Web Accessibility Quick Checklist

This document is designed to inform accessibility checks on issues that are often found on web pages. The information is relevant to multiple roles, whether you are a content editor, developer, or site manager. Use this information as a guide when assessing the accessibility of your site content. The information provided is used in order to comply with WCAG 2.0 Level A compliance per the IEEE Digital Style Guide.

This document provides checks on the following elements of a web page:

- Page titles
- Image text alternatives
- Color contrast
- Text sizes
- Keyboard access
- Forms and labels
- Multimedia
- Basic structure

Page titles

Page titles are displayed in the window title bar in browsers, shown in search engine results, and used for browser bookmarks/favorites. They are also the first items read by a screen reader. Good page titles are important for orientation to help people know where they are and move between pages in their browser.

Area of focus:

• In web browsers, look at the text in the window title bar. Alternatively, hover over the browser tab to see the page title.

What to look for:

- Check that the title adequately and briefly describes the content of the page.
- Check that the title is different from other pages on the website.

Example of web browser tab with page title

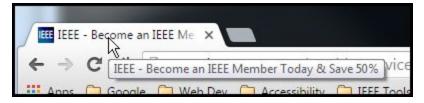


Image text alternatives

Text alternatives convey the purpose of an image, including pictures, illustrations, and charts. They are used when an image can not be seen. When a screen reader is used, users can hear the alt text read out. When users disable images on pages to speed up downloads or reduce bandwidth, alt text can be seen as an alternative to the actual image by the viewers.

Area of focus:

• Within the HTML markup, check that the "alt" parameter of images contains a value.

What to look for:

- If an image conveys information useful for interacting or understanding the page content, then it needs alternative text.
- If an image is only used as decoration and people don't need to know about the image, then it should have a null value (alt="").
- The text should provide an equivalent user experience, not necessarily describe the image. (For example, a search button with a magnifying glass image would contain alt text "search", instead of "magnifying glass".)

Example image with alt text



Example code of image with alt text

Color contrast

Text must have sufficient contrast when compared to its background. High contrast, for example dark text on a light background, is required by some people with visual impairments. This is often the case for many older people who lose contrast sensitivity from ageing.

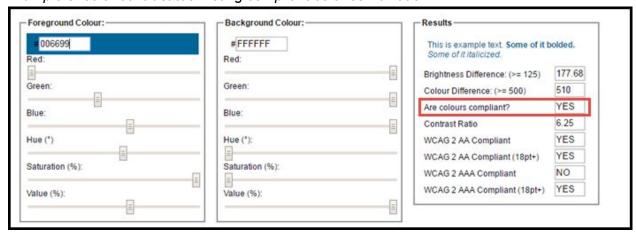
Area of focus:

- Areas on a web page where text overlays backgrounds or images with low contrast.
- For WCAG 2.0 Level AA compliance, web pages should have a minimum contrast ratio of at least 4.5:1 for normal size text. (larger text, at least 3:1)

Check using:

- An eyedropper browser add-on to check the values of text foreground and background colors.
 - ColorZilla (Firefox and Chrome)
- A color contrast tool to input foreground and background color values to check for compliance.
 - Colour Contrast Check tool

Example of color contrast tool noting compliant color combination



Text size

Sometimes web content needs to be enlarged to be read correctly. Web browsers allow text to be resized using custom display settings, text-only zoom tools, and page zooms. Pages that are incorrectly designed can cause content overlap and shift text away from the current view.

Area of focus:

- Areas on a page where the proximity of text and images can be problematic.
- Using the web browser tools, change the text size using:
 - Text size settings (usually through Options or Preferences)
 - Text-only zoom
 - Page zoom (which also zooms images, buttons, etc.)

What to look for:

- Observe if text in areas is getting cut off.
- Text and images should not overlap.
- Buttons, form fields, and other controls should be visible and usable.
- Horizontal scrolling is not required to read sentences or blocks of text. Try to keep all text content visible.

 Be careful not to use important messages as part of an image. Text in images does not get resized when a text resizer tool is used.

Keyboard access

Many users cannot use a mouse and rely on keyboards to interact with site content. Users who are blind or have mobility impairments use assistive technology tools that also rely on keyboard commands to be used correctly. Keyboard focus should be visible and should follow a logical order through the page elements.

Area of focus:

Users should be able to cycle through page elements.
 Click on the address bar to position your mouse cursor there. Press the "Tab" key to cycle through the page elements. "Shift+Tab" will allow you to cycle through the elements in reverse order.

What to look for:

- Check that you can press the "Tab" key on the keyboard to shift your focus to page elements such as links, form fields, buttons and media controls.
- Check that there are no keyboard traps. (For example, tabbing to an area and not being able to tab out of it.)
- Provide visual focus for the tabbed content. (Usually seen visually with grey outlining dot trails.)
- Drop-down list items should be navigated with the arrow keys without automatically triggering an action.

Forms and labels

Clear instructions, labels, and error handling are important for forms accessibility. Marking up form labels correctly will allow interaction with assistive technologies and better orient the user within the form.

Area of focus:

- Navigate within the web form and tab through form fields.
- Click on form field labels to see if the correct input field is focused.

What to look for:

- Make sure that all form controls can be tabbed to.
- Ensure that drop-down lists can be accessed with the arrow keys.
- Click on form field text labels to check if the "label" markup is used correctly. Labels become clickable when used correctly and shifts focus to the associated form field.

- Check that required fields are correctly indicated. It is useful to note this in the form field label to notify the user before interacting with the associated form control.
- Provide error messages that are clear and guide the user when fixing the errors. Make it
 easy for the user to find the errors. It is better to notify the user of errors before the form
 than after it.

Multimedia alternatives

Audio is not available to people who are deaf or hard of hearing. Visual information in videos is not available to those who are blind or have visual impairments. Provide an alternate means to allow these users to access information within multimedia.

Area of focus:

- Listen for audio when content is loading.
- Check if embedded video players are present.

What to look for:

- Ensure that audio does not start automatically when a web page opens. If audio must start, stop the audio after 3 seconds.
- Make sure that there are controls that allow the user to pause or stop the audio.
- Allow controls for the viewer to turn down the volume of the multimedia.
- All prerecorded audio content must have captions available. (Captions are also known as "subtitles".)

Screenshot of controls for the viewer



Basic structure

Web pages are often designed with multiple columns, sections, colors, and other visual aspects that help organize information for people who see the page in its default display. A viewer normally cannot control the order. Some people with low vision change the way the page is displayed so they can read it. For example, they may change the presentation from multiple columns to one column, change the text size, and more. When a web page is "linearized" into one column and the presentation is changed, sometimes the order of content can be in issue.

Area of focus:

• Turn off images and show the text alternatives.

- Turn off style sheet (CSS), which specifies how the page is displayed without layout and color.
- Check the markup of tables used in pages.

What to look for:

- Use a browser tool such as "Web Developer" to allow disabling of CSS styles and displaying alt text to see the linear structure of page content. Ensure the linear order of content makes sense.
 - Web Developer tool for Chrome
- Ensure that data tables are properly marked up with headers.
 - Use "th" tags to signify headers and add the "scope" parameter sith "col" or "row" to signify the orientation of the headers. (For example, Joe.)
- Check text blocks to make sure they have clear headings to facilitate navigation of page content for the user.

Contact and support

For any questions or additional information related to accessibility or this checklist, email accessibility@ieee.org.