WEB CONTENT ACCESSIBILITY GUIDELINES (WCAG) COLORCONTRAST



WCAG LEVELS OF CONFORMANCE

A - The minimum level of conformance that satisfies all Level A Success Criteria AA - Satisfies all level A & AA conformance. Usually conform to Level AA AAA - Satisfies **ALL** A, AA, & AAA conformance levels

There is more than just levels regarding requirements for conformance to WCAG

https://www.w3.org/TR/UNDERSTANDING-WCAG20/conformance.html

SUCCESS CRITERION 1.4.1 USE OF COLOR — LEVEL A

IF THE COLOR OF PARTICULAR WORDS, BACKGROUNDS, OR OTHER CONTENT IS USED TO INDICATE INFORMATION:

- Ensure that information conveyed by color differences are also available in text
 - error indicators in red, SVG diagram with text alternative elements
- Include a text cue for colored form control labels
 - red delete button, green submit/save button, required form fields
- Ensure that additional visual cues are available when text color differences are used to convey information.
 - · Links, subway maps, color coded schedule

https://www.w3.org/WAI/WCAG21/quickref/?showtechniques=141%2C143#use-of-color

SUCCESS CRITERION 1.4.1 USE OF COLOR — LEVEL A

IF THE COLOR IS USED WITHIN AN IMAGE TO CONVEY INFORMATION:

- Using color or pattern
 - bar graphs/charts and legends
- Ensuring that information conveyed by color differences is also available in text
 - · color-coded schedule with icons
 - · asterisks for required form fields in red

https://www.w3.org/WAI/WCAG21/quickref/?showtechniques=141%2C143#use-of-color

SUCCESS CRITERION 1.4.1 USE OF COLOR — LEVEL A

BENEFITS

- Users with partial sight and/or limited color vision
- · Older users who may not see color well
- Users with color-deficiencies ("color-blindness")
- Text-only, limited color, or monochrome display users
- · Users who have trouble distinguishing between colors
- People using Braille-display or other tactile interfaces

https://www.w3.org/WAI/WCAG21/Understanding/use-of-color.html

SUCCESS CRITERION 1.4.3 CONTRAST(MINIMUM) — LEVEL AA

TEXT IS < 18 PT (24 PX) IF NOT BOLD & < 14 PT (18.66666666666666 PX) IF BOLD

- •Ensure that a contrast ratio of at least 4.5 to 1 exists between text (and images of text) and background behind the text
- ·Not specifying background color, text color, and not using technology features that change those defaults
 - The author does not specify text color nor background, and does not use CSS.
 - · User can override browser defaults for colors and contrasts that work for the user
- Providing a control with a sufficient color contrast ratio that allows users to switch to a presentation that uses sufficient contrast
 - A page with headings that do not meet the 3 to 1 contrast requirements has a high contrast (5 to 1) link at the top of the page that takes the user to a new version of the page with the minimum 4.5 to 1 ratio all text and images of text
- Providing a style switcher to switch to High Contrast Mode

https://www.w3.org/WAI/WCAG21/quickref/?showtechniques=141%2C143#contrast-minimum

SUCCESS CRITERION 1.4.3 CONTRAST(MINIMUM) — LEVEL AA

• TEXT IS AT LEAST 18 PT IF NOT BOLD & < 14 PT IF BOLD

- Ensure that a contrast ratio of at least 3 to 1 exists between text (and images of text) and background behind the text
- Other sufficient techniques that are the same as previous slide

https://www.w3.org/WAI/WCAG21/quickref/?showtechniques=141%2C143#contrast-minimum

SUCCESS CRITERION 1.4.3 CONTRAST(MINIMUM) — LEVEL AA

• BENEFITS

- People with low vision who have difficulty reading text that does not have sufficient contrast with its background
- People with color deficiencies (Achromatopsia, Tritanopia, etc.)

https://www.w3.org/WAI/WCAG21/ Understanding/contrast-minimum.html

SUCCESS CRITERION 1.4.5 IMAGES OF TEXT — LEVEL AA

OTHER TECHNIQUES MAY ALSO BE SUFFICIENT IF THEY MEET THE SUCCESS CRITERION

- · Using CSS to control visual presentation of text
 - Using font-family, text-align, font-size to control text
- Using CSS to replace text with images of text and providing UI controls to switch
 - Using a style switcher to present home page in two different ways
 - Default home page uses images of text instead of heading text
 - Alternate version uses heading text instead of images of text

https://www.w3.org/WAI/WCAG21/quickref/? showtechniques=141%2C143%2C145#images-of-text

SUCCESS CRITERION 1.4.5 IMAGES OF TEXT — LEVEL AA

• BENEFITS

- People with low vision
- · People with visual tracking problems
- People with cognitive disabilities that affect reading

https://www.w3.org/WAI/WCAG21/Understanding/images-of-text.html

SUCCESS CRITERION 1.4.6 CONTRAST(ENHANCED) — LEVEL AAA

IF TEXT IS < 18 PT IF NOT BOLD & < 14 PT IF BOLD

- Ensure that a contrast ratio of at least 7 to 1 exists between text (and images of text) and background behind the text (should be minimum to strive for OR 10 to 1)
- Other situations and sufficient techniques same as SC 1.4.3 Contrast(Minimum)

https://www.w3.org/WAI/WCAG21/quickref/? showtechniques=141%2C143%2C145%2C1411%2C146#contrastenhanced

SUCCESS CRITERION 1.4.6 CONTRAST(ENHANCED) — LEVEL AAA

BENEFITS

- People with low vision who have difficulty reading text that does not have sufficient contrast with its background
- · People with color deficiencies (Achromatopsia, Tritanopia, etc.)

https://www.w3.org/WAI/WCAG21/Understanding/contrast-enhanced.html

SUCCESS CRITERION 1.4.9 IMAGES OF TEXT(NO EXCEPTION) — LEVEL AAA

OTHER TECHNIQUES MAY ALSO BE SUFFICIENT IF THEY MEET THE SUCCESS CRITERION

- Using CSS to control visual presentation of text
 - · Using font-family, text-align, font-size to control text
- Using CSS to replace text with images of text and providing UI controls to switch
 - Using a style switcher to present home page in two different ways
 - Default home page uses images of text instead of heading text
 - · Alternate version uses heading text instead of images of text

https://www.w3.org/WAI/WCAG21/quickref/?
showtechniques=141%2C143%2C145%2C146%2C148%2C1411%2C149#images-of-text-no-exception

SUCCESS CRITERION 1.4.9 IMAGES OF TEXT(NO EXCEPTION) — LEVEL AAA

• BENEFITS

- People with low vision
- · People with visual tracking problems
- People with cognitive disabilities that affect reading

https://www.w3.org/WAI/WCAG21/Understanding/images-of-text-no-exception.html

SUCCESS CRITERION 1.4.11 NON-TEXT CONTRAST — LEVEL AA

• OTHER TECHNIQUES MAY ALSO BE SUFFICIENT IF THEY MEET THE SUCCESS CRITERION

- Ul component contrast
 - · Using an author-supplied, highly visible focus indicator
- Graphics with sufficient contrast
 - Ensuring that a contrast ratio of 3 to 1 is provided for icons
 - Provide sufficient contrast at the boundaries between adjoining colors
- Text in or over graphics
 - Ensuring that a contrast ratio of at least 4.5 to 1 exists between text (and images of text) and background behind the text
 - Ensuring that a contrast ratio of at least 3 to 1 exists between text (and images of text) and background behind the text
 - · Providing a control with a sufficient contrast ratio that allows users to switch to a presentation that uses sufficient contrast

https://www.w3.org/WAI/WCAG21/Understanding/non-text-contrast.html

SUCCESS CRITERION 1.4.11 NON-TEXT CONTRAST — LEVEL AA

• BENEFITS

 People with low vision often have difficulty perceiving graphics that have insufficient contrast.

https://www.w3.org/WAI/WCAG21/ Understanding/non-text-contrast.html

