SI539 Final Accessibility Evaluation
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Evaluate **research.umich.edu/initiatives** as a designer

☐ Make sure there is enough contrast between text and its
background color

According to the WCAG, the contrast ratio between text and the text's background should be
at least 4.5 to 1. If your font is at least 24 px or 19 px bold, the minimum drops to 3 to 1 (though,
worth noting that this is a little fuzzy because numbered sizes aren't always reflective of the
visual size type). Be especially careful of text over images.

Source: **Salesforce UX**

There're 20 very low contrast elements according to WAVE. For instance, the
contrast of 17px title and 'GO' text under Interdisciplinary Research Initiatives are
4.4:1 and 3.6:1.

**Suggestion 1: The contrast between text and background color should be at
least 4.5:1. The designer should make the text of the title in initiatives
sections darker, or the text could have a bigger font size, such as 19px bold.**

☑ Don't indicate important information using color alone

There should be another indicator (such as icons to accompany color coding, or an underline
on linked text) so that people who cannot easily distinguish colors will be able to understand
and use your content.

Source: **UCLA**

The page use box border, different font size texts and also big block text
background to distinguish information with different importance.

☑ Pair values of colors together (not only hues) to increase contrast

When you strip out the color information from two hues and compare the values, there may not
be much difference. Pairing different values creates contrast.

Source: **UCLA**

Using Funkify (Disablity Simulator), I apply a greyscale to see the value contrast without hue. The page is well designed.

☑ Don't rely on sensory characteristics as the sole indicator for understanding and operating content

You should not rely solely on images, shape, size, visual location, orientation, or sound to indicate important instructions for operating or understanding content (ex. "See the image above"). Instead, use a combination of positioning, color, and labeling to identify content.

Source: **W3C**

The page use image, shape (color box), different size together to indicate information.

☐ Design focus states to help users navigate and understand where they are

Your designs should never actively hide focus states. When people use the keyboard to navigate, your product should include highly visible focus states.

Source: **W3C**

Although the 'GO' buttons in focus statues show in blue color, other links such as resources and news have a very low contrast color while tabbing.

Suggestion 2: The contrast between the focus color and the normal color is too small. To let users see clearly where they are tabbing at, the designer should change the focus color in hue, such as from grey to orange.

☑ Help users understand inputs, and help them avoid and correct mistakes

Labels should never completely go away when the focus is inside of an input. Users should always have clear instructions on what they should be inputting. Put error messages in text that explain the error and how to fix the error. Never rely solely on color to indicate errors.

Source: **W3C**

Using Contact Form as example, there're clear labels and possible error messages (in a pop bubble) attached to the input box.

☐ Write good alt text for your images

Users with low vision often make use of a talking browser to "read" the web. These specialized browsers convert text to speech so that a user can hear the words on a site. When a talking browser lands on an image, it looks for alt text that it can read aloud; if it finds none, it will often just say "image," leaving the user in the dark as to what the image is and how it matters to the story.

Describe all of the elements that explain what's happening in the image, rather than just setting the alt text to be something like, "photograph"

If you have to use an image of text, be sure to describe the design if relevant, as well as all of the words in the image. (Ex: Whiteboard drawing of the quote "This is a quote")

Source: **WebAim: The Basics of Good Alt Text**

Based on the results in WAVE, only on the index page, 9 (out of 11) images have no alt attribute.

Suggestion 3: Add alt attributes and values to image elements. Since some pictures have the same meaning with their descriptive texts, they can have a simple alt value like 'picture showing research in sport science'. So users can hear what's going on in the pictures.

☑ If an experience cannot be made accessible, create another route for users to get that information

It can be difficult to make certain components (like an SVG map) into accessible experiences. In those cases, consider creating an additional screen reader-friendly experience, or at the very least, describe the experience to users.

There're not too many unaccessible elements on the homepage. All most everything can be read by screen reader.

☑ Be as consistent and clear as possible in layout and copy

Be consistent across functions, placement, and labeling. Components with the same functionality should work and be identified consistently. Use section headings to organize content. Be clear in writing; avoid jargon and idioms

Source: **Viget**

The homepage use consistent and clear style in lists and navigation, but not in sections.