# Web Accessibility Barriers and Practices

<table>
<thead>
<tr>
<th>IMAGES</th>
<th>ACCESSIBILITY BARRIER</th>
<th>ACCESSIBILITY PRACTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-text elements lack alternate text</td>
<td>All <code>&lt;img&gt;</code> and <code>&lt;area&gt;</code> elements include ALT attribute; embedded and other objects include text alternatives</td>
<td></td>
</tr>
<tr>
<td>Images used for decoration include descriptive ALT text and/or TITLE attribute</td>
<td>Images used for decoration include empty ALT text (alt=&quot;&quot;) and no TITLE attribute</td>
<td></td>
</tr>
<tr>
<td>Equivalent text is presented using the TITLE attribute only</td>
<td>Equivalent text is presented using the ALT attribute, and advisory text is provided via the TITLE attribute</td>
<td></td>
</tr>
<tr>
<td>Important information or functionality is presented by CSS images (e.g., background images, list-style images, etc)</td>
<td>Images included using CSS (e.g., background images, list-style-images) do not convey important information or functionality, including navigation or branding</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KEYBOARD OPERABILITY</th>
<th>ACCESSIBILITY BARRIER</th>
<th>ACCESSIBILITY PRACTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page is inoperable or non-navigable by keyboard users</td>
<td>All functionality is keyboard operable; tab order follows logical page order</td>
<td></td>
</tr>
<tr>
<td>Event handlers are available to mouse, but not to keyboard</td>
<td>Where mouse event handlers are in use, keyboard handlers are also available</td>
<td></td>
</tr>
<tr>
<td>Page context changes without user event (as with onchange)</td>
<td>Change of page context should be controllable by user</td>
<td></td>
</tr>
<tr>
<td>No visual indicator when an element receives focus</td>
<td>When an element receives focus, there is a visual indicator such as an outline</td>
<td></td>
</tr>
<tr>
<td>Keyboard traps exist, preventing keyboard users from navigating effectively</td>
<td>No keyboard traps exist (i.e., the keyboard user can navigate in and out of page elements)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FORMS</th>
<th>ACCESSIBILITY BARRIER</th>
<th>ACCESSIBILITY PRACTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms are inoperable using only a keyboard</td>
<td>Forms are fully keyboard-operable</td>
<td></td>
</tr>
<tr>
<td>Form fields are unlabeled</td>
<td>All form fields are associated with <code>&lt;label&gt;</code> elements, the TITLE attribute, or an ARIA label</td>
<td></td>
</tr>
<tr>
<td>Groups of related controls are not associated programmatically</td>
<td>Radio button, checkbox, and other groups of related fields are associated by means of a fieldset/legend pairing</td>
<td></td>
</tr>
<tr>
<td>Users cannot perceive or interact with error messages, required fields, or other information</td>
<td>All error prevention and handling are exposed to and navigable by all users</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DOCUMENT STRUCTURE</th>
<th>ACCESSIBILITY BARRIER</th>
<th>ACCESSIBILITY PRACTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pages neglect or skip heading levels</td>
<td>Pages maintain a properly nested heading structure, skipping no heading levels</td>
<td></td>
</tr>
<tr>
<td>Pages do not include a top-level heading</td>
<td>Pages include a top-level heading, marked up as <code>&lt;h1&gt;</code></td>
<td></td>
</tr>
<tr>
<td>Pages lack a unique <code>&lt;title&gt;</code>, or <code>&lt;title&gt;</code> does not describe or apply to page</td>
<td>Pages should include a unique <code>&lt;title&gt;</code>; <code>&lt;title&gt;</code> should be relevant</td>
<td></td>
</tr>
<tr>
<td>Pages lack language information</td>
<td>Pages include LANG attributes for HTML tag and for changes in human language</td>
<td></td>
</tr>
<tr>
<td>ACCESSIBILITY BARRIER</td>
<td>ACCESSIBILITY PRACTICE</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>MAGNIFICATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Page loses legibility after page magnification</td>
<td>Page maintains legibility after page magnification in browser</td>
<td></td>
</tr>
<tr>
<td>Content loses legibility after text magnification</td>
<td>Content maintains legibility after text magnification</td>
<td></td>
</tr>
<tr>
<td><strong>READING ORDER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Page content does not follow a linear or logical reading order when styles are removed</td>
<td>Content reading order is linear and logical in the absence of styles and formatting</td>
<td></td>
</tr>
<tr>
<td><strong>LINKS AND NAVIGATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Links and navigation bars are not usable by keyboard</td>
<td>Ensure that links are focusable and can be activated by keyboard</td>
<td></td>
</tr>
<tr>
<td>Links to different resources use the same link text (e.g. &quot;Read More&quot;)</td>
<td>Use unique text to identify hyperlinks (e.g., &quot;More about Diversity&quot;; &quot;Proceed to Checkout&quot;)</td>
<td></td>
</tr>
<tr>
<td>Links to the same resource use different link text</td>
<td>Links to the same resource should use the same link text</td>
<td></td>
</tr>
<tr>
<td>Link text includes &quot;Click Here&quot; or other generic or device-specific wording</td>
<td>Link text uses device-neutral wording, such as &quot;Proceed to...&quot;</td>
<td></td>
</tr>
<tr>
<td>Links are indistinguishable from other page content</td>
<td>Links are visually identifiable, and distinguishable from other page content</td>
<td></td>
</tr>
<tr>
<td>Links with text or ALT text repeat text in TITLE attribute</td>
<td>TITLE attribute in hyperlinks provides advisory information only</td>
<td></td>
</tr>
<tr>
<td><strong>MULTIMEDIA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media is uncaptioned or lacks a transcript</td>
<td>Video is accompanied by a synchronized caption and audio by a transcript</td>
<td></td>
</tr>
<tr>
<td>Media player is unavailable to keyboard, or media starts automatically</td>
<td>All media should be presented in a keyboard-operable player</td>
<td></td>
</tr>
<tr>
<td><strong>TABLES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tables do not use table structure, including &lt;th&gt; and &lt;td&gt; to present data</td>
<td>Tables use &lt;th&gt; and &lt;td&gt; to present data</td>
<td></td>
</tr>
<tr>
<td>Header and data cell relationships are not indicated by SCOPE, ID/HEADERS, or other associative markup</td>
<td>Table headers and table data cells are related by SCOPE, ID/HEADERS or other associative markup</td>
<td></td>
</tr>
<tr>
<td>Nested tables are used for page or section layout, or to position elements on the page</td>
<td>Page and section layout are achieved by using semantic elements such as &lt;body&gt;, &lt;div&gt;, &lt;section&gt;, &lt;article&gt; etc.</td>
<td></td>
</tr>
<tr>
<td><strong>COLOR AND STYLES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insufficient contrast between foreground and background elements</td>
<td>Foreground and background contrast must be sufficient</td>
<td></td>
</tr>
<tr>
<td>Font sizes are defined in points, pixels, centimeters, or inches</td>
<td>Font sizes should be defined as percentages, ems, or by named sizes</td>
<td></td>
</tr>
<tr>
<td>Form controls that contain text are measured in points, pixels, centimeters, or inches</td>
<td>Text-based form control sizes are defined as percentages, ems, or by named sizes</td>
<td></td>
</tr>
<tr>
<td><strong>ARIA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pages lack ARIA landmarks</td>
<td>All page content is contained in appropriate ARIA landmarks</td>
<td></td>
</tr>
<tr>
<td>Widgets are unusable without CSS and/or scripting</td>
<td>Interactive elements are enhanced progressively, built on elements with native functionality</td>
<td></td>
</tr>
<tr>
<td>ARIA widgets lack a role (e.g., a clickable &lt;div&gt; element)</td>
<td>ARIA widgets include the role attribute to inform the user of the widget’s purpose</td>
<td></td>
</tr>
<tr>
<td>ARIA widgets do not follow expected keyboard behaviors for their role</td>
<td>ARIA widgets use predictable keystroke patterns that are consistent with their roles in other applications</td>
<td></td>
</tr>
</tbody>
</table>

*Web Accessibility Checks and Practices Matrix
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