## Abbreviations

* Are abbreviations used without spelling out what it means? User’s scan headings and links and skip to the heading or link they want.

## Alternative text & Images

### About Text in Images

Images that contain text within them are not accessible. Examples of this could include an image that contains the text 'Red shoes on sale'. An alternative text will help screen reader users understand the concept, but other user groups do not benefit from alternative texts.

Dyslexic users who use different tools for reading aloud than visually impaired users will not be able to access either the text in the image or the alternative text with their kind of assistive technologies.

In addition, users with low vision who use magnification programs to enlarge elements on the page can experience that the image become pixelated and more difficult to read when enlarged.

***Images of text should be avoided except in special cases, such as in logos.*** Review the images to assess whether images of text is used and should be avoided. If images of text can’t be avoided, the ‘alt’ should contain the same text as the image

### Images & Alternative Text

* Is the alternative text for **informative images** meaningful and does it provide the same information as the image?
* Is the alternative text for **actionable images** (image link, button or map area) clearly identify the link destination or button purpose?
* Are **decorative images** identified with an empty alt tag (marked as not requiring alt text)?
* Is **plain text** used instead of text embedded in images (with the exception of text in logos or decorative images)?

### Complex Images

* are **complex images or infographics** explained fully in the page content with a short alternative text description? *Alternative text cannot explain everything contained in a complex image. There are ways to use a complex image and still provide the long description necessary to meet accessibility guidelines. Possible solutions include:*
  + *split the image up into pieces so the alternative text can adequately explain the image*
  + *add a key directly above or below the image explaining all the complex details*
  + *have a link under the image going to an accessible document or html that explains the complex details of the image.* [example](http://gov.nv.gov/OWINN/Apprenticeship/Apprenticeship-Home/)

## Color and Contrast

* Is information conveyed by means other than just **color alone**? For example, using colors with text to label chart categories?
* Does all text have a **minimum color contrast** against its background of at least **4.5 to 1 (3 to 1** for large text)?
* Is **link text distinguishable** from non-link text by more than just color?
* Do actionable elements have **clear, visible focus** when non-mouse users Tab or Arrow to them?

## File Types - Identify

* Do identify Document file type (doc, docx, xls, xlsx, ppt, pdf, etc.) and file size for large files. In Extron, the State’s CMS this is done for programmatically.

## Google Maps

* Google maps with pins are not accessible. If displaying pins for multiple locations add a text listing on the page to meet accessibility requirements.

## iFrames

* iframes that convey content to users MUST have a non-empty title <title> attribute and the title must be accurate and descriptive and unique in the context of the page.
* The heading hierarchy of the iframe SHOULD be designed to fit within the heading hierarchy of the parent document, if possible.

## Keyboard Navigation

* Can you navigate through the site using only the keyboard?
* Has a Skip Navigation link been provided? It must be visible on keyboard focus. Or has an ARIA landmark been used to assist keyboard users?

## Links

### Link Labels

* Does **link text** clearly describe the **purpose or destination** of the link?
* Do different link labels go to the same destination? Combine multiple labels into a single label when they all go to a single destination. Different labels cannot go to the same destination. Features such as labels, names, and text alternatives for content that has the same functionality across multiple web pages MUST be consistently identified.
* The purpose of each link SHOULD be able to be determined from the link text alone.

### Link Identification

* Is text underlined that is not a link? Only links should be underlined if underlining is used to identify links. If links are not underlined what other method has been used to identify links?

### **Links to External Sites, New Windows, Files**

* Do links that open in new windows or tabs indicate that it opens in a new window or tab? ***In Ektron, the State’s CMS this is done for programmatically for you.***
* Are links to document file types identified (doc, docx, xls, xlsx, ppt, pdf, etc.) ***In Ektron, the State’s CMS this is done for programmatically for you.***
* Is file size for large files identified?

### Proximity

* Do remember proximity and group related items together (ex: don't have a user click a link at the bottom of the page to make something happen at the top of the page. Make sure something happens close to where the user clicked even when viewed at 400% or more. An action can trigger something in a different area of the page as long as something also is triggered in the users view even at 400%).

### Visual Focus Indicator

* Do all focusable elements display a visual focus indicator when focus is on the element? Focusable elements SHOULD have enhanced visual focus indicator styles.

## Lists

* Are lists constructed using the appropriate semantic markup? <ul><li></li></ul>, <ol><li></li></ol>

## Navigation

* Will the content’s reading and focus order, as determined by the code order, be logical and intuitive?

## Page Title

* Every page must have a page title (browser title). ***It must be present, and it must contain appropriate text that describes the topic or purpose of the page and it should be unique, if possible. Unique information should come first in the title and should be similar if not match the heading of the main content.*** The text in the <title></title> tag must be accurate and informative. This is not the <h1> tag.  
  

## Tables

* If the page contains a **data table**, does the table have a caption (name/title), and are columns and or rows properly identified (<table>, <th>, <td> used).
* Captions are recommended for all tables, even simple ones. A caption identifies the overall topic of a table and is useful in most situations. It should describe the identity or purpose of the table accurately, meaningfully and succinctly and it SHOULD be unique within the context of other tables on the same page.
* Are Table data cells and data group headers associated with their corresponding data or header cells?
* There SHOULD NOT BE data table headers and data associations referenced across nested, merged or separate tables?
* A summary MAY be provided for data tables. Note: Siteimprove will flag any table (even simple ones) that do not contain a summary. A table summary, if provided, SHOULD make the table more understandable to screen reader users, but should not include the number of columns, rows or other information that will be read out in the table.

### Complex Tables

* Are complex header/data associations that cannot be designated with <th> and scope marked up with *headers* plus *id*?
* If the table is complex also include the summary description. A summary provides orientation or navigation hints in complex tables.
* Are complex tables simplified to minimize or eliminate the need for compound column or row headers (multiple header rows or columns, merged cells for header columns, etc)?

### Layout Tables

* Tables SHOULD NOT be used for the purpose of purely visual (non-data) layout. If a table must be used for layout purposes it MUST NOT contain data table markup.

# Developer Checklist Items

## Animations

* Do use Animation, movement and flashing responsibly
* Don't have it flash, or rotate etc. more than 3 times per second
* Allow users to turn animations off
* Don't rely on animation (reduced motion)
* Design stateful animation: logical start and end states
* Consider dissolve transitions instead of motion

## Custom Widgets

* Does the design **use standard HTML widgets** (links, buttons, form elements, controls, etc.) whenever possible? Native widgets have built-in accessibility capabilities, while custom widgets do not.
* If you do have any custom widgets, have they been created with **full keyboard support,** and are they **compliant with WAI-ARIA authoring practices**

## Dynamic Content

* Are users made aware of **content that is dynamically inserted** on a page or does the new content come right after the element that caused it to appear, in the logical reading order / tab order of the page?

## Forms

* Do all form fields have a label that is always visible?
* Are all form labels adequately descriptive and instructive? Is all the information the user needs to fill out the form available on the page?
* Are all form labels and instructions immediately adjacent to their form element so that users (including users of screen magnification) can easily connect the form element with its label and / or instructions?
* Are all controls in close proximity to the content they control?
* Do error messages provide enough information for users to correct their error?

## iFrames

* Hidden frames or frames that do not convey content to users SHOULD be hidden from assistive technologies using *aria-hidden=”true”.*

## Language

* The primary language of the page MUST be identified accurately with a valid value on the <html> element?
* If changing the langue for a portion of the page, the language change must be identified with a valid *lang*attribute?

## Landmarks

* Landmarks should be used to designate pre-defined parts of the layout (<header>, <nav>, <main>, <footer>, etc.).
* All text SHOULD be contained within a landmark region.
* Multiple instances of the same type of landmark SHOULD be distinguishable by different discernible labels (aria-label or aria-labelledby).
* A page SHOULD NOT contain more than one instance of each of the following landmarks: banner, main, and contentinfo.
* The total number of landmarks SHOULD be minimized to the extent appropriate for the content.
* Landmarks SHOULD be made backward compatible.

## Links

* Does the link text <title> repeat the role (“link”)?

## Magnification and Responsive Design

* Can a user with low vision magnify or zoom in on the content in the browser or on any device, including desktop and mobile?
* Is the design optimized for all zoom states? Simplify the design as much as possible eliminating horizontal scrolling?

## Navigation Between Pages

### Navigation Consistency

* Navigation patterns that are repeated on web pages MUST be presented in the same relative order each time they appear and MUST NOT change order when navigating through the site.

### Navigation Lists

* Navigation lists SHOULD be designated with the <nav> element or role=”navigation”
* Navigation lists SHOULD include a visible method of informing users which page within the navigation list is the currently active/visible page
* Navigation lists SHOULD include a method of informing blind users which page within the navigation list is the currently visible/active page.

## Navigation Within Pages

* Is a method provided to **skip repetitive navigation** and go to the main content? Two of the main techniques including providing **HTML/ARIA landmarks** (e.g. header, navigation, main, footer), and **skip navigation links**.

### Table of Contents

* A table of contents for the page MAY be included at the top of the content or in a header
* If a table of contents for the page is included, it SHOULD reflect the heading structure of the page.

### Reading Order and Tab/Focus Order

* The reading order MUST be logical and intuitive.
* The navigation order of focusable elements MUST be logical and intuitive.
* *tab index* of positive values SHOULD NOT be used.

### Paginated Views

* A paginated view SHOULD include a visible method of informing users which view is the currently active/visible view.
* A paginated view SHOULD include a method of informing blind users which view is the currently active/visible view.

## Page Title

* If the page is updated or changed and the web address changes that change must be reflected in the page title <title></title>

## Proximity

* Do remember proximity and group related items together (ex: don't have a user click a link at the bottom of the page to make something happen at the top of the page. Make sure something happens close to where the user clicked even when viewed at 400% or more. An action can trigger something in a different area of the page as long as something also is triggered in the users view even at 400%).

## Other Semantic Elements

* **<strong>** **and <em>** - critical emphasis SHOULD be conveyed through visual styling and in a text-based format
* **<blockquote>** **and <q>** - the <blockquote> element SHOULD be used to designate long (block level) quotations and SHOULD NOT be used for visual styling alone. The <q> element SHOULD NOT be used as the only way to designate quotations.
* **<code>** **and <pre>** - Code SHOULD be marked with the <code> element and blocks of code SHOULD be formatted with the <pre> element.
* **<strikethrough/delete>** **and <insert>**
  + Strikethrough text SHOULD be marked with the <del> element. Critical strikethrough text MUST be supplemented with a text-based method to convey the meaning of the strikethrough.
  + Text designated for insertion SHOULD be marked with the <ins> element. Critical text designated for insertion MUST be supplemented with a text-based method to convey the meaning of the insertion.
* Highlighting **<mark>** - Highlighted text SHOULD be marked with the <mark> element and critical highlighted text SHOULD be supplemented with a text-based method to convey the meaning of the highlighting.

## Parsing and Validity

### Conflicts and duplicates

* ID’s MUST be unique within a web page.
* Names, when provided, of block level elements (e.g., landmarks, tables, iframes, etc.) SHOULD be unique within a web page.

### Parent-child Relationships

* Markup SHOULD adhere to required parent-child relationships of elements and attributes.

### Deprecated markup

* Deprecated markup SHOULD NOT be used.

## Touch Devices

* Is the **touch target size** of main links and buttons **large enough and far enough apart** from each other to activate easily with a finger?
* Is there an **alternative way to activate any custom swipe actions or gestures?** Note: that when a screen reader is activated on a touch device, it overrides all custom swipe actions and gestures.