

Web Content Accessibility Guidelines (WCAG) 2.1 Level AA

WCAG 2.1, level AA are a set of standards developed by the World Wide Web Consortium (W3C) that ensure digital content is accessible to everyone, including people with disabilities.

Category	Criteria	Description	Description (Simplified)	Pass	Fail	N/A	Description of issue
Images	1.1.1 Non-text Content (A)	Informative images must contain alternative text describing the purpose or meaning of the image.	Add descriptive text to explain what the image shows				
Images	1.1.1 Non-text Content (A)	Decorative images must have empty alternative text or be otherwise hidden from assistive technology.	Hide decorative images from screen readers				
Images	1.1.1 Non-text Content (A)	Interactive images must have alternative text describing the input's purpose.	Describe what happens when an interactive image is clicked				
Images	1.1.1 Non-text Content (A)	Complex images (graphs, maps, charts) or images of text must have a text description of all relevant information.	Provide full text explanation of complex visual information				
Forms and Inputs	1.1.1 Non-text Content (A)	CAPTCHAs must be identified with alternative text.	Add text describing the CAPTCHA challenge				
Forms and Inputs	1.1.1 Non-text Content (A)	CAPTCHAs which require user input offer at least two different modalities (e.g., visual and auditory).	Provide multiple ways to complete CAPTCHA (visual and audio)				
Content	1.1.1 Non-text Content (A)	Adjacent links navigating to the same destination must be combined into a single link.	Combine links that go to the same place				
Multimedia	1.1.1 Non-text Content (A)	Video and audio content or iFrames which present user-readable content require a title or description.	Add title or description to multimedia content				
Multimedia	1.2.1 Audio-only and Video-only (Prerecorded) (A)	Audio-only content must supply a text transcript. The location must be referenced in the accessible name of the audio content.	Provide written text for audio-only content				

Multimedia	1.2.1 Audio-only and Video-only (Prerecorded) (A)	Video-only content supplies either a text transcript or audio description. The location must be referenced in the accessible name of the video content.	Add text or audio description for video-only content				
Multimedia	1.2.2 Captions (Prerecorded) (A)	Multimedia content must have caption support for audio. Captions must be accurate, must include dialogue, the individual speaking, and any relevant audio information.	Add accurate captions that capture all spoken words and sounds				
Multimedia	1.2.3 Audio Description or Media Alternative (Prerecorded) (A)	Multimedia content must supply a text transcript OR an audio description.	Provide either a text transcript or audio description				
Multimedia	1.2.4 Captions (Live) (AA)	Live multimedia content must be captioned. Captions must be accurate, must include dialogue, the individual speaking, and any relevant audio information.	Add real-time captions for live content				
Multimedia	1.2.5 Audio Description (Prerecorded) (AA)	Multimedia content must supply an audio description, which accurately informs the user of any important visual information not already conveyed through audio.	Add spoken narration explaining visual details not in original audio				
Structure	1.3.1 Info and Relationships (A)	Visually grouped blocks of content must be organized by appropriate landmarks.	Use correct HTML tags to show content structure				
Structure	1.3.1 Info and Relationships (A)	Landmarks which are used more than once on a page must be distinguishable from each other using ARIA.	Make repeated page elements unique with ARIA attributes				

Structure	1.3.1 Info and Relationships (A)	Content which conveys information through presentation (e.g., bold, italics, emphasis, etc.) has that information conveyed semantically or in text.	Ensure visual formatting has matching semantic meaning				
Structure	1.3.1 Info and Relationships (A)	Semantic markup must be utilized to appropriately convey the intent of the content (e.g., text appearing as a heading must be a semantic heading).	Use correct HTML headings that match visual hierarchy				
Structure	1.3.1 Info and Relationships (A)	Headings must follow appropriate hierarchy and have accurate level assignments.	Create logical heading structure from h1 to h6				
Structure	1.3.1 Info and Relationships (A)	Page structure and semantics are implemented with HTML. Page styling is implemented with CSS.	Separate content structure from visual design				
Forms and Inputs	1.3.1 Info and Relationships (A)	Form controls must have programmatically associated labels.	Ensure form inputs have clear, linked labels				
Forms and Inputs	1.3.1 Info and Relationships (A)	Form controls as part of a group must be semantically grouped and labeled.	Group related form fields with appropriate tags				
Content	1.3.1 Info and Relationships (A)	Data tables are used to present tabular data. Data tables must include table headers, which are associated to the correct table cells through the scope attribute or appropriate ARIA role of "rowheader" or "columnheader."	Use correct table headers and cell associations				
Content	1.3.1 Info and Relationships (A)	Data tables which are titled must be titled with the caption element.	Add captions to data tables				

Content	1.3.1 Info and Relationships (A)	Layout tables must not include table headers, captions, or summaries. They should be marked with role="presentation".	Use presentation role for design-only tables				
Structure	1.3.1 Info and Relationships (A)	All elements with semantic roles contain all required parent and child elements. (e.g., a "list" must contain "listitem").	Ensure semantic elements have correct nested structure				
Content	1.3.1 Info and Relationships (A)	All content is available to assistive technology.	Make all page content readable by screen readers				
Structure	1.3.2 Meaningful Sequence (A)	The order in which text is presented visually matches the order which text is presented programmatically (e.g., by a screen reader).	Maintain consistent reading order for screen readers				
Content	1.3.2 Meaningful Sequence (A)	Whitespace is not utilized to create text spacing within a word. Whitespace is not utilized to create columns or tables visually in plain text.	Avoid using spaces to create visual layouts				
Content	1.3.3 Sensory Characteristics (A)	Instructions for operating web-based content and cues for identifying content does not rely exclusively on color, shape, size, position, or sound. (Above/Below references are allowed.)	Provide multiple ways to understand instructions beyond visual cues				
Resizing	1.3.4 Orientation (AA)	Content is viewable in portrait and landscape device orientations, and the user is not prompted to switch orientation unless a specific orientation is essential.	Support both portrait and landscape views				
Forms and Inputs	1.3.5 Identify Input Purpose (AA)	The purpose of any form input about the user is identified in code when the purpose is defined in HTML https://www.w3.org/TR/WCAG21/#input-purposes	Clearly define form input purposes in code				

Color	1.4.1 Use of Color (A)	Color may not exclusively distinguish between plain text and interactive text without a 3:1 color contrast difference.	Ensure color isn't the only way to distinguish text types				
Color	1.4.1 Use of Color (A)	Color may not exclusively identify content or distinguish differences in any content (e.g., red items are invalid, green items are valid).	Use additional indicators beyond color				
Multimedia	1.4.2 Audio Control (A)	Auto-playing audio that lasts longer than 3 seconds must be pausable OR have an independent volume control.	Allow control of auto-playing sounds				
Color	1.4.3 Contrast (Minimum) (AA)	Large-scale (24px or 19px bold) text must have a color contrast ratio of 3:1. Logos, inactive components, and pure decoration are excluded.	Ensure sufficient color contrast for large text				
Color	1.4.3 Contrast (Minimum) (AA)	Non Large-scale text must have a color contrast ratio of 4.5:1. Logos, inactive components, and pure decoration are excluded.	Ensure sufficient color contrast for small text				
Resizing	1.4.4 Resize Text (AA)	Text can be resized up to 200% without page content disappearing or losing functionality.	Allow text zooming without breaking page layout				
Resizing	1.4.4 Resize Text (AA)	Text can be resized up to 200% without text clipping through other elements.	Prevent text overlap when resizing				
Images	1.4.5 Images of Text (AA)	Images of text are not used when the same presentation can be made with native HTML/CSS. Logos and branding are excluded.	Use actual text instead of text images when possible				

Resizing	1.4.10 Reflow (AA)	Content may only scroll in one dimension (horizontal or vertical) at a width and height equivalent of 320x256 pixels or larger. Excluded is content where a two-dimensional layout is necessary (video, data tables, maps, diagrams etc..)	Ensure content is readable on small screens				
Color	1.4.11 Non-text Contrast (AA)	Active user interface components must meet a 3:1 color contrast ratio. (This includes buttons, inputs, custom focus indicators, dropdowns, checkboxes, and radio buttons.)	Ensure UI components have sufficient color contrast				
Color	1.4.11 Non-text Contrast (AA)	Graphical objects which describe important content must meet a 3:1 color contrast ratio; except flags, real life imagery, branding, reference screencaps, and heatmaps.	Make important graphics visually distinguishable				
Resizing	1.4.12 Text Spacing (AA)	No content or functionality may be lost when text is set to: line spacing of 1.5x font size, letter spacing at 0.12x font size, word spacing at 0.16x font size, and paragraph spacing 2x the font size.	Maintain readability when adjusting text spacing				
Keyboard	1.4.13 Content on Hover or Focus (AA)	Content generated by hover or focus can be dismissed without moving hover or focus.	Allow easy dismissal of hover/focus content				
Keyboard	1.4.13 Content on Hover or Focus (AA)	Content generated by hover or focus of an element can be hovered over without the content disappearing.	Keep hover content visible when interacting				
Keyboard	1.4.13 Content on Hover or Focus (AA)	Content generated by hover or focus of an element do not disappear until dismissed, is no longer valid, or hover or focus is removed.	Maintain hover content until intentionally closed				

Keyboard	2.1.1 Keyboard (A)	All interactive elements must be able to be navigated to and interacted with using a keyboard only.	Ensure all features work with keyboard navigation				
Keyboard	2.1.1 Keyboard (A)	Timing of keystrokes must not be required for interacting with any functionality.	Avoid time-sensitive keyboard interactions				
Keyboard	2.1.1 Keyboard (A)	Functionality available when using a cursor must be available to keyboard input.	Match mouse and keyboard interaction capabilities				
Keyboard	2.1.2 No Keyboard Trap (A)	Focus that enters any element must be able to leave that element. If the method requires more than ESC, Arrow Keys, or Tab, the user must be informed of the method.	Allow easy keyboard navigation out of page elements				
Keyboard	2.1.4 Character Key Shortcuts (A)	If any keyboard shortcut only requires letter, number, punctuation, or symbol characters, an option exists to turn it off, OR to remap it to include CTRL or ALT modifiers, OR it is only active on focus.	Provide options to modify or disable keyboard shortcuts				
Motion	2.2.1 Timing Adjustable (A)	Any time limit may be disabled, extended (with a 20-second warning), or adjusted; unless it is part of a current real-life event, it is essential, or it has a time limit of 20 hours or more.	Allow users to extend or remove time-sensitive content				
Motion	2.2.2 Pause, Stop, Hide (A)	Any moving, blinking, or scrolling information that starts automatically, lasts over 5 seconds, and is part of other content must include a pause, stop, or hide mechanism.	Provide control over automatically moving content				
Motion	2.2.2 Pause, Stop, Hide (A)	Any automatically updating content that starts automatically and is part of other content must include a pause, stop, or hide mechanism.	Allow users to control auto-updating content				

Motion	2.3.1 Three Flashes or Below Threshold (A)	No content may flash more than 3 times per any 1-second period.	Prevent content that could trigger seizures				
Keyboard	2.4.1 Bypass Blocks (A)	Content which repeats on multiple webpages has a mechanism to skip over it.	Add skip links for repetitive page elements				
Content	2.4.2 Page Titled (A)	All pages have a title, which details the topic or purpose of the page. Titles should be organized from most-specific to least-specific.	Create descriptive and specific page titles				
Keyboard	2.4.3 Focus Order (A)	Focus order should closely follow the visual layout and design of the page.	Maintain logical keyboard navigation flow				
Keyboard	2.4.3 Focus Order (A)	TabIndex values must not interfere with the proper tab sequence of the page.	Avoid disrupting natural tab navigation				
Keyboard	2.4.3 Focus Order (A)	Modals or any popup/flyout must gain focus and keep focus until dismissed.	Ensure proper focus management for popups				
Content	2.4.4 Link Purpose (In Context) (A)	Link destination is described by link text on its own or by link text programmatically associated with other text on the page (except where the destination is ambiguous to all users).	Make link purposes clear from their text				
Structure	2.4.5 Multiple Ways (AA)	Two or more mechanisms of finding a webpage are available, unless the page is accessed as part of a step in a process.	Provide multiple ways to navigate to pages				
Content	2.4.6 Headings and Labels (AA)	Each heading describes the topic or purpose of its proceeding content.	Create meaningful and descriptive headings				

Forms and Inputs	2.4.6 Headings and Labels (AA)	Each label describes the purpose of its associated input.	Write clear and specific form input labels				
Keyboard	2.4.7 Focus Visible (AA)	Every focusable element has a focus indicator present.	Show clear visual indication of keyboard focus				
Interaction	2.5.1 Pointer Gestures (A)	All functionality that uses multipoint or path-based gestures can be operated with a single pointer without a path-based gesture, unless a multipoint or path-based gesture is essential.	Allow alternative interaction methods for complex gestures				
Interaction	2.5.2 Pointer Cancellation (A)	Functionality operated with a single pointer must: not fire on the down event; fire on the up-event along with a way to abort or undo; reverse the function on the up-event, or complete an essential function on the down event.	Provide ways to cancel or undo pointer interactions				
Forms and Inputs	2.5.3 Label in Name (A)	For user interface components with labels that include text or images of text, the accessible name contains the text that is presented visually.	Ensure visible labels match programmatic labels				
Interaction	2.5.4 Motion Actuation (A)	Any functionality activated by device motion can be performed with a user interface component that does not require motion.	Provide alternative to motion-based interactions				
Interaction	2.5.4 Motion Actuation (A)	Any functionality activated by device motion can be disabled.	Allow users to turn off motion-based features				
Structure	3.1.1 Language of Page (A)	The default language of each page must be defined in the html tag.	Specify page's primary language in HTML				

Structure	3.1.2 Language of Parts (AA)	All text in a language different than the page default must be identified; aside from proper names, technical terms, words without a defined language, and words which are part of the immediate surrounding text's vernacular.	Mark sections with different languages				
Keyboard	3.2.1 On Focus (A)	When a user interface component gains focus, it may not trigger a change of context. (e.g., on focus must not submit a form, launch a new window, cause an immediate change of focus, or change the purpose of any page content.)	Prevent unexpected actions on element focus				
Interaction	3.2.2 On Input (A)	If a change of context is triggered by a change in a setting or value of a user interface component (for example, changing the option of a select box), the user must be warned beforehand.	Warn users before automatic context changes				
Structure	3.2.3 Consistent Navigation (AA)	Navigations which are utilized on multiple pages keep the same relative order on all pages, unless the user initiates the change. (Items can be removed or added, but they must maintain the same order relative to each other.)	Maintain consistent navigation layout across pages				
Structure	3.2.4 Consistent Identification (AA)	Any components with similar functionality used on multiple pages must be labeled identically and function identically. (e.g. a header Search field must be labeled the same on all pages)	Use consistent labels for similar page elements				

Forms and Inputs	3.3.1 Error Identification (A)	Whenever an input error is detected through validation, the user is informed of the error, and what was incorrect in the input.	Clearly explain form input errors				
Forms and Inputs	3.3.2 Labels or Instructions (A)	Visible labels or instructions are available for all inputs and input groupings.	Provide clear labels for all form fields				
Forms and Inputs	3.3.2 Labels or Instructions (A)	Labels describe any required fields or required formatting requirements. (e.g. If a MM/DD/YYYY format is required)	Explain field requirements and formats				
Forms and Inputs	3.3.3 Error Suggestion (AA)	If an input error was detected due to a blank input on a required field, the user is informed of the fields which were left blank in the error message.	Specify which required fields are empty				
Forms and Inputs	3.3.3 Error Suggestion (AA)	If an input error was detected due to an input that did not follow required formatting, the user is informed of the proper formatting in the error message.	Provide correct formatting guidance				
Forms and Inputs	3.3.3 Error Suggestion (AA)	If an input error was detected that was outside of the allowable range of values, the user is informed of the proper range in the error message.	Explain acceptable value ranges				
Forms and Inputs	3.3.4 Error Prevention (Legal, Financial, Data) (AA)	Any legal or financial data input must be reversible, validated for input errors, or include a mechanism for reviewing, confirming, or correcting information before submission.	Add review step for sensitive data submissions				
Structure	4.1.1 Parsing (A)	Elements have proper start and end tags, are nested correctly, and do not contain duplicate or inappropriate attributes.	Use correct and clean HTML markup				

Structure	4.1.1 Parsing (A)	Element IDs do not repeat more than once per page.	Ensure unique element IDs				
Structure	4.1.2 Name, Role, Value (A)	All elements have appropriate accessible names and ARIA roles assigned.	Add correct accessibility attributes				
Structure	4.1.2 Name, Role, Value (A)	All custom functionality has the appropriate ARIA features for states, properties, and values implemented (e.g. aria-expanded, aria-haspopup)	Use ARIA to describe interactive element states				
Motion	4.1.3 Status Messages (AA)	Status messages which change without a page reload notify users of assistive technologies without requiring focus.	Announce dynamic content changes to assistive tech				