Module 3 Day 1

Grid and Flexbox

CSS Variables

- Used to apply styles consistently and make change easier

```css
# 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

- Often used to divide a page into sections
- 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
  justify-items, align-items: horizontal/vertical alignment of all items
- Assign *Grid Items* to a grid area
  - Grid Items are <u>direct children</u> of the grid container in the HTML
  grid-area: name1;
  grid-column-start/end, grid-row-start/end: <linenumber>
  justify-self / align-self: horizontal/vertical alignment

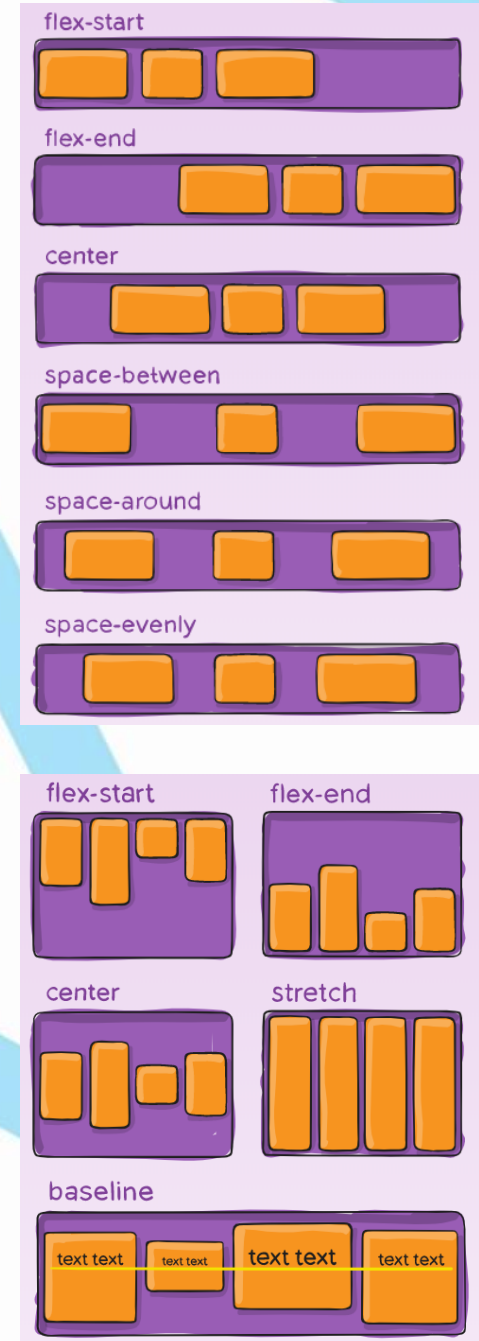# Grid Examples and Docs

- FireFox Grid Tools, browser Inspector 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

Flexbox

- Usually used to display a series of similar items, such as products, images or cards
- Has a direction: row or column (horizontal / vertical "main" axis)
- Define a flex-container
- The container's direct children are the flex items

Flex Container

- Display: flex;
- Flex-direction: row, column, row-reverse, column-reverse
- Flex-wrap: wrap, nowrap
- Justify-content: alignment along "main" axis
- Align-items: alignment along the "cross" axis

Flex Items

- Order: n; sequence of items in the container
- Flex-basis: default size
- Flex-grow, flex-shrink
- Align-self: Overrides parent align-items for this one item

Flex Examples and Docs

- https://css-tricks.com/snippets/css/a-guide-to-flexbox/
- https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Flexible_Box_Layout/Basic_Concepts_of_Flexbox