



Accessibility is not Accessible?

What You Need to Know

Tech Forward 2025

 **TECHIMPACT[®]**
Digital Services Division

Hi, there!

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He/Him





Why is it important?



Social



Technical



Financial



Legal

What areas does it involve?



Technology



Design



Content

What products does it include?



Documents



Web & Social



Presentations



Software



Mobile



Media

All Information and Communication Technology (ICT)

What is digital accessibility?



Simply put, web accessibility means that every user, regardless of circumstance, can use and contribute to the web.



WCAG Principles (version 2.2)



Perceivable



Operable



Understandable



Robust

“POUR”

Understanding Conformance

Principle  **Guidelines**  **Success Criteria**

4 Principles

13 Guidelines

More than 70
criteria across all
Levels: A, AA,
and AAA

What do the guidelines actually look like?

1.	Perceivable	1
1.1	Text Alternatives	
1.1.1	Non-text Content	
1.2	Time-based Media	
1.2.1	Audio-only and Video-only (Prerecorded)	
1.2.2	Captions (Prerecorded)	
1.2.3	Audio Description or Media Alternative (Prerecorded)	
1.2.4	Captions (Live)	
1.2.5	Audio Description (Prerecorded)	
1.2.6	Sign Language (Prerecorded)	
1.2.7	Extended Audio Description (Prerecorded)	
1.2.8	Media Alternative (Prerecorded)	
1.2.9	Audio-only (Live)	
1.3	Adaptable	
1.3.1	Info and Relationships	
1.3.2	Meaningful Sequence	
1.3.3	Sensory Characteristics	
1.3.4	Orientation	
1.3.5	Identify Input Purpose	
1.3.6	Identify Purpose	
1.4	Distinguishable	
1.4.1	Use of Color	
1.4.2	Audio Control	
1.4.3	Contrast (Minimum)	
1.4.4	Resize text	
1.4.5	Images of Text	
1.4.6	Contrast (Enhanced)	
1.4.7	Low or No Background Audio	



Perceivable

- Nothing can be invisible to all of a user's senses
- Text equivalents, captions, and transcripts, oh my!
- Proper color contrast
- Flexible design



Operable

- Must be keyboard-friendly and usable by all input mechanisms
- Properly structured site architecture and content
- Controls over animation, auto-updating or moving content
- Giving enough time for actions



Understandable

- Language of page and parts
- No surprises from interactions
- Clear instructions and definitions of elements, errors
- Consistent navigation and naming



Robust

- Backwards compatible and futureproof
- Components' names, roles, states, properties, and values must be available to all assistive technology (AT)
- AT alerted to status messaging, but not interrupting the user

What can you do?



How do I start?



Planning



Discovery
& Design



Content
Creation



Planning

1. **Build in, not bolt on.**



Planning

1. Build in, not bolt on
2. **Accessibility as a requirement**



Planning

1. Build in, not bolt on.
2. Accessibility as a requirement
- 3. Plan for training**



Discovery and Design

1. Universal and Inclusive Design













































Discovery and Design

1. Universal and Inclusive Design
2. **Personas with limitations**



Discovery and Design

1. Universal and Inclusive Design
2. Personas with limitations
3. **Vet mockups**

	White text #FFFFFF Aa	Light text #B3EFFF Aa	Bright text #00CFFF Aa	Medium text #046B99 Aa	Dark text #1C304A Aa	Black text #000000 Aa
 Black background #000000						
 Dark background #1C304A						
 Medium background #046B99						
 Bright background #00CFFF						
 Light background #B3EFFF						
 White background #FFFFFF						



Discovery and Design

1. Universal and Inclusive Design
2. Personas with limitation
3. Vet mockups
4. **Pilot test, test, test!**



Content

1. Check your content's reading level and structure.

- Aim for a 6th-grade reading level.
- Employ a logical progression of broader information to more specific.
- Use headings to provide cues about information hierarchy.
- Keep it short: sentences *and* paragraphs.
- Be directive and provide clear instructions.
- Always use active voice.



Content Accessibility Matters

As the creators of a highly popular WYSIWYG rich text editor, [CKSource](#) is no stranger to web standards. [CKEditor](#) is responsible for producing a good part of the HTML content online so it must always generate semantic markup. Web standards are what keep the Internet from chaos and accessibility plays an important role in this. CKEditor is proud of being fully compliant with the most important industry standards:

- [Web Content Accessibility Guidelines \(WCAG\)](#)
- [Section 508 Amendments](#)
- [WAI-ARIA](#)
- [IBM Web Accessibility Checklist](#)

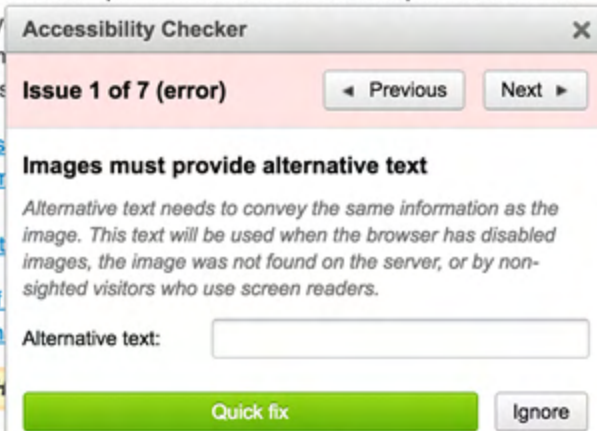
It also includes a [number of features](#) such as intuitive [keyboard navigation](#).

Accessibility Checker Is Here

Accessibility Checker is an integrated tool that allows you to check the accessibility of content created in CKEditor and **immediately solve** any accessibility issues that are found.

It is built upon three key elements:

- 1) **Intuitive user interface** optimized for quick problem solving.
- 2) **Flexibility** allowing you to use the **accessibility checking engine** of your choice.



Hemingway Editor

Readability

Grade 6

Good

Words: 133

Show More ▾

2 adverbs, meeting the goal of 2 or fewer.

1 use of passive voice, meeting the goal of 2 or fewer.

1 phrase has a simpler alternative.

1 of 11 sentences is hard to read.

1 of 11 sentences is very hard to read.

Hemingway App makes your writing bold and clear.

The app highlights lengthy, complex sentences and common errors; if you see a yellow sentence, shorten or split it. If you see a red highlight, your sentence is so dense and complicated that your readers will get lost trying to follow its meandering, splitting logic — try editing this sentence to remove the red.

You can utilize a shorter word in place of a purple one. Mouse over them for hints.

Adverbs and weakening phrases are helpfully shown in blue. Get rid of them and pick words with force, perhaps.

Phrases in green have been marked to show passive voice.

You can format your text with the toolbar.

Paste in something you're working on and edit away. Or, click the Write button and compose something new.

AI-based Tools for Assessing / Adjusting Reading Levels

Diffit

Cathoven AI

Flint AI Text Leveler



Content

1. Check your content's reading level and structure.
- 2. Write meaningful links.**



[Read More](#)



[Click here to read more about our staff.](#)



Content

1. Check your content's reading level and structure.
2. Write meaningful links.
- 3. Optimize your images.**

File Size	Under 100kb, if possible Under 500kb for banner images
Maximum Resolution	72 DPI



Content

1. Check your content's reading level and structure.
2. Write meaningful links.
3. Optimize your images.
- 4. Limit your use of animated images.**
 - Keep it static as much as you can.
 - Pause the GIF on pageload and avoid autoplay
 - Photosensitive Epilepsy Analysis Tool



Content

1. Check your content's reading level and structure.
2. Write meaningful links.
3. Optimize your images.
4. Limit your use of animated images.
- 5. Write helpful alternative text.**
 - Rule of thumb: Alt-text describes the image content, captions provide editorial information.



Content

1. Check your content's reading level and structure.
2. Write meaningful links.
3. Optimize your images.
4. Limit your use of animated images.
5. Write helpful alternative text.
- 6. Provide alternative versions of video and audio.**

Testing:

**How can I ensure an
accessible digital product?**

Notes on Testing

- Test with automated tools *and* manually
- Use more than one automated tool.
- You can control content and design. A vendor may need to help you fix technical errors.
- Good news: if you're using an accessible CMS, you may find many of the issues *are* likely content-related.

Automated Tools



Siteimprove
browser extension



Microsoft
Accessibility Insights



WAVE
browser extension



Manual Keyboard Testing

TAB

Go forward

TAB

+

SHIFT

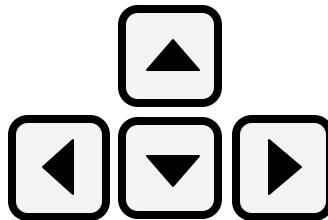
Go backward

ENTER

OR

SPACE

Activate



Move around





Ensuring Accessibility

1. Choose a CMS that is accessible out of the box.
2. Bake accessibility into any RFP process & requirements.
3. Thoroughly vet your vendor's experience.
4. Protect yourself in the contract.
5. Understand that compliance is an ongoing process.

Resources

For Planners, Content Editors, and Everyone:

WCAG Accessibility Standards: <https://www.w3.org/TR/WCAG22/>

ADA Section 508 Standards Roadmap: bit.ly/508toolkit

Accessibility Testing Tools: <https://wave.webaim.org/>

Manual Testing for Accessibility: <https://accessibility.huit.harvard.edu/manual-testing-accessibility>

Multimedia Accessibility: <https://accessibility.psu.edu/multimedia/>

Writing Alt Tags: <https://accessibility.psu.edu/images/alttext/>

Long Descriptions: <http://accessibility.psu.edu/images/longdescription/>

WCAG-EM Report Tool: <https://www.w3.org/WAI/eval/report-tool/#/>

Hemingway Editor: <https://hemingwayapp.com/>

Resources

For Developers:

Google Accessibility Developer Tools: <https://developer.chrome.com/docs/devtools/accessibility/reference>

WAVE Chrome & Firefox Extensions: bit.ly/wave-ext

The W3C Markup Validation Service: bit.ly/w3validate

Web Design References/How to Articles: bit.ly/access-howto

NV Access Screen Reader: bit.ly/nv-access

Text Spacing Bookmarklet: <https://codepen.io/stevef/pen/YLMqbo>

Resources

For Designers:

WCAG Contrast Checker: bit.ly/cc-checker

10 principles of inclusive web design: bit.ly/idx-principles

U.S. Government Web Design System: bit.ly/us-design

You can do it!

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