

Checklist for 508-Compliant Web Pages (HTML and CSS)

Overall structure

- The page(s) have a Document Type Declaration (!DOCTYPE) as in the example below that shows a complete URL path for the Document Type Definition (DTD) in the first line in the file.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

- A “Skip Navigation” link is provided at the top of the page which jumps the user down to an anchor within the main content to bypass any repetitive navigation.
- The document file name does not contain spaces or special characters and is no more than 20 characters.
- If frames are used, each frame should include a title that describes the frame’s purpose or content.
- Test the page without an associated style sheet to make sure they are readable.
- Use headings for content structure starting with the <h1> tags

Page Content

Non-text Elements

- All images and/or non-text elements have alternative text descriptions

Guidelines for alt text:

- alt attribute content should be limited in length
- Longer descriptions use the longdesc attribute.
- Text alternatives communicate the purpose of the graphic accurately and succinctly.
- Empty or null alt text which do not convey content is provided for graphics.
- alt text is provided for both the main image and the hot spots of image maps.

- alt text of an image in the adjacent text is not repeated.
- Important images are not in the background.
- All charts and graphs have either an alternative text description or provide a description in the text immediately below the chart/graph. Descriptions in the text must be referenced in the alt tag.
- Image maps use appropriate alternative text and are rendered on the user-side.
- Color is not used to convey important information (e.g., “See red text below.”)
- Test color scheme used to make sure the contrast is sufficient and color combinations used are distinguishable to those with color-blindness.
- Graphics, animations, movies, or other objects avoid strobing, flickering, or flashing effects.

Links

- All the links work without JavaScript, i.e.; do not have the href attribute of the anchor tag is valid and its value is not “#”

```
(Bad example) <a href="#" onmouseover="dropdownmenu()">Products</a>  
(Better link) <a href="products.html">Products</a>
```

- Link labels should convey what the link takes the visitor to. When labeling the links follow these guidelines:
 - Links should make sense out of context
 - Avoid uninformative link phrases such as “click here”, “more”, “click for details,” “read more”, “info”, and “here”
 - Do not use “link” or “link to” as part of the label as screen readers usually say “link” before each link
 - Links should be as concise as possible without sacrificing meaningfulness making sure they indicate the purpose of the link
 - When images are used as links, the alt text performs the function of link text, so use the purpose of the link as alt text rather than describe visual characteristics of the image

- Warn users about links to non-HTML resources, such as PDF files, Word files, PowerPoint files, and so on. For example: “Third quarter sales projections (PowerPoint);” “Tax form 1040 (PDF format)”
- If appropriate, inform the user that the link will open in a new window. For instance you can add as part of the text for the link (“open in new window”) at the end or something similar.

Tables

- Designate row and/or column headers with the <th> tags
- Associate the cells with the appropriate headers.
 - For simple tables the headers should indicate the association by using the `scope` attribute with the possible values of “row” or “col” indicating that the direction of the data associated with the header.

```
<th scope="col">Name</th>
```

- For complex tables with multiple header levels use the `id` attribute for the headers and for each data cell use the `headers` attribute with the value of the `id` attribute for the header that the data is associated with.

```
<th id="Name">Name</th>  
<td headers="Name">Wendy</td>
```

Forms

When electronic forms are designed to be completed online:

- Create form fields in logical tab order
- Use the <label> tag to define relationships between a form control, such as, a text input field, and one or more text labels by using the `for` attribute for the label tag with the `id` attribute of the form control

```
<label for="ssn">Social Security Number:</label>  
<input type="text" id="ssn" name="SocSecNumber" />
```

- Group all related form elements using the <fieldset> tag
- Provide a “title” or “legend” for each field set using the <legend> tag.

- Group radio buttons in a `<fieldset>` tag, and provide a `<label>` for each checkbox
- Group checkboxes in a `fieldset` tag, and provide a `<label>` for each checkbox
- Always provide a button to submit forms. Don't use JavaScript to automatically submit them.
- Use Title attributes.

Presentation (Style Sheets)

- Separate content from its presentation
- Use relative units to specify font sizes. Browsers are more likely to allow the users to resize relatively-sized fonts than absolutely-sized fonts
- Preferred units are percentages (%) and "ems" (em), although in practical terms there may be disagreement as to which units are "relative" and which ones are "absolute." It is best to avoid using the following units: points (pt), pixels (px), centimeters (cm), millimeters (mm), and inches (in).
- If developers specify smaller font sizes, it is best not to use values that are below 75% or 80% of the original font size. In fact, 85% is considered a safer boundary to set, especially for the main text.

Miscellaneous

- Render buttons in HTML rather than as images
- The user should have control over the timing of content changes
- Make sure that all linked files are 508-compliant or a second link to an equivalent alternative HTML or text-only version is provided
- Provide a link to a download for all viewers, players, and plug-ins (e.g., Adobe Acrobat Reader, Windows Media Player, PowerPoint)
- Provide file format and the size of non-HTML linked files
- Provide a text-only version when there is no other way to make the content accessible (e.g., a flow chart must have a text equivalent.)
- Scripts include text and keyboard access, and the Web page functions properly when the scripts are disabled (e.g., images used in navigation scripts have alt tags and "onClick" commands are accompanied by "onkeypress")