



WordCamp

KRAKÓW 2025

From Theory to Practice: Getting Started with Accessibility Testing



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Resources & Tools



<https://bit.ly/WCKRK25>

What Will We Cover?

Introduction

What is accessibility?

Foundations of Accessibility Testing

How to approach accessibility, guidelines and references

Tools Useful in Testing

Overview of plugins, tools, and screen readers

Manual Testing

Keyboard navigation and visual page inspection

Screen Readers

Focus areas and how screen readers read a page

The Four Principles of Accessibility (POUR)

- Perceivable
- Operable
- Understandable
- Robust

*"The power of the Web is in its universality.
Access by everyone regardless of disability is an essential aspect."*

– Tim Berners-Lee, W3C Director and inventor of the World Wide Web

source: www.w3.org

Why is Accessibility Essential?

- Ensures Accessibility for People with Disabilities
- Legal Compliance
- Improves User Experience for Everyone
- Expands Audience Reach
- Ethical and Social Responsibility

Foundations of Accessibility Testing

When should we think about accessibility on our website?

Accessibility Guidelines & References

Web Content Accessibility Guidelines 2.2

How to Meet WCAG (Quick Reference)

WAI-ARIA Authoring Practices Guide

WAI-ARIA Specification

MDN Web Docs: ARIA

Tools Useful in Testing

- Google Lighthouse
- Unighthouse
- WAVE Evaluation Tool
- axe DevTools – Web Accessibility Testing
- IBM Equal Access Accessibility Checker
- WCAG Color Contrast checker
- Text Spacing Editor
- ARIA DevTools
- HeadingsMap
- Chrome Settings – Appearance
- Chrome DevTools – Accessibility Pane
- Chrome DevTools – Contrast Ratio
- Using Multiple Chrome Profiles
- Screen Readers
 - NVDA (Windows)
 - VoiceOver (Apple)
 - TalkBack (Android)

Keyboard Navigation Basics

| | |
|----------------------------------|---|
| Navigate to interactive elements | TAB - navigate forward SHIFT + TAB - navigate backward |
| Link | ENTER - activate the link |
| Button | ENTER or SPACEBAR - activate the button |
| Checkbox | SPACEBAR - check/uncheck a checkbox |
| Radio buttons | SPACEBAR - select the focused option (if not selected) ↑/↓ or ←/→ - navigate between options TAB - leave the group of radio buttons |
| Select (dropdown) menu | ↑/↓ - navigate between options SPACEBAR - expand ENTER/ESC - select option and collapse |
| Autocomplete | Type to begin filtering ↑/↓ - navigate to an option ENTER - select an option |
| Dialog | ESC - close |

| | |
|-------------|--|
| Slider | ↑/↓ or ←/→ - increase or decrease slider value HOME/END - beginning or end |
| Menu bar | ↑/↓ - previous/next menu option ENTER - expand the menu (optional) and select an option. ←/→ - expand/collapse submenu |
| Tab panel | TAB - once to navigate into the group of tabs and once to navigate out of the group of tabs ↑/↓ lub ←/→ - choose and activate previous/next tab. |
| 'Tree' menu | ↑/↓ - navigate previous/next menu option ←/→ - expand/collapse submenu, move up/down one level. |
| Scroll | ↑/↓ - scroll vertically ←/→ - scroll horizontally SPACEBAR/SHIFT + SPACEBAR - scroll by page |

Manual Testing: Keyboard Navigation

- Focus is visible on every element we land on and has appropriate contrast.
- A component a user can focus on should not initiate a change of context on focus or on input without user confirmation.
- We can skip directly to the main content using a button.
- We can use all website functionalities using only the keyboard.
- The site does not contain elements that can get us stuck.
- We cannot access elements that are not visible.
- We navigate through the page from the top to the bottom.
- Elements available on hover are also available via keyboard.
- Modals correctly trap focus while open, and users can exit them using the ESC key, a close button, or other standard methods.

Manual Testing: Visual Inspection

- Interactive elements are appropriately sized and spaced from neighboring elements, making them easy to target.
- Sliders and any autoplay elements have an option to stop, and autoplay does not last longer than 5 seconds unless necessary.
- No element blinks more than 3 times per second.
- The page has sufficient contrast ratio everywhere and at any given window size.
- The text on our site is readable, and the font scales correctly up to 200% zoom, including images with text.
- At a width of 1280px and 400% zoom, there is no loss of content or functionality of the site, nor is there an additional scrollbar.
- Input errors are clearly identified, with accessible labels, instructions, and helpful suggestions for correction.

Screen Readers

- All elements are clearly described using semantic HTML, with ARIA used only when needed and without introducing incorrect or redundant information.
- Images have an alt attribute, and if the image is not decorative, the alt text accurately describes what is in the image.
- Elements with the same description should behave the same way.
- The main navigation and other navigational elements are always clearly marked and described.
- The dynamic behaviors of a page are clearly signaled.
- Input purposes are programmatically identified using attributes like autocomplete, helping screen readers convey more than just the label.
- The main language of the page and any language changes are programmatically identified using the lang attribute.

THANK YOU!

Share your feedback
about my speech.

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COMMENT!



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