Accessibility Evaluation

This page helps you assess the accessibility of a web page. With these simple steps, you can get an idea whether or not accessibility is addressed in even the most basic way. These checks cover just a few accessibility issues and are designed to be quick and easy, rather than definitive. A web page could seem to pass these checks, yet still have accessibility barriers.

Page title

What to do:

If possible, use a browser that displays the page title in the window title bar. Currently Firefox, Safari, Opera and some other browsers show the title by default. Chrome and some versions of IE do not have a title bar. In those browsers you can see the full page title by hovering over the tab.
- Look at the page's title.
- Look at titles of other pages within the website.

What to check for:

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

Image text alternatives ("alt text")

What to do:

Automated tests can tell you if alt text is missing.

2. Type the website address in the box after "Enter the URL of the web site you want to evaluate:"
3. Click the "WAVE this page!" button. Your page will show up with lots of little icons on it.
4. To check for missing alt: Look for the red icon, or search for the alt text "ERROR: Missing alt text". If you find it, that means the following image is missing alt.

To determine if the alt text is appropriate, you need to see the image and judge it in context.

1. To check if alt text is appropriate look for the green alt icon. Next to it is text on a light blue background; the alt text is in between the asterisks (*). See if that text adequately conveys the information in the image it is next to, per the Tips above.

What to check for:

- Every image has appropriate alternative text.
**Headings**

What to do:

The checks below provide instructions for how to get:

- an outline of the headings that are marked up on page
- a view of the page with the heading markup shown.

**Headings Outline**

1. In any browser, open the [W3C HTML Validator (The W3C Markup Validation Service)](http://validator.w3.org) at http://validator.w3.org
2. In the Address field, type the URI (e.g., www.w3.org).
3. Click the ‘More Options’ link.
4. Select the ‘Show Outline’ checkbox.
5. Click the Check button.

*The results page appears (with title starting either [Valid] or [Invalid]).*

6. In the results page, near the top, at the end of the "Jump to:" line, click the Outline text link.
7. Non-visual checks:
   - Is there anything there? If there is no text between "Below is an outline for this document, automatically generated from the heading tags (<h1> through <h6>.)" and "If this does not look like a real outline..." it means there are no headings marked up on the page.
   - Does the outline start with [h1] and follow a meaningful hierarchy? (That's not required, but strongly suggested.)

8. Visual checks: Compare the Document Outline to the visual rendering of the page.
   - Are the things that look like headings on the page listed in the Document Outline?
   - Are there things in the Document Outline that aren’t really headings?

**Heading markup in the page:**

1. Open [WAVE web accessibility evaluation tool](http://wave.webaim.org/)
2. Type the website address in the box after "Enter the URL of the web site you want to evaluate:"
3. Click the "WAVE this page!" button.

*Your web page will show up in the browser with lots of little icons on it.*

4. Anything that is a functional heading should have a heading icon before it.
5. Anything that is **not** a functional heading should **not** have a heading icon before it.

**What to check for:**

- The page has a heading. In almost all pages there should be at least one heading.
- All text that looks like a heading is marked up as a heading.
- All text that is marked up as a heading is really a conceptual section heading.
- The heading hierarchy is meaningful. Ideally the page starts with an "h1" — which is usually similar to the page title — and does not skip levels; however, these are not absolute requirements.
Contrast Ratio ("colour contrast")

What to do:
There are basically three ways to check contrast, each with pros and cons.

1. **Table with contrast ratio** - The tool displays a table with all the possible contrast ratios in the web page. With some tools, you can click in the table and it will show where that colour combination is in the web page.
   - **Pro:** Comprehensive.
   - **Con:** Can be inaccurate, specifically, it can show some colour combinations that are not really in the displayed page.

2. **Eye-dropper to select colours** - The tool lets you select a text colour and a background colour then it shows you the contrast ratio.
   - **Pro:** Accurate.
   - **Con:** Can only test one item at a time. Need to be able to see and use a mouse.

3. **Turn off colour.** The tool shows the page in grayscale.
   - **Pro:** Gives you direct experience.
   - **Con:** Imprecise, doesn’t provide contrast ratio value.

Contrast checking Tools:
http://snook.ca/technical/colour_contrast/colour.html
http://www.456bereastreet.com/archive/200709/10_colour_contrast_checking_tools_to_improve_the_accessibility_of_your_design/

What to check for: Web pages should also have a minimum contrast by default: a contrast ratio of at least 4.5:1 for normal-size text.

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**Zoom**

What to do:
In most browsers:

- From the menubar, select View > Zoom > 200%
- Or, incrementally increase zoom:
  - In Windows, press Ctrl+ (the control key and the + key at the same time) 4 times
  - On Mac, press Command+ (the Command key and the + key at the same time) 4 times

What to check for:

- With zoom text only: All text gets bigger.
- With zoom page: Everything on the page gets bigger, including in any navigation, ads, etc.
- Text doesn’t disappear or get cut off.
- Text, images, and other content doesn’t overlap.
- All buttons, form fields, and other controls are visible and usable.
It's best practice that when a page is zoomed, lines of text don't go off the screen and require people to scroll horizontally to read a line of text. It's acceptable to have to scroll horizontally to get to different sections of a page.

**Keyboard access and visual focus**

**What to do:**

In a browser that supports keyboard navigation with the Tab key (for example, Firefox, IE, Chrome, and Safari; not Opera):

- Click in the address bar, then put your mouse aside and **do not use it**.
- Press the 'Tab' key to move through the elements on the page.
- To move within elements such as select boxes or menu bars, press the arrow keys.
- To select a specific item within an element such as a drop-down list, press the Enter key or Space bar.

**What to check for:**

**All elements and order:**

- Check that you can tab to all the elements, including links, form fields, buttons, and media player controls. Make sure there are no actions or options that you cannot get to, for example, because they are only available on mouse hover or click.
- Check that you can tab away from all elements that you can tab into. (A common problem is the keyboard focus gets caught in media controls and you cannot get out; it's called the "keyboard trap".)
- Check that the tab order follows the logical reading order (for example, for left-to-right languages: top to bottom, left to right) in sequence.
- Check that the focus does not stop at the end of the page; it goes to the top of the page or to the browser controls and then the page.

**Visual focus:**

- Check that the focus indicator is clearly visible as you tab through the elements, that is, you can tell which element has focus, for example, links have a grey outline around them or are highlighted.
- Check that all visible changes that are available with mouse hover, such as highlighting, also triggered with keyboard focus.

**Drop-down lists and image links:**

- Check that after you tab into a drop-down list, you can use the arrow keys to move through all the options. (A common problem for drop-downs used for navigation is that as soon as you arrow down, it automatically selects the first item in the list and goes to a new page — you cannot get to other items in the list.)
- Check that when images are links, they have clear visual focus and can be activated using the keyboard.
Forms

What to do:

Find any forms on the page. A form could be a single text box, such as Search, or could be a complex form with text fields, radio buttons, checkboxes, drop-down lists, and buttons.

What to check for:

Keyboard access

- Check that all form controls are keyboard accessible by following the keyboard access checks above, including checking that you can get to all items in any drop-down lists.

Labels

- Check that the labels are positioned correctly. For left-to-right languages, labels should usually be:
  - Left of text boxes and drop-down lists.
  - Right of radio buttons and checkboxes.

Required fields and other instructions

- Check that any fields that are required/mandatory are clearly indicated.
  - Check that the indicator does not rely on colour alone, for example, if required fields were only indicated by red coloured labels, they would not be accessible to people who do not see the different colours.
- Check that any instructions for completing the form are before they are needed, for example,
  - General instructions should usually be at the top of the form or the section they relate to.
  - Check that required formats, such as dates (year-month-date in the format 0000-00-00), are included in the marked up label.
Multimedia (video, audio) alternatives

What to check for:

Keyboard access
Follow the steps above for keyboard access to ensure that the media player controls are labeled and keyboard accessible.

Auto-start control
It is best if audio (including background noise and video with sound) does not start automatically when a web page opens. If it does start automatically, it should either:

- Stop after 3 seconds.
- Include controls to pause or stop the audio.
- Include controls to turn down the volume.

Captions/Subtitles
Most video on the web that provides captions has "closed captions" that can be turned on and off. ("Open captions" are always shown.) For example, in YouTube, you turn on captions with the CC button. If there is not a CC button, there are no captions available for that video.

Automatic captions are not sufficient for accessibility because they are not accurate enough. For example, in YouTube, if only "automatic captions" are listed, there are no sufficient captions and the video is not accessible.

If there are captions, you can check that:

- The captions seem in sync with the spoken content.
- The people who are speaking are identified when they speak.
- Important sound other than dialogue — e.g., footsteps approaching, doors closing, glass breaking — is included.

Transcript
If there are captions, transcripts are not usually required; however providing transcripts in addition to captions has many benefits - both to people with disabilities and to website owners.

Transcripts should be easy to find near the audio/video itself and any links to the audio/video.

Check that transcripts include all audio information, including dialogue with the speakers identified, and all important sound.

A transcript for a video could provide all the audio and all the visual information, so that a person can get all the content of the video by reading the text.

Audio description
Audio description (sometimes known as described video, video description, or visual interpretation) is description of important visual information in a video, in order to make it accessible to people who cannot see. For example, some videos start out with a title in text, have speaker names in text, and have
illustrations. That visual information needs to be provided to people who cannot see the video. It can be provided through:

- **Audio description** - where the audio track includes someone describing the important visuals. Audio description can be included in the main video, or it can be provided in a separate video.
- **Text transcript** - that includes description of meaningful visual information (so it’s kind of like a screenplay).

### Plain Content View

Note: Data tables will not make sense when linearized — that's OK because screen readers have functionality to make data tables usable (when they are marked up correctly).

### What to do:

To get a plain content view of the page:

- Turn off images and show the text alternatives.
- Turn off style sheets (CSS), which specifies how the page is displayed with layout, colors, etc. See [http://developer.yahoo.com/blogs/ydn/temporarily-disable-css-testing-53538.html](http://developer.yahoo.com/blogs/ydn/temporarily-disable-css-testing-53538.html)
- Linearize the page or the tables (depending on the toolbar).

Most browsers provide the option to turn off images and disable CSS from the menus. For example:

- **In Opera:**
  - View > Images > Show Images
  - or, Alt+V, I, S
  - View > Style > User Mode
  - or, Alt+V, S, U

- **In Safari:**
  - If the Develop menu is not shown in the menu bar, turn it on:
    - In Safari preferences, click Advanced.
    - Select the "Show Develop menu in menu bar" checkbox.
  - Develop > Disable Images
  - or, Ctrl+F2, D, down arrow to Disable Images
  - Develop > Disable Styles
  - or, Ctrl+F2, D, down arrow to Disable Styles

### What to check for:

- Check that the information makes sense when read in the order it is shown; for example, headings are right above the information they apply to. (Data tables do not need to make sense linearized, per the note above.)
- Check that the alternative text provides adequate information for the missing images.
- Check that blocks of information have clear headings (see also the [Headings section above](#)). When navigation, main content, and other sections have good headings, it's easier for people to find their way around the information.