CSS Box Model

Learning Objectives

- **Define** CSS Box Model, and demonstrate the ability to properly manipulate the "box" around elements
- **Select** nested elements to apply styling
- **Apply** different display properties to a page
- **Describe** and identify use cases for normalize.css and reset.css files

Agenda

- Week One Review
- CSS Selectors
- How to start a project / website
- CSS Box Model
- Lab Time
- Question & Answer Time

Things to focus on...

- Organisation and Folder Structure
- Naming Conventions and File Extensions
- Consistency and Formatting
- Get used to Atom
- Office Hours

Remember! This isn't a memory game, you aren't expected to remember everything. You just need to roughly know what to search for. Google is your friend!

Review

Web Review

- Roughly, how does it work?
- What does HTML do?
- What does CSS do?
- What does JS do?

HTML Review

- What is it?
- What are elements?
- What are elements made up of?
- Why do we indent?
- What are some common tags?

CSS Review

- How do we include CSS?
- Where do we add a link tag?
- Why does it mean by **cascading**?
- What is a CSS rule?
- What is a CSS rule made up of?
- What are some common selectors?
- What is CSS specificity?

Starting Projects

GENERAL ASSEMBLY

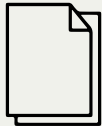📁 Project Name

   📁 assets

      📁 fonts, images, audio, videos, etc.

   📁 css
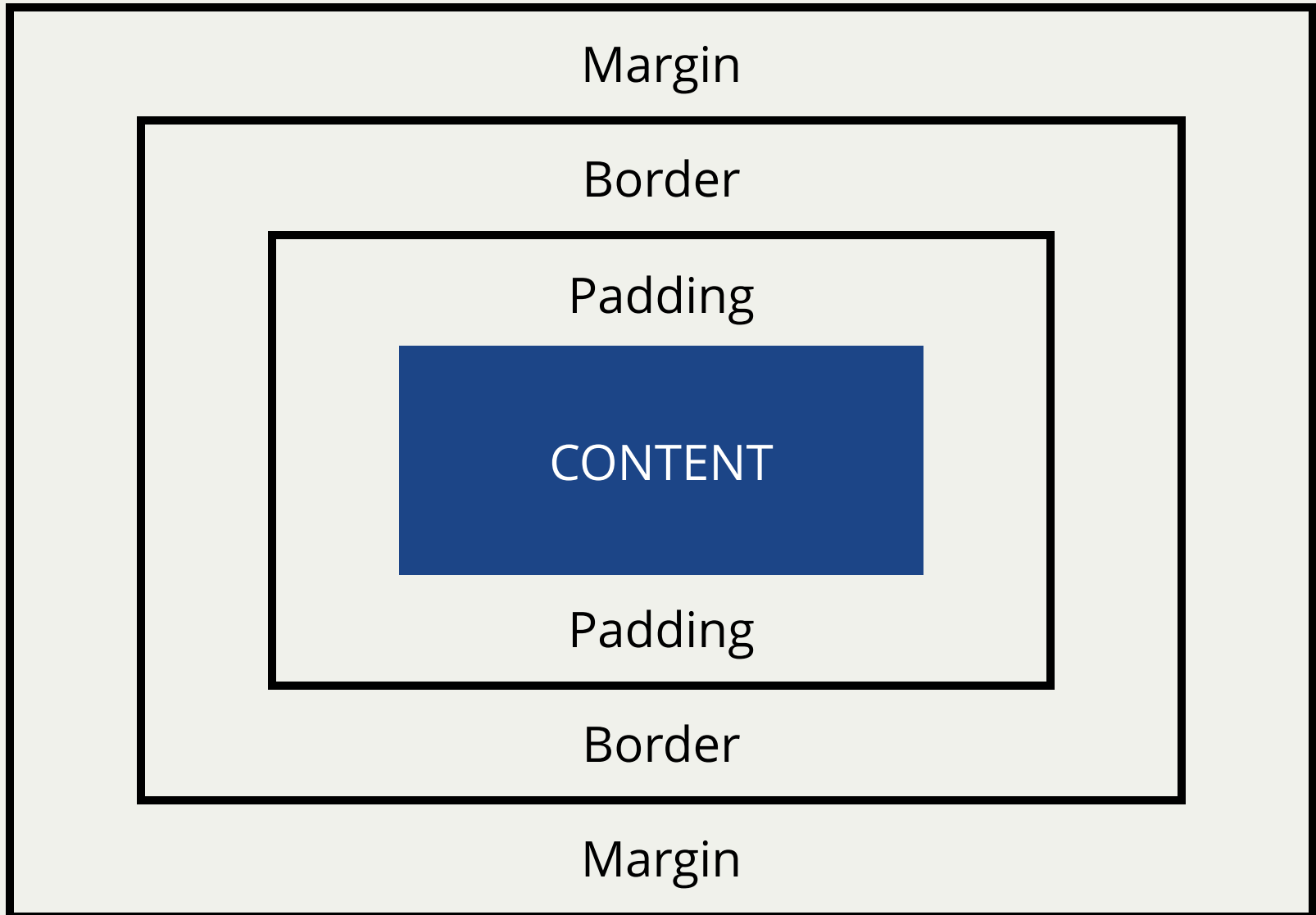
   📁 js

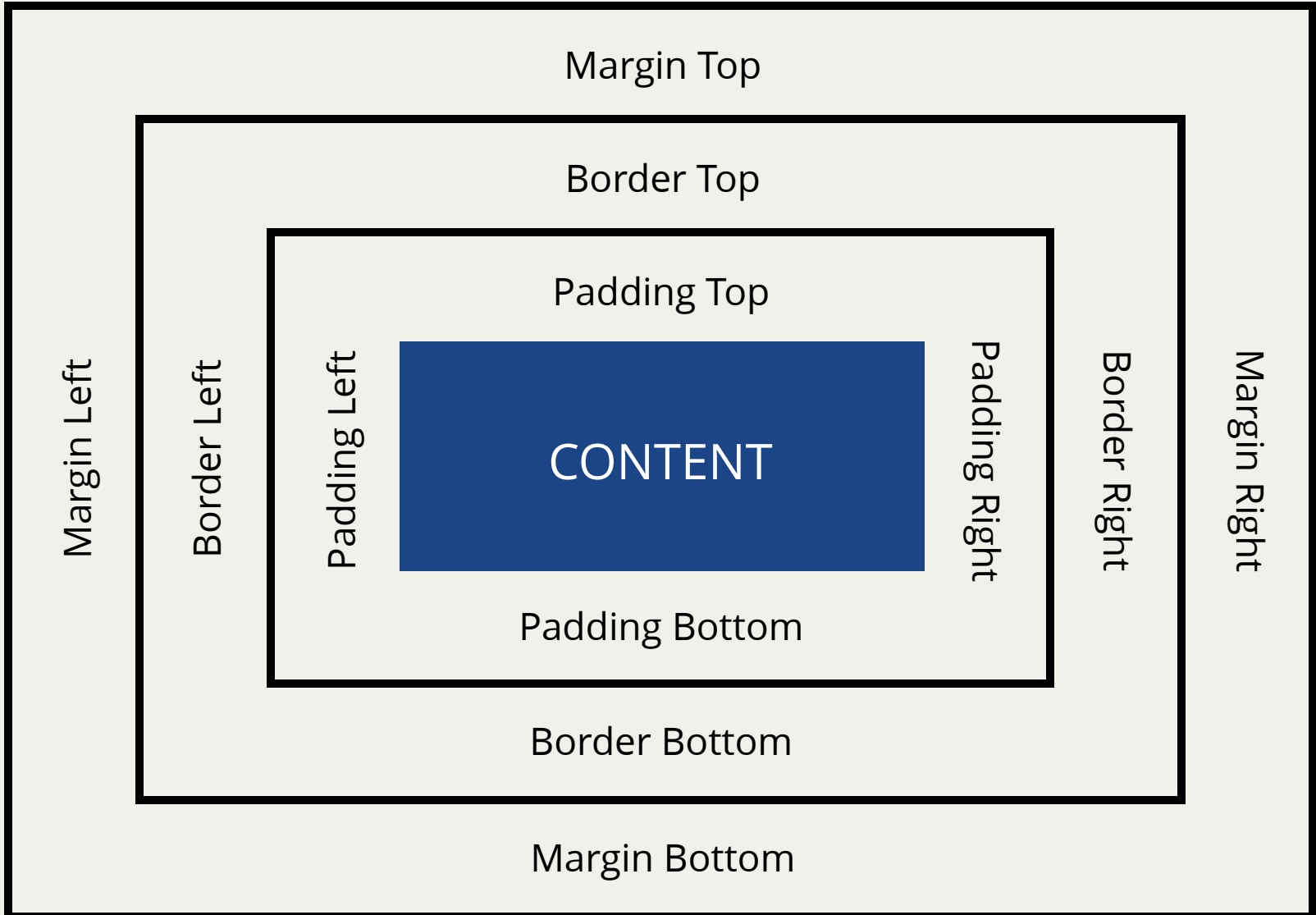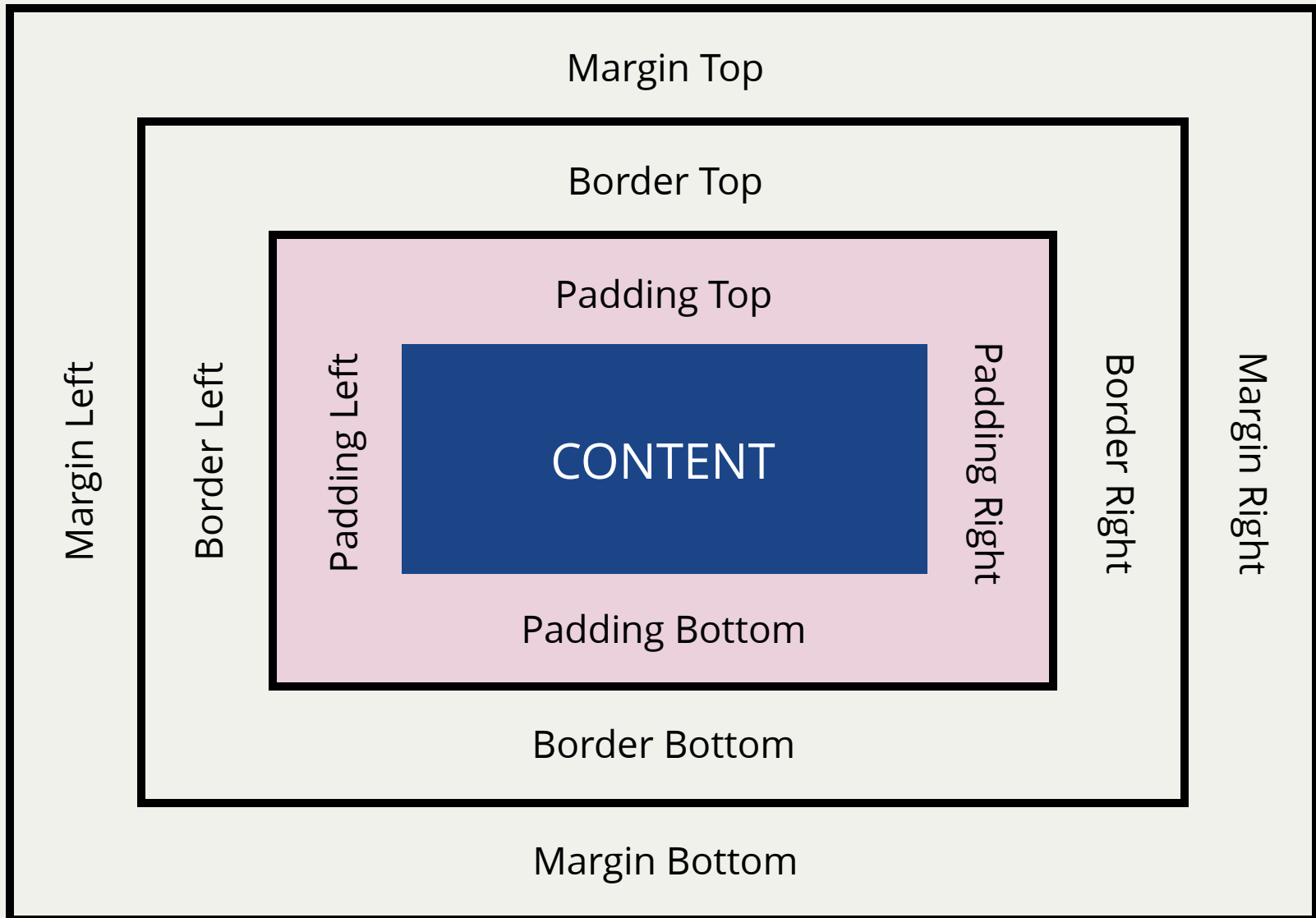   📄 *.html (all of them!)

Box Model

Every element in web design is a box.

Box Model

- The CSS Box Model is essentially a couple of squares that wrap around every element
- It defines how much space they take up
- It consists of a couple of different things:

  - Content
  - Padding
  - Border
  - Margin

Margin

Border

Padding

CONTENT

Padding

Border

Margin

Margin Top

Border Top

Padding Top

Margin Left

Border Left

Padding Left

CONTENT

Padding Right

Border Right

Margin Right

Padding Bottom

Border Bottom

Margin Bottom

Margin Top

Border Top

Padding Top

Margin Left

Border Left

Padding Left

CONTENT

Padding Right

Border Right

Margin Right

Padding Bottom

Border Bottom

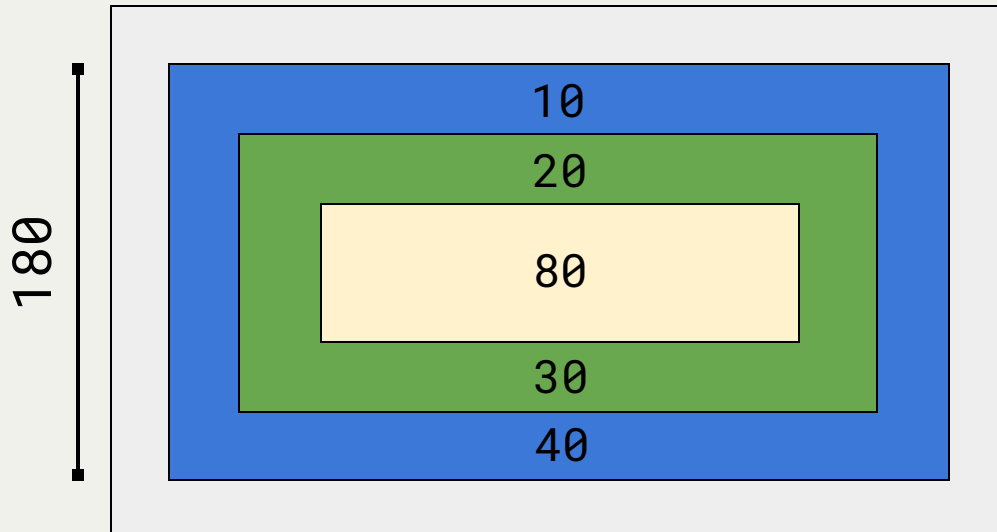Margin Bottom

The pink is the element's background colour

Width Calculation

Total Width

Content Width + padding-left + padding-right + border-left + border-right

Height Calculation

Total Height

180

10
20
80
30
40

Content Height +
padding-top +
padding-bottom +
border-top +
border-bottom

Box Model Resources

- [Shay Howe's explanation](#) (this is awesome)
- [CSS Tricks](#)
- [MDN's explanation](#)
- [Learn Layout](#)

Exercise!

[Tags and Boxes](#)

Ahh! Math!

Adding the widths, borders, and paddings can be a little frustrating. Sometimes even impossible!

So what can we do?

Box Sizing: Border Box

```css
*, *:before, *:after {
    box-sizing: border-box;
}
```

Add this at the start of every project!

Exercise!

Relaxr

Homework

- Keep planning for Relaxr
- Finish off anything you didn't get done from last Thursday's homework
- Keep practicing HTML and CSS
- Start looking into floats and clears
    - CSS Tricks
    - Smashing Magazine
    - Floats and Escalators (this is really well done!)

Q & A

Feedback Time

Lesson 3: **CSS Box Model**

https://ga.co/fewd32syd

Thanks!