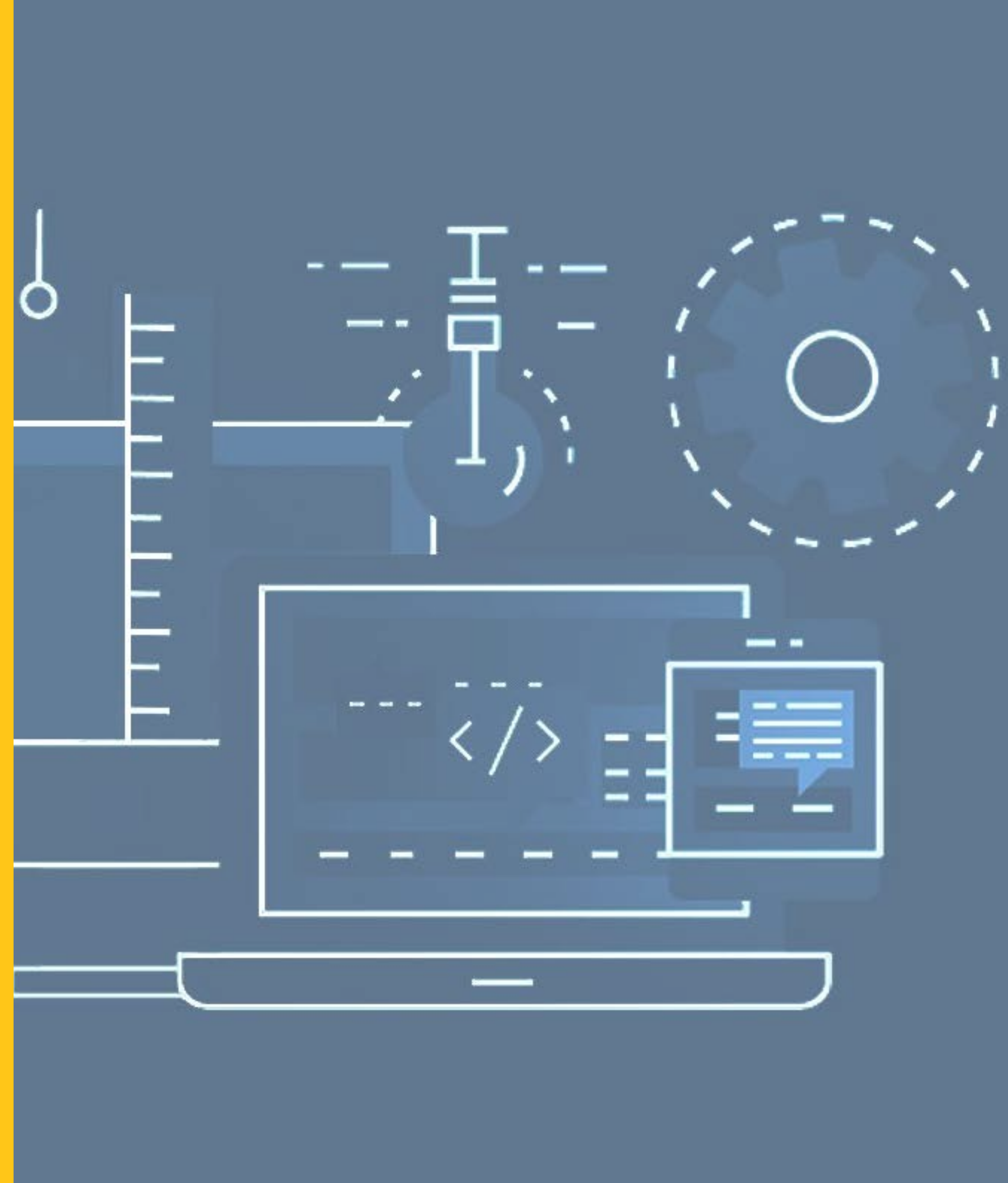


SHELLY GRAHAM, 08/15/2022

WEB DEV 4

SUMMER 2022

Week 6: CSS Variables



WEEK 6: CSS VARIABLES



USING VARIABLES

- The only reason we are able to use CSS variables is because of preprocessors like SASS or LESS
- Preprocessors offer many more useful options (syntax, interpolation, nesting etc)
- Variables make our live easier, our code base shorter as well as our code overall dryer

```
$brandColor: #F06D06;

.main-header {
  color: $brandColor;
}

.main-footer {
  background-color: $brandColor;
}
```

VARIABLES

- So far we usually define variables in a separate partial or at the top of our main style sheet
- Variables are defined at compile time which means they can't be changed afterwards
- No dynamic change with JavaScript!

Syntax so far:

\$variable

CSS VARIABLES

- Built-in CSS3 feature and no need for additional library
- CSS variables can be changed through JavaScript!
- Opens up a whole new realm of possibilities!
- Use just like SASS or LESS variables
- Syntax: double dash and variable name

```
:root {  
  --base: #ffc600;  
  --spacing: 10px;  
  --blur: 10px;  
}  
  
img {  
  padding: var(--spacing);  
  background: var(--base);  
  filter: blur(var(--blur));  
}
```

VARIABLE SCOPE

- We have global and local variables
- We usually define variables in the global scope (partial style sheet) = global variable
- CSS Variables introduce local scope variables that can be defined within a certain block or section of code and only apply to said block

GLOBAL SCOPE

```
:root {  
  --color: red ■  
}  
  
div {  
  color: var(--color) ■
```

A blue arrow points from the `--color` definition in the `:root` block to the `var(--color)` usage in the `div` block, illustrating how a global variable is accessed from a local scope.

LOCAL SCOPE

```
.local {  
  --color: blue ■  
}  
  
color: var(--color) ■
```

A blue arrow points from the `--color` definition in the `.local` block to the `var(--color)` usage in the `color` property, illustrating how a local variable is accessed within its own scope.

UNDEFINED VARIABLES?

- You can set a variable without it being declared
- It will simply display as “basic” un-styled code
- You can add a fallback, separated with a comma to a variable

```
body {  
  text-align: center;  
  background: var(--main-bg-color, pink);  
  color: white;  
  font-family: 'helvetica neue', sans-serif;  
  font-weight: 100;  
  font-size: 1.2rem;  
  
}
```


CONCATENATE VARIABLES

- With SASS or LESS you can concatenate numbers with letters, eg. 20 with px to get 20px
- With CSS variables you can't do that but you can use the calc function:
`calc(var(--main-size) * 1px);`

```
h2 {  
  /* notice no unit following the 50! */  
  --gap: 50;  
  margin-bottom: calc(var(--gap) * 1px);  
}
```

```
h2 {  
  /* notice no unit following the 2! */  
  --gap: 2;  
  margin-bottom: calc(var(--gap) * 1em);  
}
```


QUESTIONS?

HOMEWORK

- This project combines everything we've learned in the past five weeks. Make a portfolio-worthy website with at least two subpages.
- The site should follow all SEO and Accessibility guidelines we've discussed in class. This includes but is not limited to alt-tags, image optimization, the correct use of ARIA labels, page titles, meta description and tags etc. Semantic HTML as well as responsive design is a must. I'm encouraging you to browse "the wire" and get inspired. Good design resources to get you started might be.
 - www.dribbble.com
 - www.designinspiration.com
 - www.awwwards.com/websites/sites_of_the_day
 - Pick a brand you like but their website sucks. Find a competitor that has a better website and elevate your brand with design features from the competitor.
 - Go through recent Circus graduates portfolios and search for Interactive Designers. If you like one of their designs contact them and ask for the Photoshop file. That's an easy way to get a real-life design template and usually the designers love seeing their work come to life!
- Upon completion, upload the website to your newly purchased domain via cPanel with our hosting provider or an FTP server. (Cyberduck, FileZilla, Transmit etc.) The site should be live on the wire!
- Please brainstorm about your potential website and let me know by Thursday, 3pm what you want to build so I can make sure its feasible.
- The project is due two weeks from now. Please feel free to reach out with any questions!
- Submit a link to the git repository as well as to your website for this assignment.

FIN