CSS Week 2

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CSS Research

1. Explore the use of CSS custom properties (variables) and their benefits in managing reusable styles and theming. Research how CSS variables can improve code maintainability and enable dynamic styling changes.
2. Investigate the role of CSS in ensuring sufficient contrast and color accessibility for users with visual impairments. Research techniques for implementing accessible color schemes.

CSS custom properties help manage reusable styles because they allow the coder to implement one style across multiple pages and/or sites. The reusable styles help limit the amount of code a coder has to write which can make a website load faster and be more efficient when users are interacting with it. Variables allow for writing cleaner code as well. For example, when a coder uses a variable instead of writing the same css for multiple elements, the variable is in one place. If it needs to be changed or updated, it only has to be changed or updated in one place, not in multiple places in a stylesheet (or even if multiple stylesheets).

An example of a variable would be setting a font color within a certain area on a page.

**Example**

.fun-text {

--color: pink;

}

This shows that every time the class “fun-text” is used, the font color will be pink.

Accessibility is important when creating websites. Those with colorblindness may have a hard time viewing a site if the color contrast isn’t accessible. There are two levels of contrast ratios which are AA and AAA. The minimum for AA is 4.5:1 and the minimum for AAA is 7:1. The higher the first number, the better the ratio which means the site is more accessible. Choosing the right colors are important, but it is also important to choose the correct level of brightness and luminance to ensure the site is fully accessible.

There are a variety of free color contrast checkers available online. You can input the hex codes for the font color and background color and the checker will give you a rating to see if the color contrast is accessible or not. Some checkers will also show ways to improve the accessibility. The best ratio for color contrast is 21:1 which is black text on a white background. (<https://www.audioeye.com/color-contrast-checker/>)