that “no qualified individual with a disability in the United States shall be excluded from, denied the benefits of, or be subjected to discrimination under” any program or activity that either **receives Federal financial assistance** or is conducted by any Executive agency or the United States Postal Service.



Section 508 of the Rehabilitation Act of 1973

In 1998, Congress amended the Rehabilitation Act of 1973 to require federal agencies to make their electronic and information technology (EIT) accessible to people with disabilities. The law 29 U.S.C § 794d applies to all federal agencies when they **develop, procure, maintain, or use electronic and information technology**. Under Section 508, agencies must give disabled employees and members of the public access to information **comparable to the access available to others**.



Americans with Disabilities ACT of 1990 – Title II

Title II [...] applies to State and local government entities, and [...] protects qualified individuals with disabilities from discrimination on the basis of disability in services, programs, and activities provided by State and local government entities. Title II extends the prohibition on discrimination established by section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. 794, to all activities of **State and local governments regardless of whether these entities receive Federal financial assistance.**



Americans with Disabilities ACT of 1990 – Title II

- Final rule update on April 24, 2024
- Created a deadline for compliance (April 24, 2026)
- Introduced a technical standard for web (WCAG 2.1, Level AA)



What is a technical standard?

A technical standard says specifically what is needed for something to be accessible. For example, the existing [ADA Standards for Accessible Design](#) are technical standards that say what is needed for a building to be physically accessible under the ADA, such as how wide a door must be or how steep a ramp can be.



Web Content Accessibility Guidelines (WCAG)

- Shared technical standard to make web content accessible
- Four principles: perceivable, operable, understandable, robust
- Guidelines with testable success criteria
- Three conformance levels: A, AA, AAA
- Techniques for implementation
- [How to Meet WCAG \(Quick Reference\)](#)



Web Content Accessibility Guidelines (WCAG)

- Web Content Accessibility Guidelines (WCAG) 2.1 **defines how to make web content more accessible** to people with disabilities. Accessibility involves a wide range of disabilities, including visual, auditory, physical, speech, cognitive, language, learning, and neurological disabilities.
- WCAG 2.1 is developed through the W3C process in cooperation with individuals and organizations around the world, with a **goal of providing a shared standard for web content accessibility** that meets the needs of individuals, organizations, and governments internationally.
- Includes **principles, guidelines, success criteria, and techniques**

- [Web Content Accessibility Guidelines \(WCAG\) 2.1](#)



WCAG: Principles (POUR)

The guidelines and success criteria are organized around the following **four principles**, which lay the foundation necessary for anyone to access and use web content. Anyone who wants to use the web must have content that is:

1. **Perceivable** - Information and user interface components must be presentable to users in ways they can perceive.
2. **Operable** - User interface components and navigation must be operable.
3. **Understandable** - Information and the operation of user interface must be understandable.
4. **Robust** - Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.

- [WCAG 2.1 Understanding Docs](#)



WCAG: Principles (POUR)

“If any of these are not true,
users with disabilities will not be
able to use the Web.”



WCAG: Guidelines

Under the principles are 13 guidelines that provide the basic goals authors should work toward to make content more accessible to users with different disabilities. The **guidelines are not testable, but provide the framework** and overall objectives to understand the success criteria and better implement the techniques.



WCAG: Success Criteria

For each guideline, **testable success criteria** are provided to allow WCAG 2.1 to be used where requirements and conformance testing are necessary. Three levels of conformance are defined:

- A (lowest)
- AA
- AAA (highest)



WCAG: Sufficient and Advisory Techniques

For each of the guidelines and success criteria, the working group has documented a wide variety of techniques. Techniques are informative and fall into two categories: those that are **sufficient** for meeting the success criteria and those that are **advisory**. Where common **failures** are known, these are also documented.



What is assistive technology?

- Assistive technology (AT) is any item, piece of equipment, software program, or product system that is used to increase, maintain, or improve the functional capabilities of persons with disabilities.
- Different disabilities require different assistive technologies.
- AT can be many things, including:
 - computer hardware: special switches, keyboards, and pointing devices
 - computer software: screen readers and communication programs



What is assistive technology?

AT can be:

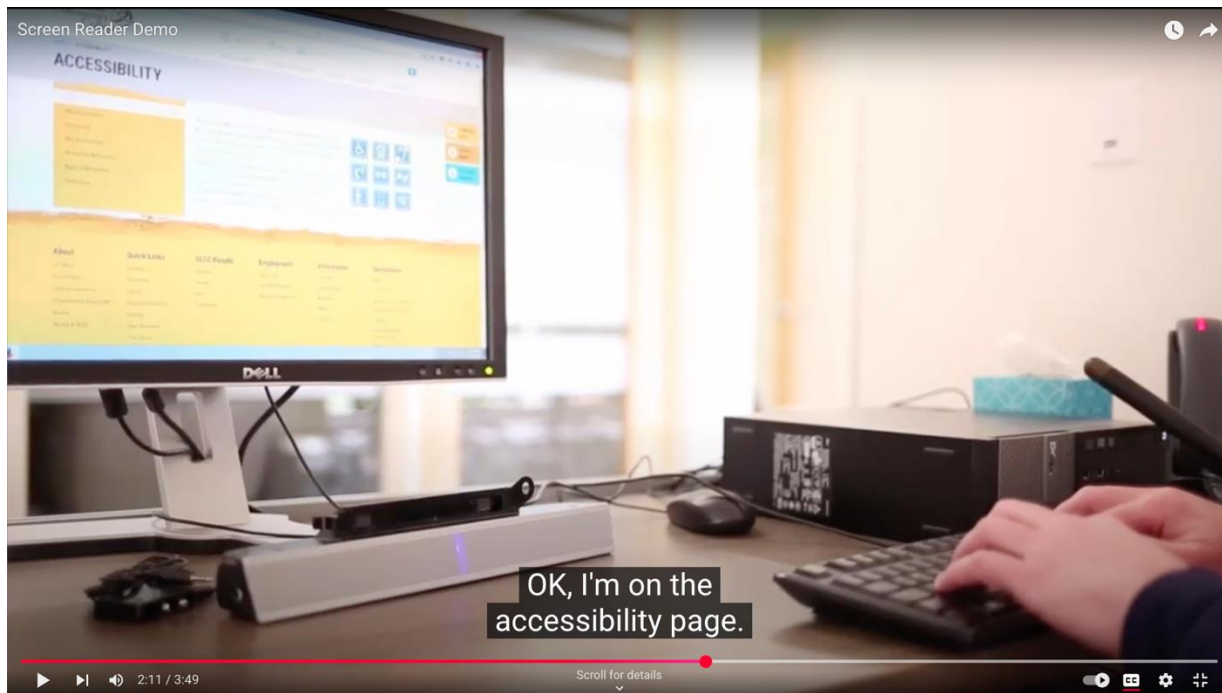
- low-tech: communication boards made of cardboard or fuzzy felt
- high-tech: special-purpose computers
- hardware: prosthetics, mounting systems, and positioning devices
- **computer hardware: special switches, keyboards, and pointing devices**
- **computer software: screen readers and communication programs**
- inclusive or specialized learning materials and curriculum aids
- specialized curricular software
- much more—electronic devices, wheelchairs, walkers, braces, educational software, power lifts, pencil holders, eye-gaze and head trackers, and much more

- [Assistive Technology Industry Association](#)

What is assistive technology?



What is assistive technology?



- [Screen Reader Demo](#)



Common Issues: Images

- 1.1.1 Non-text Content – Level A
All non-text content has a text alternative that serves the equivalent purpose.
- 1.4.5 Images of Text – Level AA
Text should be used to convey information rather than images of text.



Common Issues: Images

- Images are content.
- Avoid text in images.
- Use the alternative description, not the image title.
- Alt text should:
 - describe the image
 - be concise
 - not include redundant words (e.g., “photo of”)

Common Issues: Images

WEATHER WIZARDRY PM CAMP

Students will discover the wows and whys of weather through experimenting, hands-on activities, and building their own weather measuring devices. We will explore wind currents, forms of precipitation, cloud formations, weather forecasting, and wild weather events. For grades 4-5 only. Registration for first 24 participants in each session.

Who: Students entering grades 4-5 in Fall 2025
When: June 23 - 26, 2025
Time: 1:00 PM – 4:00 PM
Cost: \$70 per camper





Maximum of two camps per student

Weather PM Camp Registration Form \$70 NON-Refundable checks payable to:
Deadline to register is May 23, 2025 Mail form and registration fee to:
(Limited to 24 participants)

Child's Name _____ Age _____ Gender _____
Grade (Fall 2025) _____ Parent or Guardian Name _____
Any medical conditions, illnesses, allergies, etc. _____
Address _____
City _____ State _____ Zip Code _____
Home Phone _____ Work Phone _____
Parent Email _____

☐ I WILL allow my child to be videotaped/photographed.
☐ I WILL NOT allow my child to be videotaped/photographed.

Parent/Guardian Signature

-  The content is in the image.
-  The image contains a lot of text.
-  The alt text would not be concise.
-  Recreate the image in HTML.

Common Issues: Images

Publish - index.pcf

Final Check Schedule

Are you ready to publish?
Double-check your page before publishing.

html ▾ **✓ RUN ALL CHECKS**

AB **Spelling** ⓘ English ▾

🔗 **Links** ⓘ

🌐 **W3C Valid** ⓘ

✓ **Accessibility: No Issues Found** ⓘ

📅 **Schedule:** [Add Schedule](#)

Version Description 0/256

CANCEL **PUBLISH**

Insert/Edit Image ✕

General Source ⓘ

Advanced

✓ **Alternative description**
Pre-publish accessibility check with no issues f

Image title

Width Height ⓘ

Class ▾

Custom Class

ID

CANCEL **SAVE**



Common Issues: Color

- 1.4.1 Use of Color – Level A
Color is not the only visual indicator.
- 1.4.3 Contrast (Minimum) – Level AA
The visual presentation of text and images of text has a contrast ratio of at least 4.5:1

Common Issues: Color

Original



Deuteranopia
(green)



Protanopia
(red)



Tritanopia
(blue)



Achromatopsia
(no color)



Common Issues: Color

Background \ Text	#000	#A7A7A7	#D1D1D1	#FFF	#C0B5D5	#927EB4	#694190	#512888	#3D1366	#280049	#F4C55C
black #000		Text AAA 8.7	Text AAA 13.7	Text AAA 21	Text AAA 10	Text AA 5.8	Text DNP 2.7	Text DNP 2	Text DNP 1.4	Text DNP 1.1	Text AAA 12.9
ksu-gray-40 #A7A7A7	Text AAA 8.7		Text DNP 1.5	Text DNP 2.4	Text DNP 1.2	Text DNP 1.4	Text AA18 3.1	Text AA18 4.3	Text AA 5.8	Text AAA 7.3	Text DNP 1.4
ksu-gray-20 #D1D1D1	Text AAA 13.7	Text DNP 1.5		Text DNP 1.5	Text DNP 1.2	Text DNP 2.3	Text AA 4.9	Text AA 6.8	Text AAA 9.2	Text AAA 11.5	Text DNP 1
white #FFF	Text AAA 21	Text DNP 2.4	Text DNP 1.5		Text DNP 1.9	Text AA18 3.5	Text AAA 7.6	Text AAA 10	Text AAA 14.1	Text AAA 17.7	Text DNP 1.6
ksu-purple-light-75 #C0B5D5	Text AAA 10	Text DNP 1.2	Text DNP 1.2	Text DNP 1.9		Text DNP 1.8	Text AA18 3.9	Text AA 5.3	Text AAA 7.2	Text AAA 9.1	Text DNP 1.2
ksu-purple-light-50 #927EB4	Text AA 5.8	Text DNP 1.4	Text DNP 2.3	Text AA18 3.5	Text DNP 1.8		Text DNP 2.1	Text DNP 2.9	Text AA18 3.9	Text AA 4.9	Text DNP 2.2
ksu-purple-light-15 #694190	Text DNP 2.7	Text AA18 3.1	Text AA 4.9	Text AAA 7.6	Text AA18 3.9	Text DNP 2.1		Text DNP 1.3	Text DNP 1.8	Text DNP 2.3	Text AA 4.7
ksu-purple #512888	Text DNP 2	Text AA18 4.3	Text AA 6.8	Text AAA 10	Text AA 5.3	Text DNP 2.9	Text DNP 1.3		Text DNP 1.3	Text DNP 1.6	Text AA 6.4
ksu-purple-dark-25 #3D1366	Text DNP 1.4	Text AA 5.8	Text AAA 9.2	Text AAA 14.1	Text AAA 7.2	Text AA18 3.9	Text DNP 1.8	Text DNP 1.3		Text DNP 1.2	Text AAA 8.7
ksu-purple-dark-50 #280049	Text DNP 1.1	Text AAA 7.3	Text AAA 11.5	Text AAA 17.7	Text AAA 9.1	Text AA 4.9	Text DNP 2.3	Text DNP 1.6	Text DNP 1.2		Text AAA 10
ksu-yellow #F4C55C	Text AAA 12.9	Text DNP 1.4	Text DNP 1	Text DNP 1.6	Text DNP 1.2	Text DNP 2.2	Text AA 4.7	Text AA 6.4	Text AAA 8.7	Text AAA 10	







- K-State Colors in Contrast Grid



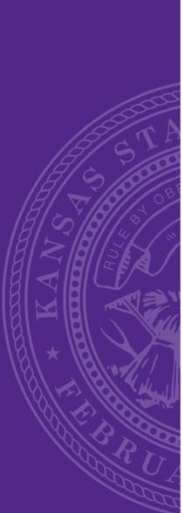
Common Issues: Links

- 2.4.4 Link Purpose (In Context) – Level A
The purpose of each link can be determined from the link text alone.
- Technique G201
Give users advanced warning when opening a new window.

Common Issues: Links


-  [Click here](#) for more information about accessibility.
-  [Click here for more information about accessibility.](#)
-  Click here for [more information about accessibility.](#)
-  To learn more, additional [information about accessibility](#) is available.
-  Additional [information about accessibility](#) is available in the WCAG quick reference (*opens new window*).
-  Additional information about accessibility is available at <https://www.w3.org/WAI/WCAG22/quickref/> (*opens new window*).

Common Issues: Links




Insert/Edit Link ×



Basic
Advanced


URL
{{f:72859939}} 

/cms/help/templates/accessibility/template-full-width/index.pcf

 Text to display
Full-width

Title

 Open link in...
Current window 

Class
(not set) 

Custom Class

CANCEL SAVE



Common Issues: Content

- 1.3.1 Info and Relationships – Level A
Information, structure, and relationships conveyed through presentation can be programmatically determined.
 - H51: Use table markup to present tabular information
 - H48: Use ol and ul for lists
 - H42: Using h1-h6 to identify headings
- 1.3.3 Sensory Characteristics - Level A
Instructions for understanding and operating content do not rely solely on sensory characteristics of components such as shape, color, size, visual location, orientation, or sound..



Common Issues: Content

- 2.4.2 Page Titled – Level A
Web pages have titles that describe the topic or purpose.
- 2.4.6 Headings and Labels – Level AA
Headings and labels describe the topic or purpose.

Common Issues: Content

Web Services



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Web Developer



Is it tabular data?



Missing table headings



Missing captions

[Adding table headings in the CMS.](#)

[Adding table captions in the CMS.](#)

Common Issues: Content

2024

[December 2024](#)

[November 2024](#)

[October 2024](#)

[September 2024](#)

[August 2024](#)

[July 2024](#)

[June 2024](#)

[May 2024](#)

[April 2024](#)

[March 2024](#)

[February 2024](#)

[January 2024](#)

Bullet list

- [December 2024](#)
- [November 2024](#)
- [October 2024](#)
- [September 2024](#)
- [August 2024](#)
- [July 2024](#)
- [June 2024](#)
- [May 2024](#)
- [April 2024](#)
- [March 2024](#)



Items are visually grouped.



AT reads the number of items.



Related items are not grouped.

Common Issues: Content

Standard-level Template

Base

Reports

✗ Relies on style instead of structure.

✗ Does not follow heading order.



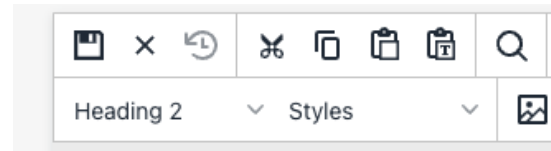
Standard-level Template

Base

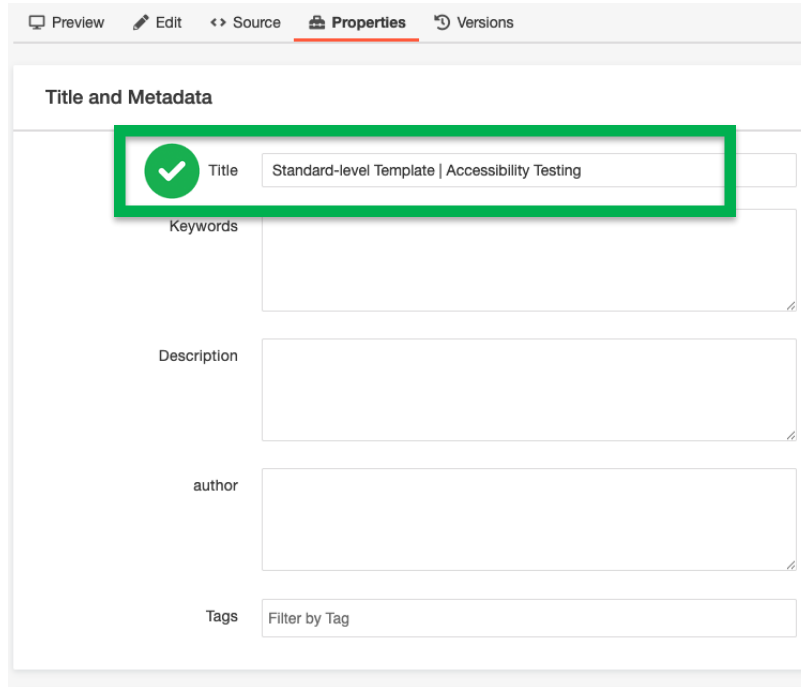
Reports

✓ Uses semantic structure.

✓ Follows heading order.



Common Issues: Content



The screenshot shows a document management interface with a top navigation bar containing 'Preview', 'Edit', 'Source', 'Properties' (highlighted with a red underline), and 'Versions'. Below this is a 'Title and Metadata' section. The 'Title' field is highlighted with a green border and contains a green checkmark icon followed by the text 'Standard-level Template | Accessibility Testing'. Below the title field are input fields for 'Keywords', 'Description', 'author', and 'Tags'. The 'Tags' field has a placeholder text 'Filter by Tag'.

Preview Edit Source **Properties** Versions

Title and Metadata

✓ Title Standard-level Template | Accessibility Testing

Keywords

Description

author

Tags Filter by Tag

Common Issues: Content

- ✕ [Click here](#) for more information about accessibility.
- ✕ More information about accessibility can be found below.
- ✕ More information about accessibility can be found **in red**.



What are we doing now?

- Testing templates and components for accessibility issues.
- Fixing issues to ensure the “clean” CMS accessibility checks.
 - Templates will be updated by June 13.
 - Components will be August 1.
- Beginning a vendor partnership for additional accessibility testing and monitoring.



What's next?

- Next meeting tentatively scheduled for July 17 at 1:30.
- Removing inactive CMS users.
- Be sure to join the Canvas course (CMS 101) and accept the user agreement.
- Launching the first module (accessibility) in CMS 101.
- Questions?

KANSAS STATE

U N I V E R S I T Y