

CSS
IS
AWESOME

Module 4 Day 3

CSS Grid Layout

Aside: CSS Variables

- Used to apply styles consistently and make change easier

```
# style.css ▶ body
1  :root {
2      --top-row-height: 120px;
3      --gutter: 20px;
4      --highlight-color: #00adee;
5      --bg-color: rgba(192, 192, 192, 0.1);
6  }
7
8  body {
9      background-color: var(--bg-color);
10     color: var(--highlight-color, darkblue);
11 }
```

Grid Container

- Usually used to divide a page into sections
 - Such as this: <https://gridlayout.io/demos/holy-grail.html>
- Setup a *Grid Container*

```
display: grid;  
grid-template-columns: 100px 1fr 1fr 1fr  
grid-template-areas: ". name1 name2 name3"  
                    ". name4 name4 name4"  
  
grid-gap: 10px; /* or grid-column-gap / grid-row-gap */  
grid-template-rows:
```
- Grid items are the Direct Children of the grid container

Grid Items

- Grid Items are **direct children** of the grid container in the HTML
- Assign *Grid Items* to a grid area

`grid-area: name1;`

`grid-column-start/end, grid-row-start/end: <linenumber>`

Grid Examples and Docs

- FireFox Grid Tools
- <https://www.mozilla.org/en-US/developer/css-grid/>
- <https://gridbyexample.com/>
- <https://css-tricks.com/snippets/css/complete-guide-grid/>
- [https://developer.mozilla.org/en-US/docs/Web/CSS/CSS Grid Layout/Basic Concepts of Grid Layout](https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Grid_Layout/Basic_Concepts_of_Grid_Layout)
- <http://cssgridgarden.com/>



Let's
Code

Responsive Design

- A page should respond to the user's environment based on screen size, platform, and orientation (landscape / portrait)
- Three areas to consider:
 - Flexible grid layouts
 - Percentages, not pixels
 - Responsive images
 - Percentages, not pixels

```
img {  
  width: 100%;  
  height: auto;  
}
```
 - Changing layout entirely based on screen characteristics

Media Queries

- Selectively apply CSS based on screen / environment characteristics
 - The @media rule:
 - https://www.w3schools.com/cssref/css3_pr_mediaquery.asp
 - Breakpoints
 - The width where "something changes" in the layout
 - Breakpoints are your choice. You may have zero, or many
 - Bootstrap's breakpoints, for reference →
- Remember, the order of CSS matters! https://www.w3schools.com/cssref/tryit.asp?filename=trycss3_media2

```
// Extra small devices (portrait phones, less than 576px)
// No media query since this is the default in Bootstrap

// Small devices (landscape phones, 576px and up)
@media (min-width: 576px) { ... }

// Medium devices (tablets, 768px and up)
@media (min-width: 768px) { ... }

// Large devices (desktops, 992px and up)
@media (min-width: 992px) { ... }

// Extra large devices (large desktops, 1200px and up)
@media (min-width: 1200px) { ... }
```

Let's
Code