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The Must-Have WCAG 2.1 Checklist

A practical resource for understanding and assessing the accessibility of your website, web content, and web applications

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What is WCAG?

The Web Content Accessibility Guidelines, or WCAG, are a set of technical standards that, when followed, improve the accessibility of web content, websites, and web applications for people with a wide range of disabilities—including auditory, cognitive, neurological, physical, speech, and visual disabilities.

WCAG was created by the W3C, the World Wide Web Consortium, which is a global community of accessibility experts striving to make the internet as inclusive as possible. WCAG provides a single, common, global standard for web accessibility, enabling designers, developers, and authors to remove barriers that users with disabilities may encounter online. Importantly, following WCAG also helps organizations comply with various legal mandates, like the Americans with Disabilities Act (ADA), Section 508 of the Rehabilitation Act, the Accessibility for Ontarians with Disabilities Act (AODA), and others. In some cases, to comply with legal requirements, web content ***must*** conform with WCAG standards.

So how well does your web content, website, or web application conform with WCAG?

This practical guide explains the different WCAG principles, versions, and conformance levels, and how to test for WCAG conformance. It includes an interactive WCAG success criteria checklist to help you evaluate your current state of accessibility.

WCAG 101

Before evaluating your web content for WCAG conformance, it's important to understand the WCAG principles, the versions of WCAG that have been released, and the different conformance levels.

POUR principles

WCAG is organized by four main principles, which state that content must be perceivable, operable, understandable, and robust. They are often referred to by the acronym POUR. These principles can be applied to any kind of digital product or service, no matter the underlying technology:

Perceivable

Information and user interface components must be presentable to users in ways they can perceive. For example, it's important to present information that can be perceived in different ways, where a user can adjust color contrast or font size, or view captions for videos.

Operable

User interface components and navigation must be operable and cannot require interaction that a user cannot perform. As an example, required interactions must be operable using keyboard or voice commands.

Understandable

Information and the operation of a user interface must be understandable. For example, information and instructions should be clear and navigation methods should be easy to understand and use.

Robust

Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies. As technologies evolve, code and content should remain accessible for users of common and current assistive devices and tools.

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Various versions

WCAG exists in three versions: 1.0, 2.0, and 2.1. Updated versions were released to keep pace with changes in technology. The first version, WCAG 1.0, was released in 1999. A later version, WCAG 2.0, came out in 2008. In June 2018, the W3C released WCAG 2.1, which builds upon the guidelines in 2.0, introducing additional success criteria related to newer technologies, and addressing a broader range of disability-related needs. The various versions of WCAG are backwards compatible, meaning if content conforms to WCAG 2.1, it also conforms to WCAG 2.0.

What's new with WCAG 2.1?

Mobile

- Improves support for touch interactions, keyboard, and mouse
- Avoids unintended activation of device sensors

Low vision

- Extends contrast requirements to graphics
- Improves text and layout adaptability

Cognitive and learning disabilities

- Enables more detailed description of page controls and elements to support personalization of user interfaces

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Conformance levels

There are three levels of WCAG conformance: A, AA, and AAA.
Level A refers to the lowest level of conformance (minimum) and Level AAA is the highest (maximum):

- **Level A** = minimum WCAG conformance has been met, with web page and content satisfying all Level A Success Criteria (or a conforming alternate version is provided)
- **Level AA** = the web page satisfies all WCAG Level A and Level AA Success Criteria (or a Level AA conforming alternate version is provided)
- **Level AAA** = the web page satisfies all Level A, Level AA, and Level AAA Success Criteria (or a Level AAA conforming alternate version is provided)

		Success Criteria		
Level		**WCAG 2.0**	**WCAG 2.1**	**Total WCAG 2.0 and 2.1**
A	The most basic web accessibility features	25	5	30
AA	Deals with the biggest and most common barriers for users with disabilities	13	7	20
AAA	The highest (and most complex) level of web accessibility	23	5	28
Total		**61**	**17**	**78**

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How high should you aim?

The W3C encourages organizations to follow the most recent version, WCAG 2.1 Level AA conformance. It recommends Level AA because all of the technical standards in Level AAA may not be applicable or realistic in all situations.

Reinforcing the W3C's recommendation, the U.S. Department of Justice (DOJ) has begun to point to WCAG 2.1 in its enforcement actions. The DOJ is the organization responsible for enforcing the ADA. Conformance with WCAG 2.1 AA is the current best practice for optimum accessibility and legal compliance in the U.S., and in many other global jurisdictions.

WCAG 2.2

The W3C has released a working draft of WCAG 2.2, which includes nine new success criteria. These criteria focus on accessibility for users with low vision, cognitive and learning disabilities, and limited fine motor skills. They also offer more guidance for mobile devices and e-books. The W3C is expected to release its final draft of 2.2 in late 2022 or early 2023.

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Start testing

To gauge WCAG conformance, first conduct an evaluation of your website or web content. This evaluation can consist of the step-by-step process of thoroughly and diligently testing whether that experience is usable by people with disabilities.

A comprehensive accessibility evaluation typically involves a combination of automated testing and extensive manual evaluation.

Automated testing

Automated testing (or scanning) is a great first step in the testing process. There are several tools to use to conduct automated testing. We recommend you determine which will work with your firewall settings, as well as for your design and developer teams. Quality assurance (QA) teams will likely leverage even more tools to ensure compliance and usability. Here is a list of free automated testing tools for consideration as you get started:

Code validation

W3C CSS Validator software was created by the W3C to help web designers and web developers check Cascading Style Sheets (CSS). It can be used via the free web service, or downloaded and used either as a java program or as a java servlet on a web server. This tool allows a comparison of style sheets to the CSS specifications, and helps find errors, typos, and incorrect uses of CSS. It will also advise when the CSS poses some usability risks.

Color contrast

The WebAIM Contrast Checker is an online tool that enables users to enter the hex codes of foreground and background color. It will reveal the contrast ratio between the two, ensuring you meet WCAG recommendations. If the two colors do not have a high enough contrast, this tool enables you to adjust either color until the proper contrast is met, providing the new hex code.

Mobile accessibility

Two tools serve the mobile accessibility space. Accessibility Scanner checks the accessibility of Android apps. For iOS, Accessibility Inspector can be used. Both apps are utilized by developer and QA teams.

Document accessibility

The Document Accessibility Toolbar is a dedicated accessibility ribbon menu for Microsoft Word that makes it quicker and easier to create accessible documents. This toolbar features a range of hand-picked and custom-built functions to optimize and validate a document for accessibility.

The PDF Accessibility Checker PAC 3 allows for the checking of PDF accessibility. It works even for those who do not have Adobe Acrobat Professional.

Web accessibility

The WAVE tool by WebAIM scans a URL, delivering a report that uses a simple red, yellow, or green icon to show errors, warnings, and elements that pass. It also has a built-in ARIA checker and color contrast analyzer, and enables a user to turn on/off style sheets.

Manual and functional testing

Manual and functional testing will build upon automated testing results. In this process, accessibility experts, which should include users with disabilities, check website features and flows using assistive technology. This evaluation will confirm or dismiss any issues reported in an automated scan, as well as identify any new issues that should be resolved.

Getting started with manual testing

There are several ways to accomplish manual testing:

Option 1:
Build an in-house team of accessibility testers to perform QA on digital assets in development.

Option 2:
Hire an outside consultant to provide a one-time report outlining issues identified and barriers encountered.

Option 3 (recommended):
Work with an accessibility partner on an ongoing basis. A partner should provide automated testing as well as give you access to an expert team to manually check digital assets in multiple environments using different assistive technologies. These partners will also work with you to develop a prioritization report outlining the critical, high, medium, and low-level issues; monitor your digital properties on an ongoing basis; and integrate seamlessly into your backend systems for better team collaboration.

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WCAG 2.1 A, AA, and AAA checklists

As you test your content, or partner with a company to conduct testing, the following interactive WCAG checklist will serve as a helpful tracking guide for applicable success criteria:

WCAG 2.1 Level A checklist

Success Criteria	Description	Pass/Fail	Complete
1.1.1 – Non-text Content	Provide text alternatives for non-text content	○ ○	☐
1.2.1 – Audio-only and Video-only (Pre-recorded)	Provide an alternative to video-only and audio-only content	○ ○	☐
1.2.2 – Captions (Pre-recorded)	Provide captions for videos with audio	○ ○	☐
1.2.3 – Audio Description or Media Alternative (Pre-recorded)	Video with audio has a second alternative	○ ○	☐
1.3.1 – Info and Relationships	Logical structures	○ ○	☐
1.3.2 – Meaningful Sequence	Present content in a meaningful order	○ ○	☐
1.3.3 – Sensory Characteristics	Use more than one sense for instructions	○ ○	☐
1.4.1 – Use of Color	Don't use presentation that relies solely on color	○ ○	☐

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WCAG 2.1 Level A checklist *(continued)*

Success Criteria	Description	Pass/Fail	Complete
1.4.2 – Audio Control	Don't play audio automatically	○ ○	☐
2.1.1 – Keyboard	Accessible by keyboard only	○ ○	☐
2.1.2 – No Keyboard Trap	Don't trap keyboard users	○ ○	☐
2.1.4 – Character Key Shortcuts	Do not use single-key shortcuts, or provide a way to turn them off or change them	○ ○	☐
2.2.1 – Timing Adjustable	Time limits have user controls	○ ○	☐
2.2.2 – Pause, Stop, Hide	Provide user controls for moving content	○ ○	☐
2.3.1 – Three Flashes or Below	No content flashes more than three times per second, or the flash is below the general flash and red flash thresholds	○ ○	☐
2.4.1 – Bypass Blocks	Provide a "Skip to Content" link	○ ○	☐
2.4.2 – Page Titled	Helpful and clear page title	○ ○	☐
2.4.3 – Focus Order	Logical order	○ ○	☐
2.4.4 – Link Purpose (In Context)	Every link's purpose is clear from its context	○ ○	☐

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WCAG 2.1 Level A checklist *(continued)*

Success Criteria	Description	Pass/Fail	Complete
2.5.1 – Pointer Gestures	Users can perform touch functions with assistive technology or one finger	○ ○	☐
2.5.2 – Pointer Cancellation	This requirement applies to web content that interprets pointer actions	○ ○	☐
2.5.3 – Label in Name	The name contains the text that is presented visually	○ ○	☐
2.5.4 – Motion Actuation	Functions that are triggered by moving a device or by gesturing towards a device can also be operated by more conventional user interface components	○ ○	☐
3.1.1 – Language of Page	Page has a language assigned	○ ○	☐
3.2.1 – On Focus	Elements do not change when they receive focus	○ ○	☐
3.2.2 – On Input	Elements do not change when they receive input	○ ○	☐
3.3.1 – Error Identification	Clearly identify input errors	○ ○	☐
3.3.2 – Labels or Instructions	Label elements and give instructions	○ ○	☐
4.1.1 – Parsing	No major code errors	○ ○	☐
4.1.2 – Name, Role, Value	Build all elements for accessibility	○ ○	☐

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WCAG 2.1 Level AA checklist

Success Criteria	Description	Pass/Fail	Complete
1.2.4 – Captions (Live)	Live videos have captions	○ ○	☐
1.2.5 – Audio Description (Pre-recorded)	Users have access to audio description for video content	○ ○	☐
1.3.4 – Orientation	Authors do not rely on a screen orientation	○ ○	☐
1.3.5 – Identify Input Purpose	Ensure common names are provided using the HTML autocomplete list	○ ○	☐
1.4.3 – Contrast (Minimum)	Contrast ratio between text and background is at least 4.5:1	○ ○	☐
1.4.4 – Resize Text	Text can be resized to 200% without loss of content or function	○ ○	☐
1.4.5 – Images of Text	Don't use images of text	○ ○	☐
1.4.10 – Reflow	Your website must be responsive	○ ○	☐
1.4.11 – Non-Text Contrast	Minimum of 3:1 color contrast ratio for user interface components and states and graphical objects that convey meaningful information	○ ○	☐
1.4.12 – Text Spacing	Text spacing can be overridden to improve the reading experience	○ ○	☐

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WCAG 2.1 Level AA checklist *(continued)*

Success Criteria	Description	Pass/Fail	Complete
1.4.13 – Content on Hover Focus	Content visible on hover or keyboard focus does not lead to accessibility issues	○ ○	☐
2.4.5 – Multiple Ways	Offer several ways to find pages	○ ○	☐
2.4.6 – Headings and Labels	Use clear headings and labels	○ ○	☐
2.4.7 – Focus Visible	Keyboard focus is visible and clear	○ ○	☐
3.1.2 – Language of Parts	Tell users when the language on a page changes	○ ○	☐
3.2.3 – Consistent Navigation	Use menus consistently	○ ○	☐
3.2.4 – Consistent Identification	Use icons and buttons consistently	○ ○	☐
3.3.3 – Error Suggestion	Suggest fixes when users make errors	○ ○	☐
3.3.4 – Error Prevention (Legal, Financial, Data)	Reduce the risk of input errors for sensitive data	○ ○	☐
4.1.3 – Status Messages	Status messages can be presented to the user by AT without receiving focus	○ ○	☐

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WCAG 2.1 Level AAA checklist

Success Criteria	Description	Pass/Fail	Complete
1.2.6 – Sign Language (Pre-recorded)	Provide sign language translations for videos	○ ○	☐
1.2.7 – Extended Audio Description (Pre-recorded)	Provide extended audio description for videos	○ ○	☐
1.2.8 – Media Alternative (Pre-recorded)	Provide a text alternative to videos	○ ○	☐
1.2.9 – Audio-only (Live)	Provide alternatives for live audio	○ ○	☐
1.3.6 – Identify Purpose	Anticipates the release of cognitive metadata to be used with assistive technology to simplify interfaces	○ ○	☐
1.4.6 – Contrast (Enhanced)	Contrast ratio between text and background is at least 7:1	○ ○	☐
1.4.7 – Low or No Background Audio	Audio is clear for listeners to hear	○ ○	☐
1.4.8 – Visual Presentation	Offer users a range of presentation options	○ ○	☐
1.4.9 – Images of Text (No Exception)	Don't use images of text	○ ○	☐

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WCAG 2.1 Level AAA checklist *(continued)*

Success Criteria	Description	Pass/Fail	Complete
2.1.3 – Keyboard (No Exception)	Accessible by keyboard only, without exception	○ ○	☐
2.2.3 – No Timing	No time limits	○ ○	☐
2.2.4 – Interruptions	Don't interrupt users	○ ○	☐
2.2.5 – Re-authenticating	Save user data when re-authenticating	○ ○	☐
2.2.6 – Timeouts	Users need to be warned of the duration of any inactivity that could cause data loss	○ ○	☐
2.3.2 – Three Flashes	No content flashes more than three times per second	○ ○	☐
2.3.3 – Animation from Interactions	Motion animation triggered by interaction can be deactivated	○ ○	☐
2.4.8 – Location	Let users know where they are	○ ○	☐
2.4.9 – Link Purpose (Link Only)	Every link's purpose is clear from its text	○ ○	☐
2.4.10 – Section Headings	Break up content with headings	○ ○	☐
2.5.5 – Target Size	The size of the target for pointer inputs is at least 44 x 44 CSS pixels	○ ○	☐

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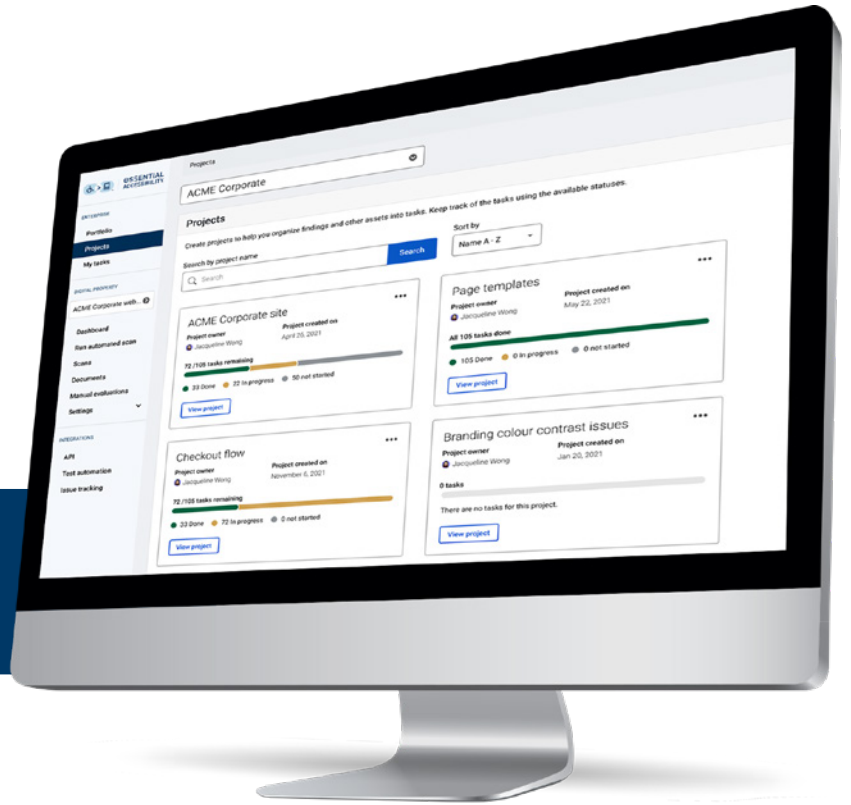
WCAG 2.1 Level AAA checklist *(continued)*

Success Criteria	Description	Pass/Fail	Complete
2.5.6 – Concurrent Input Mechanism	Web content does not restrict use of input modalities available on a platform	○ ○	☐
3.1.3 – Unusual Words	Explain any strange words	○ ○	☐
3.1.4 – Abbreviations	Explain any abbreviations	○ ○	☐
3.1.5 – Reading Level	Users with nine years of school can read your content	○ ○	☐
3.1.6 – Pronunciation	Explain any words that are hard to pronounce	○ ○	☐
3.2.5 – Change on Request	Don't change elements until users ask	○ ○	☐
3.3.5 – Help	Provide detailed help and instructions	○ ○	☐
3.3.6 – Error Prevention (All)	Reduce the risk of all input errors	○ ○	☐

Let's get started

Whether you want help evaluating the state of accessibility for your web content, website, or web application, or you're ready to make them accessible, eSSENTIAL Accessibility is here to help. Our comprehensive accessibility platform combines tooling, testing, and technology with access to expert services and training, enabling you to meet your accessibility objectives and scale with confidence.



Request a demo of our solution today.

www.essentialaccessibility.com
info@essentialaccessibility.com
1 (866) 333-3909