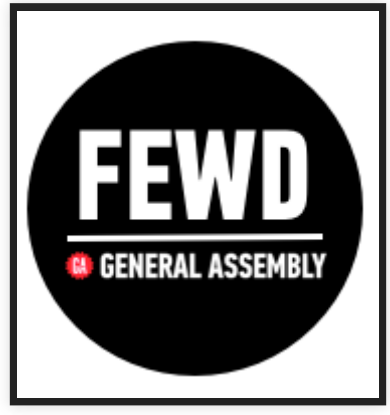


LESSON 3 - CSS BOX MODEL

AGENDA

- Learning Objectives
- Review
- Box Model
- Nested Selectors
- HTML Template
- Lab Time
  - How To Start

CLASSROOM CULTURE & VALUES

- Be present and involved
- Be respectful of other people's time
- Honor your commitments
- Be patient!
- Step out of your comfort zone
- Share your Knowledge

LEARNING OBJECTIVES:

AFTER TODAY, YOU SHOULD BE ABLE TO...

- Define CSS Box Model, and demonstrate the ability to properly manipulate the "box" around tags.
- Select nested elements to apply styling.
- Apply inline and block attributes to a page.
- **(PUSHED)** Describe and identify use cases for normalize.css and reset.css files.

LESSON 1 HOMEWORK/GITHUB

HOW TO SUBMIT VIA GITHUB

We will be using the Github fork feature to manage our projects/HW

Let's walk through how to set this up...

Considering the issues we've had getting this moving, Week 1 homework will be due by 5pm this Wednesday

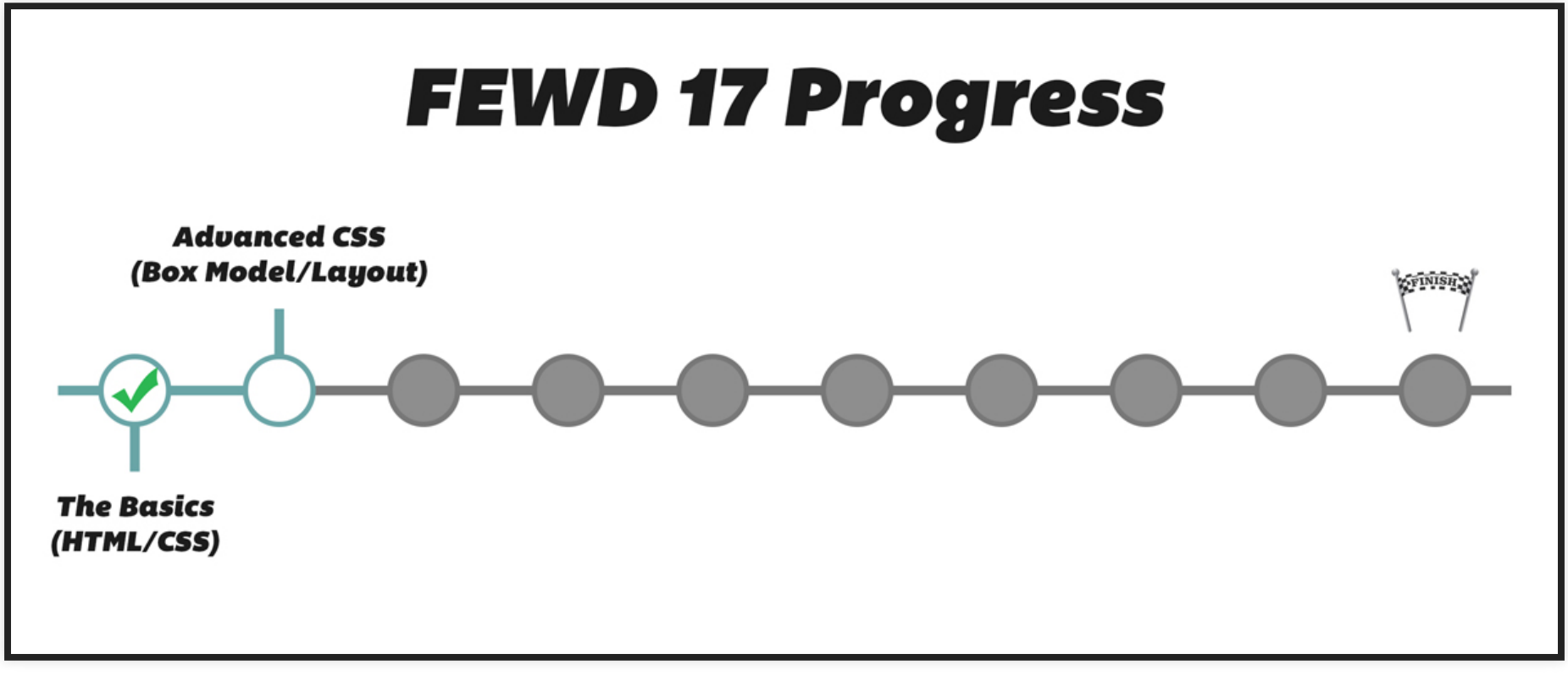
HOMEWORK DEADLINES

Going forward, homework submission should be as follows:

- Homework is due at 5pm on Monday; after this time it will be counted as late
- Homework will not be accepted after 5pm on Wednesday

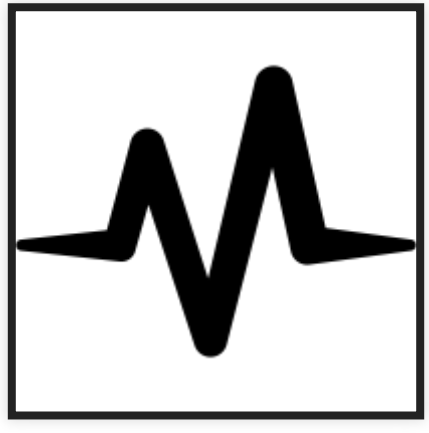
Email/message me in Slack if you have any questions or concerns

WHERE ARE WE NOW?



WEEKLY OPEN OFFICE HOURS

I am available Saturdays between 2pm and 4pm



PULSE CHECK REVIEW

Let's review some of the major points from last week...

CSS BOX MODEL

WHAT IS THE CSS BOX MODEL?

EVERY ELEMENT IN WEB DESIGN IS A BOX, WHICH CAN BE STYLED USING CSS!

INLINE VS BLOCK ELEMENTS

In general, almost all of HTML elements can be split into 2 groups:

INLINE & BLOCK

BLOCK-LEVEL ELEMENTS

- By default, block-level elements begin on new lines
- Meaning, the "boxes" for block-level elements extend the full-width of the available space by default
- They can contain other block-level elements as well as inline elements

BLOCK-LEVEL EXAMPLES

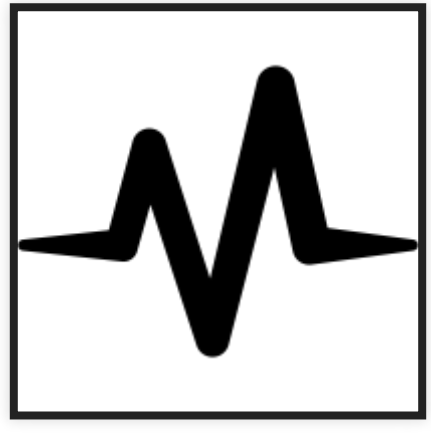
- `<p>`
- `<h1>, <h2>, ... <h6>`
- `<ol>`
- `<div>`
- `<blockquote>`
- MORE...

INLINE ELEMENTS

- By default, inline elements do not begin on new lines
- This means, the "boxes" for inline elements will only take up as much space as necessary by default
- They can contain data and other inline elements.

INLINE EXAMPLES

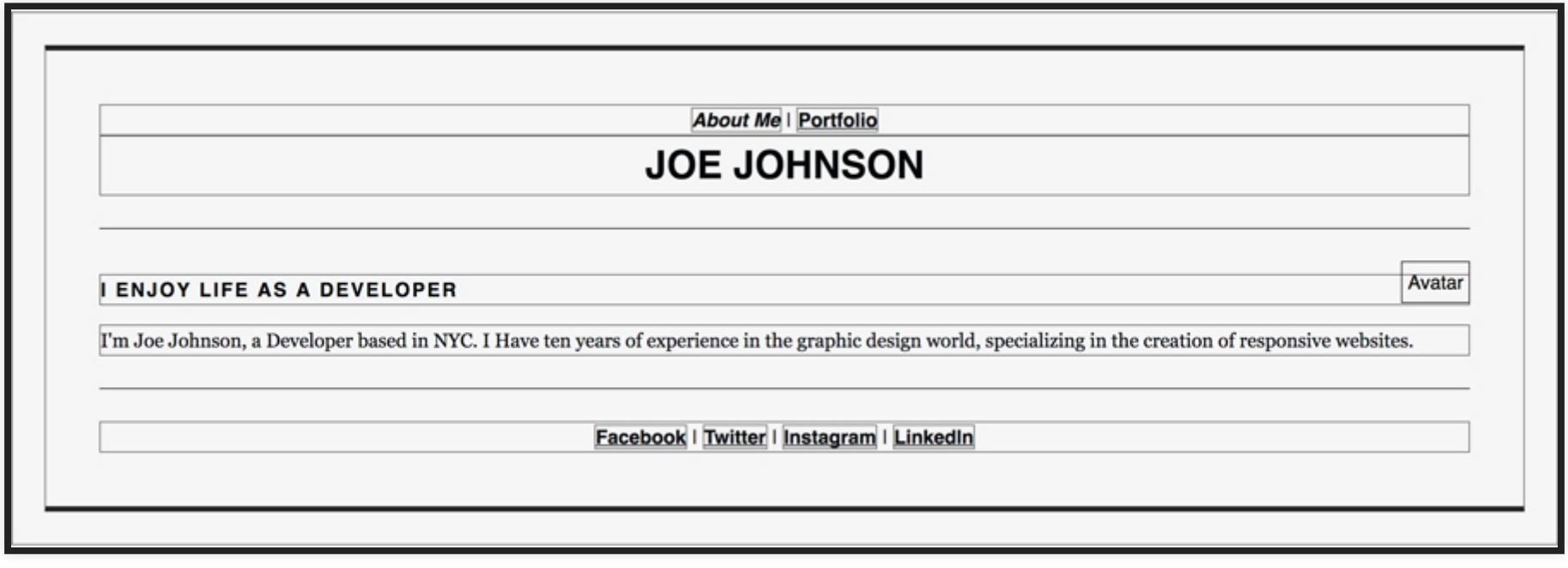
- `<span>`
- `<a>`
- `<code>`
- `<strong>`
- `<input>`
- `<img>`
- MORE...



PULSE CHECK

Let's take a look at an example webpage...

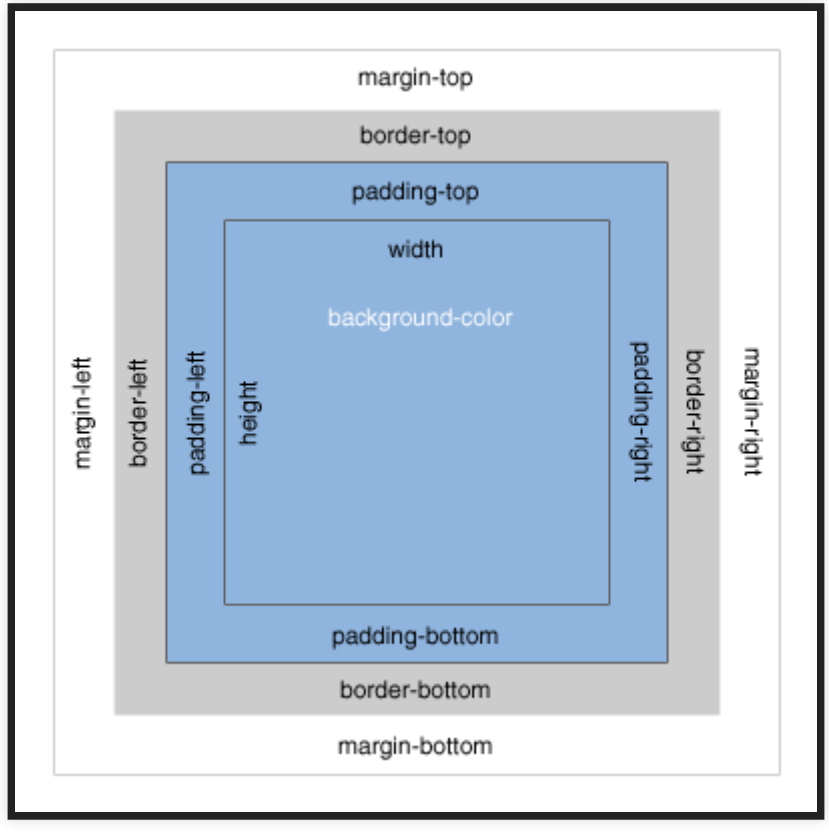
Can you tell which elements might be **inline** and which ones might be **block**?



WHAT MAKES A "BOX"?

From the inside out:

- content
- padding
- border
- margin


margin-top
border-top
padding-top
width
background-color
height
padding-left
padding-right
padding-bottom
border-bottom
margin-bottom
margin-left
border-left
border-right
margin-right

The size of the box is calculated like this:

WIDTH

width + padding-left + padding-right + border-left + border-right

HEIGHT

height + padding-top + padding-bottom + border-top + border-bottom

MARGIN

Margin is unique in that it doesn't affect the size of the box itself per se, but it affects other content interacting with the box, and thus an important part of the CSS box model.

PULSE CHECK ACTIVITY

Let's have some fun... Spend about 2-3 minutes playing around with this Codepen of the CSS Box Model

WHAT IS BOX-SIZING?

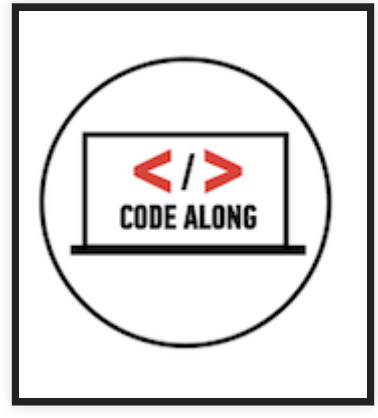
`box-sizing` is an important CSS property that is used to alter the default CSS box model used to calculate width and height of HTML elements.

You have 2 options:

`content-box` and `border-box`

WHY DOES THIS MATTER?

- Responsive web design
- More control over your website's layout

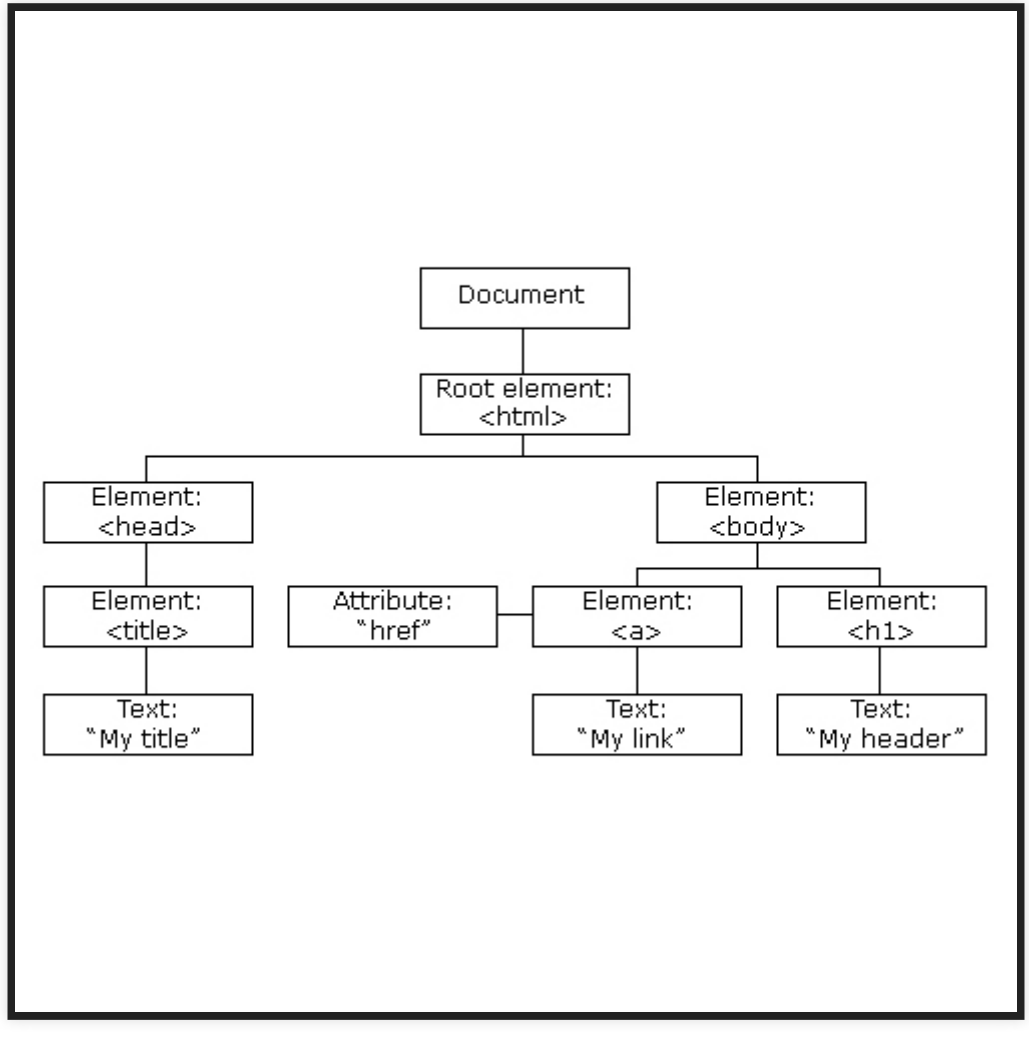


TAGS & BOXES

15 MINUTE BREAK

NESTED SELECTORS AND THE DOM

We all remember the DOM from last week right?



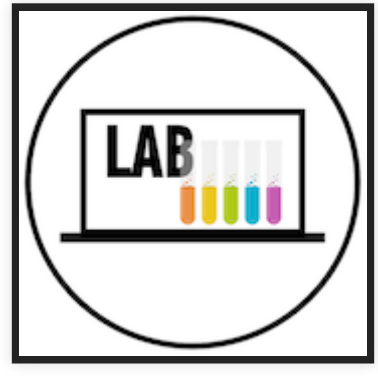
Pretty much, any child element in HTML is a nested element.

This is important when editing these nested elements via CSS.

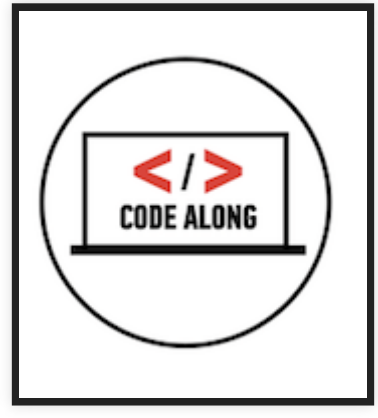
Before we jump into the next lab, lets learn about a new HTML element: `<div>`

Technically, the `<div>` tag is a block-level element that defines a division or a section in an HTML document.

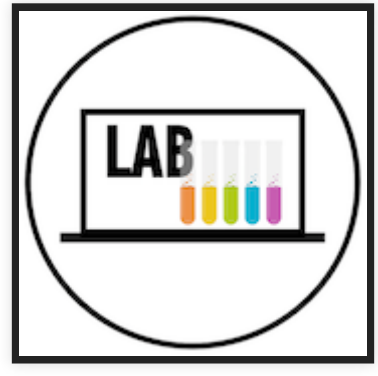
It's essentially the swiss army knife of HTML tags...



DRAW ME A DOM



NESTED SELECTORS



RELAXR LANDING PAGE

LEARNING OBJECTIVES REVIEW

- We learned to define CSS Box Model, and demonstrate the ability to properly manipulate the "box" around tags.
- We learned how to select & style nested elements using CSS selectors
- We learned how to apply inline and block attributes to a page.
- **(PUSHED)** describe and identify use cases for normalize.css and reset.css files.

HOMEWORK

Complete the design of the Relaxr single-column website using advanced CSS (we began the initial groundwork of this lab in the last hour of class today)

Be sure it meets the criteria outlined in the Rubric.md document