The Must-Have WCAG 2.1 Checklist

Practical Resource Guide

eSSENTIAL ACCESSIBILITY®

What is WCAG?

The Web Content Accessibility Guidelines or WCAG provides technical specifications to improve the accessibility of web content, websites and web applications on desktop computers, laptops, tablets and mobile devices for people with a wide range of disabilities, including auditory, cognitive, neurological, physical, speech and visual disabilities.

W3C, or World Wide Web Consortium, is a global community of accessibility experts who are striving to make the internet as inclusive as possible. The Web Accessibility Initiative (WAI) develops WCAG and related resources with input from individuals and organizations around the world.

The guidelines are mainly for the use of web content developers, web authoring tool developers and related professions; they aren't intended to be an introduction to accessibility. However, it is helpful for companies and organizations, especially employees who contribute to their digital properties, to have a general understanding of WCAG, its purpose and how it benefits not only people with disabilities, but all users.

This checklist is a practical resource guide for experienced accessibility professionals and for those newer to the industry. The first part is a primer of industry nomenclature and accessibility testing approaches. Fillable and printable checklists follow.

WCAG 2.1 Highlights

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 interface

EN 301 549 Coordination

- Harmonized update in progress in Europe
- Particularly for expanded mobile

What's Different About WCAG 2.1?

WCAG 2.0, released nearly 10 years ago, contains 12 guidelines for digital accessibility, divided among four principles with the acronym P.O.U.R: Perceivable, Operable, Understandable and Robust. Each guideline has a list of "success criteria," or requirements (61 in total), for making content – including text, images, sounds, code and markup – more accessible. In addition, WCAG 2.0 has three levels of conformance: **A (minimum accessibility), AA (addresses the major, most common accessibility issues) and AAA (the highest standard).**

The success criteria found in WCAG 2.0 are included in WCAG 2.1 – the wording of those criteria has not changed. That means that WCAG 2.1 is "backwards compatible" or, as W3C puts it, "content that conforms to WCAG 2.1 also conforms to WCAG 2.0."

What's new about WCAG 2.1 is that it includes 17 new success criteria related to mobile accessibility, as well as provisions that will benefit more people.

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**

Should You Follow WCAG 2.0 or 2.1?

WCAG 2.1 doesn't supersede or cancel out WCAG 2.0 – they are both "existing standards" – but W3C encourages organizations to use the most recent version of WCAG when developing or updating their content or digital accessibility policy.

Authorities that enforce major accessibility laws, including the *Americans with Disabilities Act* (ADA), Section 508 of the *Rehabilitation Act*, and the *Accessibility for Ontarians with Disabilities Act* (AODA), continue to require that organizations comply with WCAG 2.0, conformance level AA. However, this could change in the future.

If your company is in the process of making its website and other digital tools and technologies accessible and conform to WCAG 2.1 Level A and AA, it's a good idea to implement the additional 17 success criteria now to ensure maximum accessibility.

Largest Changes in WCAG 2.1: Mobile Specific Highlights

When testing mobile platforms for accessibility, individuals had to map the old WCAG 2.0 standards to mobile design guidelines to apply WCAG to mobile.

Now, new mobile requirements in WCAG 2.1 help guide the way:

Speech Input

- Character Key Shortcuts
- Label in Name

Pointer

- Pointer Gestures
- Pointer Cancellation
- Target Size

Input Methods

- Concurrent Input Mechanisms
- Motion Actuation

Device Settings

- Orientation

Other Standards that can be applicable to Mobile

- Identify Input Purpose
- Reflow
- Non-Text Contrast
- Text Spacing
- Content on Hover or Focus

Level Breakdown

Level A – 5 New Standards

Guideline 2.1 Keyboard Accessible

- 2.1.4 Character Key Shortcuts

Guideline 2.5 Input Modalities

- 2.5.1 Pointer Gestures
- 2.5.2 Pointer Cancellation
- 2.5.3 Label in Name
- 2.5.4 Motion Actuation

Level AA – 7 New Standards

Guideline 1.3 Adaptable

- 1.3.4 Orientation
- 1.3.5 Identify Input Purpose

Guideline 1.4 Distinguishable

- 1.4.10 Reflow
- 1.4.11 Non-Text Contrast
- 1.4.12 Text Spacing
- 1.4.13 Content on Hover or Focus

Guideline 4.1 Compatible

- 4.1.3 Status Messages

Level AAA – 5 New Standards

Guideline 1.3 Adaptable

- 1.3.6 Identify Purpose

Guideline 2.2 Enough Time

- 2.2.6 Timeouts

Guideline 2.3 Seizures and Physical Reactions

- 2.3.3 Animation from Interactions

Guideline 2.5 Input Modalities

- 2.5.5 Target Size
- 2.5.6 Concurrent Input Mechanisms

Each of these breakdown levels link to the W3C for additional definition depth.

Testing Against WCAG 2.1

When we use the term "digital accessibility testing" we're referring to the step-by-step process of thoroughly and diligently checking whether or not an internal or external-facing website, mobile app, software application, or LMS is usable by people with disabilities.

Proper accessibility testing of these digital properties typically involves extensive manual scrutiny of individual web pages against the WCAG 2.1 success criteria, as well as tests of various functions such as product searches and online form submissions.

It can also mean using automated testing tools to check for accessibility of various, specific elements of the digital property. The best approach is usually a combination of both.

Automated Testing

There are many tools available that will perform an automated test of certain components of a website, mobile experience, app, or electronic document. They can be quite useful for doing preliminary inspections. Accessibility experts often use various tools in concert to effectively test a website.

Automated accessibility testing is a great way to learn more about the different reasons why persons with disabilities might encounter problems. However, this form of testing has limitations. Only about 30% of the WCAG 2.0 success criteria and precisely 0% of the WCAG 2.1 success criteria can be tested using an automated tool.

There are a number of tools to conduct preliminary automated testing. It is recommended that you determine which tools will work with firewall settings and design and developer teams use the same tools. QA teams will likely leverage even more tools to ensure compliance and usability. Here is a listing of free tools for you to peruse to get you 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 on their free service on the web, or downloaded and used either as a java program, or as a java servlet on a web server. This tool will allows comparison of style sheets to the CSS specifications, helps find errors, typos, and incorrect uses of CSS. It will also advise when the CSS poses some usability risks.

Color Contrast and Color Blindness

The Colour Contrast Analyser is a downloadable tool that helps determine the legibility of text and the contrast of visual elements, such as graphical controls and visual indicators. Currently, the tool supports WCAG 2.1 compliance indicators.

Mobile Accessibility

Two tools serve the mobile accessibility space. For Android, Accessibility Scanner checks for accessibility in Android apps. For iOS, Accessibility Inspector can be used to check for accessibility. Both apps are utilized by developer and QA audiences.

Document Accessibility

The Document Accessibility Toolbar (DAT) 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 PDFs for accessibility. It works even for people that do not have Adobe Acrobat Professional.

Web Accessibility

The WAVE by WebAIM tool is one of the favorites in the industry as it uses a simple Red, Yellow, Green icon to show errors, warnings and good areas. It also has an ARIA check and color contrast analyzer built in, and you can turn on/off style sheets. Currently, it only checks against WCAG 2.0. Other tools offer specificity of analysis for content, design, developers and QA teams.

Manual and Functional Testing

Manual and functional testing are an essential component of accessibility testing. These testing types involve using human expertise to check the automated tests and then having trained teams and persons with disabilities actually engage with the digital experiences directly. There simply isn't any technology that can replace this portion of accessibility testing. When conducting a manual review, a sample test plan should include the following components:

Ensure you're testing the most accurate environments for all users:

• Check Google Analytics to determine high trafficked pages.

• Cross reference this list against WebAIM's Screen Reader Survey and Low Vision Survey.

Cross check the accessibility features with HTML 5 Browser Accessibility to ensure all features are supported

Keyboard accessibility check

Code validation check

Automated accessibility tool check

User stories for manual and functional testing:

• Develop accessibility-related user stories, such as:

  • *As a keyboard only user, I want the ability to reach all links (text or image), form controls and page functions, so that I can perform an action or navigate to the place I choose.*

  • *As a user who is hearing-impaired, I want closed captioning functionality so that I can have access to all information provided in video clips.*

• Ask yourself the questions:

  • *Why is the screen reader reading the sidebar before the main article?*

  • *Do I have to tab through every page and every navigation before getting to the content? (Why isn't there a skip to content link?)*

  • *What does image IMG_238429.jpg mean?*

  • *What did I miss on the page?*

There are a number of ways organizations can ramp up their manual testing capabilities:

Option 1

Build an in-house team of accessibility testers to perform QA on digital properties in development.

Option 2

Hire an outside consultant to systematically test the website, apps and/or electronic documents. They will provide you with a one-time report outlining the issues and barriers encountered.

Option 3

Work with an accessibility partner over time with access to a team of testers who manually check digital properties in multiple environments using different assistive technologies. These partners 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 to better collaborate with your team.

WCAG 2.1 Level A Checklist

Project:

Digital Asset:

Date:

Success Criteria	Description	Notes	Pass/Fail
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 an 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 Colour	Don't use presentation that relies solely on colour		
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		

WCAG 2.1 Level A Checklist (continued)

Success Criteria	Description	Notes	Pass/Fail
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		
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 trigged 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		

Result

WCAG 2.1 Level AA Checklist

Project:

Digital Asset:

Date:

Success Criteria	Description	Notes	Pass/Fail
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	Requires authors not to 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	High contrast between pieces of text and their backgrounds		
1.4.12 – Text Spacing	Text spacing can be overridden to improve the reading experience		
1.4.13 – Content on Hover Focus	Ensuring content visible on hover or keyboard focus does not lead to accessibility issues		
2.4.5 – Multiple Ways	Offer several ways to find pages		

WCAG 2.1 Level AA Checklist (continued)

Success Criteria	Description	Notes	Pass/Fail
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 Changes	Distances between paragraphs, rows, words and characters must be able to be increased to a certain value		

Result

WCAG 2.1 Level AAA Checklist

Project:

Digital Asset:

Date:

Success Criteria	Description	Notes	Pass/Fail
1.2.6 – Sign Language (Pre-recorded)	Provide sign language translations for videos		
1.2.7 – Extend 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 simply 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		
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		

WCAG 2.1 Level AAA Checklist (continued)

Success Criteria	Description	Notes	Pass/Fail
2.3.2 – Three Flashes	No content flashes more than three times per second		
2.3.3 – Animation from Interaction	Motion animation triggered by interaction can be disabled		
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		
2.5.6 – Concurrent Input Mechanisms	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		

Result

eSSENTIAL ACCESSIBILITY

eSSENTIAL ACCESSIBILITY is a comprehensive digital accessibility platform. We help organizations create inclusive web, mobile, and product experiences through digital accessibility testing, evaluation and remediation. Organizations can then enhance the digital experience for people with disabilities, comply with regulatory and statutory accessibility standards, and project an inclusive and disability-friendly presence.

To learn more about how you can make your web, mobile, and product experiences accessible, visit **www.essentialaccessibility.com**

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