Responsive Web Design and Accessibility

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LEAD ACCESSIBILITY STRATEGIST

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Overview

Switching context

Order of content

Focus order

Mobile devices

Additional responsive guidelines

Switching Context

Level A 3.2.2 – On Input

Changing the setting of any user interface component does not automatically cause a change of context unless the user has been advised of the behavior before using the component.

Order of Content/ Focus

Level A 1.3.2 – Meaningful Sequence

When the sequence in which content is presented affects its meaning, a correct reading sequence can be programmatically determined.

Assistive technologies access page content via markup/ DOM

Combination of screen magnifiers and readers

Level A 2.4.3 – Focus Order

If a Web page can be navigated sequentially and the navigation sequences affect meaning or operation, focusable components receive focus in an order that preserves meaning and operability.

Focus order must be in a logical and expected manner

Level A 3.2.1 – On Focus

When any component receives focus, it does not initiate a change of context.

Don't programmatically shift focus when not expected

Notify users up front that the change will happen

Mobile Devices

Level AA 1.3.4 – Orientation

Content does not restrict its view and operation to a single display orientation.

Level A 2.5.1 – Pointer Gestures

All functionality that uses gestures can be operated with a single pointer.

Level A 2.5.2 – Pointer Cancellation

For functionality operated using a single point can be cancelled or deferred.

Level A 2.5.4 – Motion Actuation

Functionality operated by device motion can also be operated by UI components.

Additional Responsive Guidelines

Be careful with off screen content

Proper Ways to Accessibly Hide Content

hidden attribute
[hidden] { display: none; }

display: none;

visibility: hidden;

aria-hidden="true"

Use relative units, either em, rem, %

Level AA 1.4.12 – Text Spacing

No loss of content or functionality occurs by setting the following:

- Line height is 1.5x font size

- 2x font size spacing after paragraphs

- Letter spacing at least .12x font size

- Word space at least .16x font size

Level AA 1.4.12 – Text Space

```
html, body {

   font-size: 1rem;
   line-height: 1.5;
   letter-spacing: .12rem;
   word-spacing: .16rem;

}

p + p {

   margin-top: 2rem;

}
```

Avoid clipping content or introducing scrollbars

Level AA 1.4.10 – Reflow

Content can be presented without loss of information or functionality, and without requiring scrolling in two dimensions for:

- Vertical scrolling content at a width equivalent to 320 CSS pixels

- Horizontal scrolling content at a height equivalent to 256 CSS pixels

Maintain color contrast with text over images

Summary

Switching Context
- On focus/ input

Order of content
- Visual order must match DOM order
- Floats, absolute positioning, flex order

Focus order
- Logical, Predictable

Mobile devices
- Orientation
- Gestures and motion actuation

Additional Guidelines
- Off screen content
- Relative units