

# J220: Intro to Coding

Class 4  
Monday, Feb. 14

**Note to lecturers:**  
start Zoom recording

TOPIC:

1. CSS, continued!

**Note to students:** use  
iClicker.com  
to log your  
attendance

# Agenda

- Announcements
- Quick Review
- Add a CSS file to your file structure
- Common CSS properties
- Quick intro to fonts (and font-sizes)

## Break

- Debugging CSS 
- Box Model

# Announcements

- We will continue with our hybrid class model

# Quick Review

# CSS Properties

```
<head>
  <style>
    h1 {

    }
    #idSelector {

    }
    .classSelector {

    }
  </style>
</head>
```

Let's take a close look at how CSS is structured

# CSS Properties

```
<head>
  <style>
    h1 {

    }

    #idSelector {

    }

    .classSelector {

    }
  </style>
</head>
```

Let's take a close look at how CSS is structured

1. There's the **selector**, which will either be a tag, an id or a class

# CSS Properties

```
<head>
  <style>
    h1 {

    }

    #idSelector {

    }

    .classSelector {

    }
  </style>
</head>
```

Let's take a close look at how CSS is structured

1. There's the selector, which will either be a tag, an id or a class
2. The selector is followed by **curly brackets**. The styling will be INSIDE of these curly brackets

# CSS Properties

```
<head>
  <style>

    #idSelector {
      color: red;
      font-size: 12px;
    }
  </style>
</head>
```

Let's take a close look at how CSS is structured

1. There's the selector, which will either be a tag, an id or a class
2. The selector is followed by curly brackets. The styling will be INSIDE of these curly brackets
3. Inside the brackets will be the **CSS properties**. They are always followed by a **:**



# CSS Properties

```
<head>
  <style>

    #idSelector {
      color: red;
      font-size: 12px;
    }
  </style>
</head>
```

Let's take a close look at how CSS is structured

1. There's the selector, which will either be a tag, an id or a class
2. The selector is followed by curly brackets. The styling will be INSIDE of these curly brackets
3. Inside the brackets will be the CSS properties. They are always followed by a :
4. After the colon is the **property value**. The property value is always closed with a semicolon ;

# CSS Properties

```
<head>
  <style>

    #idSelector {
      color: red;
      font-size: 12px;
    }
  </style>
</head>
```

Let's take a close look at how CSS is structured

1. There's the selector, which will either be a tag, an id or a class
2. The selector is followed by curly brackets. The styling will be INSIDE of these curly brackets
3. Inside the brackets will be the CSS properties. They are always followed by a :
4. After the colon is the property value. The property value is always closed with a semicolon ;
5. While they are small punctuation marks, if the **colon** or **semicolon** are missing, it will break your code. So keep a close eye on them.

# Review of Assignment #2

Common mistakes and other HTML  
conventions

# 1. Not using **mailto:** when linking email address

We didn't cover this in class, but it was in the [example portfolio template](#). No points taken off if you didn't include it.

```
This is <a href="mailto:myemail@gmail.com">my email  
address</a>.
```

**mailto:** signals to your browser to open up your email client.

## 2. Using spaces in file names or links

Don't do this:



```

```

Rename image so it doesn't have spaces. Then, replace the file name in the HTML:

```

```

No points taken off.

### 3. Mixing spaces and tabs

Long dash  
represents  
a **TAB**.

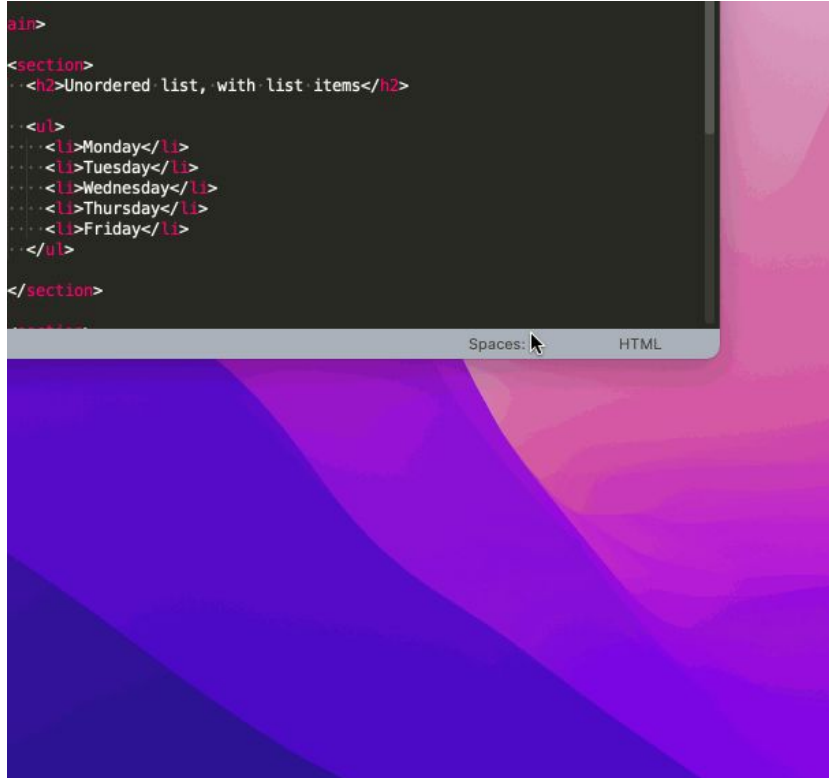


```
<!DOCTYPE html>
<html class="...">
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>
    <meta name="description">
  </head>
  <body>
    <header>
    </header>
    <main>
    </main>
  </body>
</html>
```

No points taken  
off if you did this.

Dot represents  
a **SPACE**.

# Pro-tips for tidy indenting on SublimeText



(Come to office hours if you want help troubleshooting another text editor.)

In the lower right corner of the Sublime Text editor, click on the words to the left of HTML. It should say

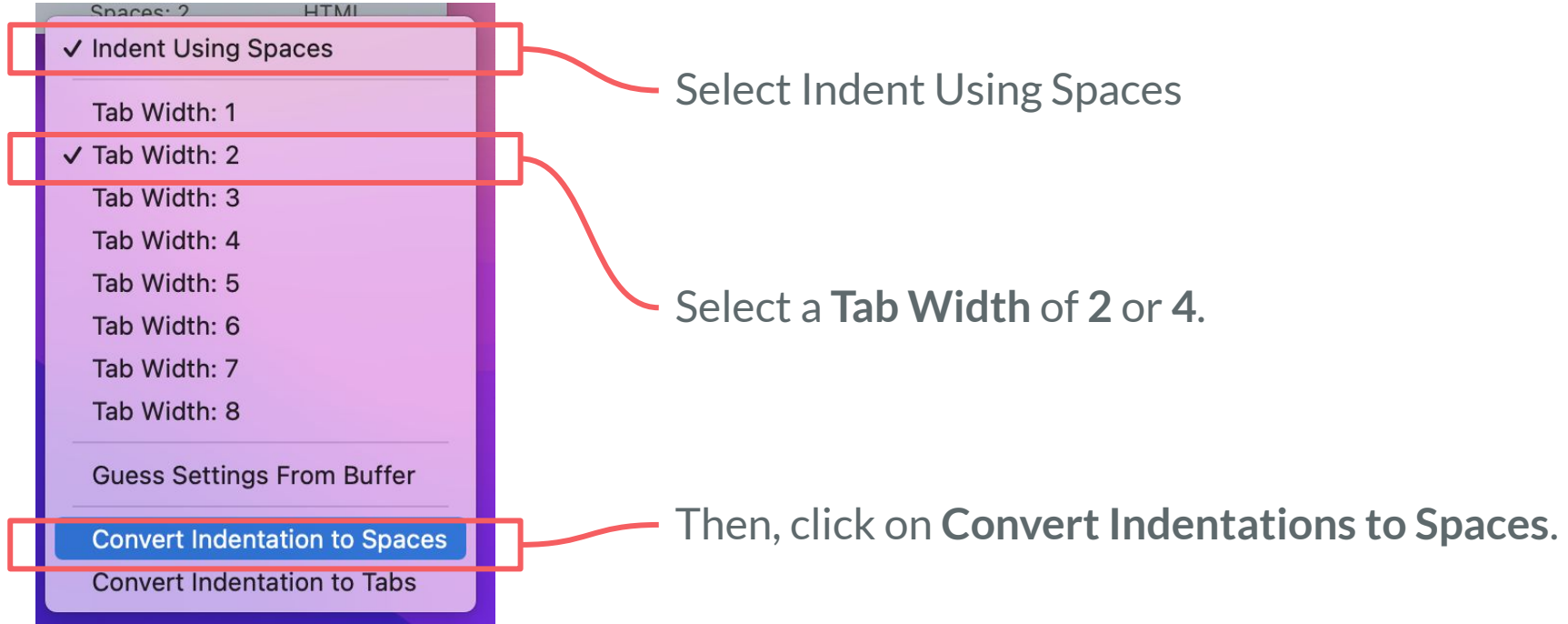
**Spaces: 2**

or

**Tab Size: 4**

or something similar.

# Pro-tips for tidy indenting on SublimeText





# Pro-tips for tidy indenting on SublimeText

1. Select all your code.
2. Keep hitting **⌘COMMAND** and **[** (the left bracket key) until all your code is flush to the left.
3. Then go to **Edit > Line > Reindent**.

(Let's do a demo!)

# Adding CSS to your file

# Adding CSS to your file

```
<!DOCTYPE html>
<html>
  <head>
    <!-- meta tags -->
  </head>
  <body>
    <main>
      <header>
        <h1>My first website</h1>
      </header>
      <section>
        <h2>A collection of my work</h2>
        <p>Some text for the article.</p>
      </section>
    </main>
  </body>
</html>
```

Let's remember our HTML document.

# Adding CSS to your file

```
<!DOCTYPE html>
<html>
  <head>
    <!-- meta tags -->
  </head>
  <body>
    <main>
      <header>
        <h1>My first website</h1>
      </header>
      <section>
        <h2>A collection of my work</h2>
        <p>Some text for the article.</p>
      </section>
    </main>
  </body>
</html>
```

Let's remember our HTML document.

- Stuff in **<head>** is read by the browser

# Adding CSS to your file

```
<!DOCTYPE html>
<html>
  <head>
    <!-- meta tags -->
  </head>
  <body>
    <main>
      <header>
        <h1>My first website</h1>
      </header>
      <section>
        <h2>A collection of my work</h2>
        <p>Some text for the article.</p>
      </section>
    </main>
  </body>
</html>
```

Let's remember our HTML document.

- Stuff in <head> is read by the browser
- Everything in <body> is seen by the reader

# Adding CSS to your file

```
<!DOCTYPE html>
<html>
  <head>
    <!-- meta tags -->
  </head>
  <body>
    <main>
      <header>
        <h1>My first website</h1>
      </header>
      <section>
        <h2>A collection of my work</h2>
        <p>Some text for the article.</p>
      </section>
    </main>
  </body>
</html>
```

Because elements in **<head>** are read by the browser, we need to add our CSS here, so it knows how to style the HTML elements.

So let's focus in.

# Adding CSS to your file

There are two ways of adding CSS to your file.

```
<!DOCTYPE html>
<html>
  <head>
    <!-- meta tags -->
  </head>
  <body>
    </body>
</html>
```

# Adding CSS to your file

```
<!DOCTYPE html>
<html>
  <head>
    <!-- meta tags -->
    <style>
      /* CSS goes here */
    </style>
  </head>
  <body>
    </body>
</html>
```

There are two ways of adding CSS to your file.

1. You can write your CSS directly in your file by adding **<style>** tags inside of <head>. The CSS would appear in between the tags.



# Adding CSS to your file

```
<!DOCTYPE html>
<html>
  <head>
    <!-- meta tags -->
    <link rel="stylesheet"
href="./styles/main.css">
  </head>
  <body>
  </body>
</html>
```

There are two ways of adding CSS to your file.

1. You can write your CSS directly in your file by adding `<style>` tags inside of `<head>`. The CSS would appear in between the tags.
2. You can **link** your your CSS file. Which would be saved in your root folder.

# Adding CSS to your file

```
<!DOCTYPE html>
<html>
  <head>
    <!-- meta tags -->
    <link rel="stylesheet"
href="./styles/main.css">
  </head>
  <body>
  </body>
</html>
```

There are two ways of adding CSS to your file.

1. You can write your CSS directly in your file by adding `<style>` tags inside of `<head>`. The CSS would appear in between the tags.
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  - a. The **“rel=”** attribute tells the browser that the linked file will add styling to the page

# Adding CSS to your file

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<!DOCTYPE html>
<html>
  <head>
    <!-- meta tags -->
    <link rel="stylesheet"
href="./styles/main.css">
  </head>
  <body>
  </body>
</html>
```

There are two ways of adding CSS to your file.

1. You can write your CSS directly in your file by adding `<style>` tags inside of `<head>`. The CSS would appear in between the tags.
2. You can link your your CSS file. Which would be saved in your root folder.
  - a. The `"rel="` attribute tells the browser that the linked file will add styling to the page
  - b. `"href="` lets the browser know where to find this file.

# Adding CSS to your file

```
<!DOCTYPE html>
<html>
  <head>
    <!-- meta tags -->
    <link rel="stylesheet"
href="./styles/main.css">
  </head>
  <body>
  </body>
</html>
```

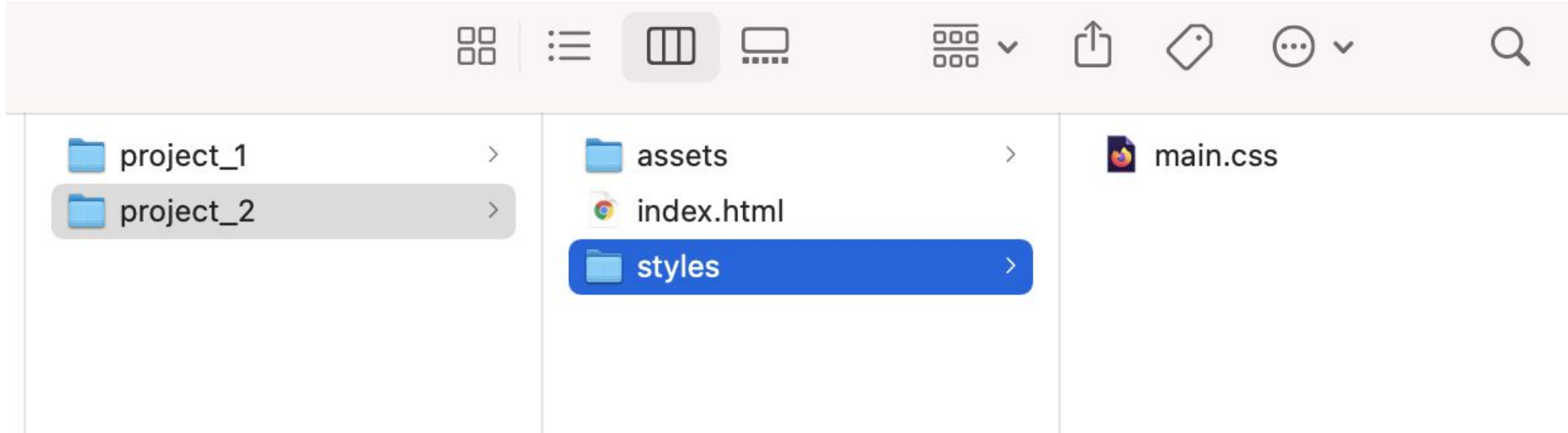
There are two ways of adding CSS to your file.

1. You can write your CSS directly in your file by adding `<style>` tags inside of `<head>`. The CSS would appear in between the tags.
2. You can link your your CSS file. Which would be saved in your root folder.
  - a. The “rel=” attribute tells the browser that the linked file will add styling to the page
  - b. “href=” lets the browser know where to find this file.

This is the method we'll be using in this class.

# Adding CSS to your file

Just like you create an “assets” folder to store your images. You have to make a “styles” folder to hold your CSS. Notice the “.css” extension.



# CSS Properties

# CSS Properties

```
h1 {  
  color:  
}
```

## Color

In these examples, we've been using the name of the color, but there are other, more exact ways of defining them.

# CSS Properties

```
h1 {  
  color: #FF0000;  
}
```

## Color

In these examples, we've been using the name of the color, but there are other, more exact ways of defining them.

When using the color property, you can use

1. **Hex color**



# CSS Properties

```
h1 {  
  color: rgb(255, 0, 0);  
}
```

## Color

In these examples, we've been using the name of the color, but there are other, more exact ways of defining them.

When using the color property, you can use

1. Hex color
2. **RGB color (red, green, blue combination)**

# CSS Properties

```
h1 {  
  color: hsl(0, 100%, 50%);  
}
```

## Color

In these examples, we've been using the name of the color, but there are other, more exact ways of defining them.

When using the color property, you can use

1. Hex color
2. RGB color (red, green, blue combination)
3. **HSL color (hue, saturation, lightness)**

# CSS Properties

```
h1 {  
  color: red;  
}
```

## Color

In these examples, we've been using the name of the color, but there are other, more exact ways of defining them.

When using the color property, you can use

1. Hex color
2. RGB color
3. HSL color
4. **Color name**

# CSS Properties

```
h1 {  
  color: #FF0000;  
  color: rgb(255, 0, 0);  
  color: hsl(0, 100%, 50%);  
  color: red;  
}
```

## Color

In these examples, we've been using the name of the color, but there are other, more exact ways of defining them.

When using the color property, you can use

1. Hex color
2. RGB color
3. HSL color
4. Color name

All of these iterations will give you the same color. What you used will depend on personal preference or the styles used by your news org.

# CSS Properties

```
h1 {  
  background-color: #FF0000;  
  background-color: rgb(255,  
0, 0);  
  background-color: hsl(0,  
100%, 50%);  
  background-color: red;  
}
```

These rules also apply to background-color property!

The color and background-color properties are very differently applied.

Download the zip file (sharing on the class slack!) and open background.html to see the difference.

# Resources for colors

Adobe Color:

<https://color.adobe.com/create/color-wheel>

Color Oracle

<https://colororacle.org/>

Material Design Color Tool:

<https://material.io/resources/color/>

Quick intro to fonts!

# Quick intro to fonts:

## Serif

Times New Roman

Garamond

Georgia

## Sans-serif

Helvetica

Lato

Roboto



## Quick intro to fonts: Serif

Georgia

# Quick intro to fonts: Serif

Georgia

The word "Georgia" is displayed in a dark grey serif font. Three red circles are overlaid on the text to highlight specific features: one on the top curve of the capital 'G', one on the bottom curve of the lowercase 'o', and one on the top curve of the lowercase 'a'. These circles illustrate the "finishing strokes" mentioned in the text below.

Finishing strokes. Some claim it's easier to read in the body of articles. Think about the tone you're setting.

## Quick intro to fonts: Sans-serif

Helvetica

# Quick intro to fonts: Sans-serif



Helvetica

Sans = “without” in French. These are fonts with no decorating features. Usually used for displays or titles

# CSS Properties

```
h1 {  
  font-family:  
}
```

Knowing what type of font you are using helps with writing the property value in your CSS.

# CSS Properties

```
h1 {  
  font-family:  
}
```

Knowing what type of font you are using helps with writing the property value in your CSS.

You can download fonts, use special font selected by the designers in your newsroom. Because not everyone has every font installed on their computers, via CSS you can let the browser know what to fall back on.

# CSS Properties

```
h1 {  
  font-family:  
}
```

Knowing what type of font you are using helps with writing the property value in your CSS.

You can download fonts, use special font selected by the designers in your newsroom. Because not everyone has every font installed on their computers, via CSS you can let the browser know what to fall back on.

So for each font-family, you need at least two values.

# CSS Properties

```
h1 {  
  font-family: Georgia  
}
```

Knowing what type of font you are using helps with writing the property value in your CSS.

You can download fonts, use special font selected by the designers in your newsroom. Because not everyone has every font installed on their computers, via CSS you can let the browser know what to fall back on.

So for each font-family, you need at least two values.

1. Your preferred font



# CSS Properties

```
h1 {  
  font-family: Georgia,  
  serif;  
}
```

Knowing what type of font you are using helps with writing the property value in your CSS.

You can download fonts, use special font selected by the designers in your newsroom. Because not everyone has every font installed on their computers, via CSS you can let the browser know what to fall back on.

So for each font-family, you need at least two values.

1. Your preferred font
2. Your back-up

# CSS Properties

```
h1 {  
  font-family: "Times New  
Roman", serif;  
}
```

If you're using a font that is more than one word, wrap it in quotes.

You can use single (") or double (""), whichever you or your newsroom prefers

# CSS Properties

```
<html>
  <head>
    <!-- meta tags -->
    <link rel="stylesheet"
href="./styles/main.css">
  </head>
  <body>
    <h1 id="pageTitle">Yoli
Martinez Portfolio</h1>
    <h2 class="subhead">Page
showing all the HTML I have
learned.</h2>
  </body>
</html>
```

So let's go back to our simplified file and try to apply some common CSS properties

- color
- font-family
- font-size

# CSS Properties

```
<html>
  <head>
    <!-- meta tags -->
    <link rel="stylesheet"
href="./styles/main.css">
  </head>
  <body>
    <h1 id="pageTitle">Yoli
Martinez Portfolio</h1>
    <h2 class="subhead">Page
showing all the HTML I have
learned.</h2>
  </body>
</html>
```

So let's go back to our simplified file and try to apply some common CSS properties

- color
- font-family
- font-size

For now, let's style "Yoli Martinez Portfolio"

I want to be using the Helvetica font (a sans-serif), in a size 25px with the color blue.

How would you do this?

# CSS Properties

```
h1 {  
    font-family: Helvetica,  
sans-serif;  
    font-size: 25px;  
    color: blue;  
}
```

← Using  
the tag

```
#pageTitle {  
    font-family: Helvetica,  
sans-serif;  
    font-size: 25px;  
    color: blue;  
}
```

← Using  
the id  
selector

# CSS Properties

```
h1 {
  font-family:
  sans-serif;
  font-size:
  color: bi
}
```

```
#pageTitle {
```

vetica,

Woah woah woah!

## So which is the best way to style something that has several CSS selectors?

I prefer using the more specific option. In this case, the id. This becomes more important as your html page grows and you have multiple elements to choose from. Also, remember the rules of cascading. A CSS selector will take precedence over a tag.

## ← Using the id selector

# CSS Properties

```
<html>
  <head>
    <!-- meta tags -->
    <link rel="stylesheet"
href="./styles/main.css">
  </head>
  <body>
    <h1 id="pageTitle">Yoli
Martinez Portfolio</h1>
    <h2 class="subhead">Page
showing all the HTML I have
learned.</h2>
  </body>
</html>
```

Using the same CSS properties, let's now style "Page showing all the HTML I have learned."

I want to be using the Arial font (a sans-serif), in a size 18px with the color red.

How would you do this?

# CSS Properties

```
h2 {  
    font-family: Arial,  
    sans-serif;  
    font-size: 18px;  
    color: red;  
}
```

← Using  
the tag

```
.subhead {  
    font-family: Arial,  
    sans-serif;  
    font-size: 18px;  
    color: red;  
}
```

← Using  
the class  
selector



# CSS Properties

```
p {  
  font-size: 16px;  
}
```

For now, we are using “px” to designate a size, mostly because that’s easier to see. But just like color, there are several ways of setting this.

# CSS Properties

```
p {  
  font-size: 1.2rem;  
}
```

For now, we are using “px” to designate a size, mostly because that’s easier to see. But just like color, there are several ways of setting this.

The most common are:

1. rem

# CSS Properties

```
p {  
  font-size: 1.6em;  
}
```

For now, we are using “px” to designate a size, mostly because that’s easier to see. But just like color, there are several ways of setting this.

The most common are:

1. rem
2. em

# CSS Properties

```
p {  
  font-size: 16px;  
}  
  
p {  
  font-size: 1.2rem;  
}  
  
p {  
  font-size: 1.6em;  
}
```

There are different use cases for each.

With 'em' the font-size adjusts based on the size of the parent element.

With 'rem', the browser adjusts size based on the <html> element.

Usually you use one style throughout your CSS styling. Sometimes this is based on in-house style rules too.

# CSS Properties

```
p {  
  font-size: 16px;  
}
```

For this class, we'll continue using px so you can get a sense of size overall.

Read more about the other options via Mozilla:

<https://developer.mozilla.org/en-US/docs/Web/CSS/font-size>

# CSS Properties

With CSS, sometimes it's just easier to see the properties in action.

So now, open the index.html file and check out its corresponding CSS file!

Also check out the atag.html file to see how you can use these properties to style links on your page. (Notice the separate .css files for each .html document)

BREAK



# Debugging CSS



# Debugging CSS

Typical mistake in your CSS code:

1. Unclosed bracket

```
h1 {  
    font-size: 25px;  
    color: blue;  
  
.subhead {  
    font-size: 15px;  
}
```

# Debugging CSS

Typical mistake in your CSS code:

1. Unclosed bracket
2. Missing semicolon

```
h1 {  
    font-size: 25px  
    color: blue;  
}  
  
.subhead {  
    font-size: 15px;  
}
```

# Debugging CSS

Typical mistake in your CSS code:

1. Unclosed bracket
2. Missing semicolon
3. Missing colon

```
h1 {  
    font-size: 25px;  
    color: blue;  
}  
  
.subhead {  
    font-size 15px;  
}
```

# Debugging CSS

Typical mistake in your CSS code:

1. Unclosed bracket
2. Missing semicolon
3. Missing colon
4. Selector has wrong identifying punctuation

```
<html>
  <head>
    <style>
      #subhead {
        color: #F78419;
      }
    </style>
  </head>
  <body>
    <h1>This is an h1</h1>
    <h2 class="subhead">A page for the
HTML I have learned.</h2>
  </body>
</html>
```

# Debugging CSS: Why is this breaking?

```
#pageTitle {  
  font-size 35px;  
}  
  
#subhead {  
  background-color: FF0000  
}  
  
h4 {  
  margin-right: 25px;  
  font-family: Helvetica  
  san-serif;
```

```
<html>  
  <head>  
    <!--meta tags -->  
    <link rel="stylesheet" href="./styles/main.css"  
  </head>  
  <body>  
    <header>  
      <h1 id="pageTitle">Portfolio: Yoli Martinez</h1>  
      <h2 class="subhead">Page showing all the HTML and CSS I  
have learned.<h2>  
    </header>  
    <main class="container">  
      <h3>Links to my work</h3>  
      <h4>BART increases fare</h4>  
        
      <p class="description">A story about the 25% increase  
in fare for commuters. I interviewed a BART spokesperson and  
morning commuters in Oakland.</p>  
      <a "https://oaklandnorth.net/2022/01/04/story-heading"  
>OaklandNorth, Jan., 2022</a>  
    </main>  
  </body>  
</html>
```

# Debugging CSS: Why is this breaking?

```
#pageTitle {  
  font-size: 35px;  
}  
  
.subhead {  
  background-color: #FF0000;  
}  
  
h4 {  
  margin-right: 25px;  
  font-family: Helvetica,  
  san-serif;  
}
```

```
<html>  
  <head>  
    <!--meta tags -->  
    <link rel="stylesheet" href="./styles/main.css">  
  </head>  
  <body>  
    <header>  
      <h1 id="pageTitle">Portfolio: Yoli Martinez</h1>  
      <h2 class="subhead">Page showing all the HTML and CSS I  
have learned.</h2>  
    </header>  
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      <p class="description">A story about the 25% increase  
in fare for commuters. I interviewed a BART spokesperson and  
morning commuters in Oakland.</p>  
      <a href="https://oaklandnorth.net/2022/01/04/story-heading">  
>OaklandNorth, Jan., 2022</a>  
    </main>  
  </body>  
</html>
```

# Debugging CSS: Why is this breaking?

```
#pageTitle {  
  font-size: 35px;  
}  
  
.subhead {  
  background-color: #FF0000;  
}  
  
h4 {  
  margin-right: 25px;  
  font-family: Helvetica,  
  san-serif;  
}
```

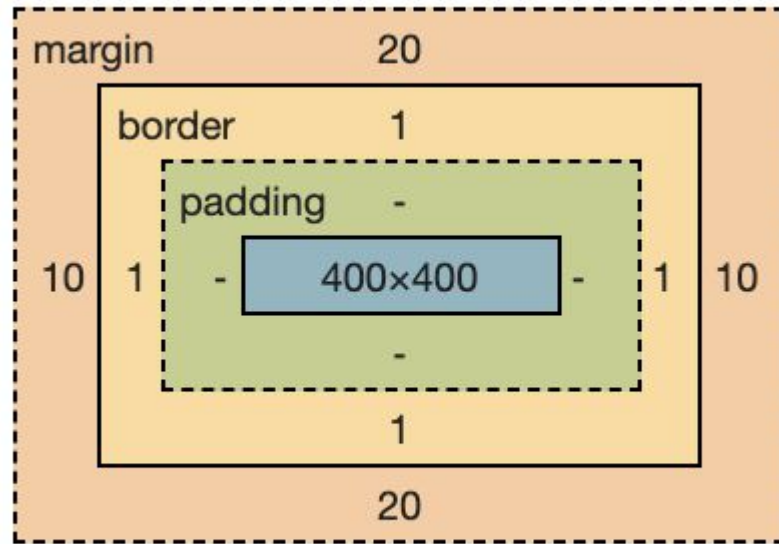
```
<html>  
  <head>  
    <!--meta tags -->  
    <link rel="stylesheet" href="../styles/main.css"  
  </head>  
  <body>  
    <header>  
      <h1 id="pageTitle">Portfolio: Yoli Martinez</h1>  
      <h2 class="subhead">Page showing all the HTML and CSS I  
have learned.</h2>  
    </header>  
    <main class="container">  
      <h3>Links to my work</h3>  
      <h4>BART increases fare</h4>  
        
      <p class="description">A story about the 25% increase  
in fare for commuters. I interviewed a BART spokesperson and  
morning commuters in Oakland.</p>  
      <a "https://oaklandnorth.net/2022/01/04/story-heading"  
>OaklandNorth, Jan., 2022</a>  
    </main>  
  </body>  
</html>
```

# Box Model



# Box Model

Let's talk about spacing!

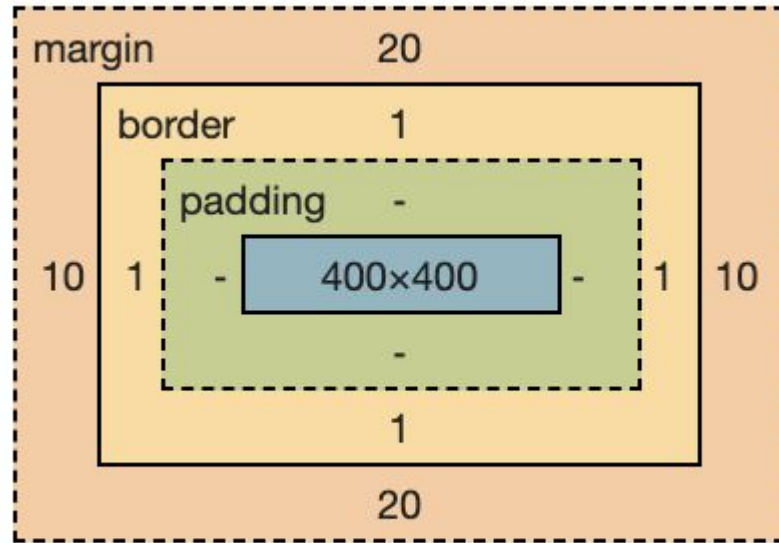


# Box Model

The CSS properties that makes up the box are:

1. margin
2. border
3. padding

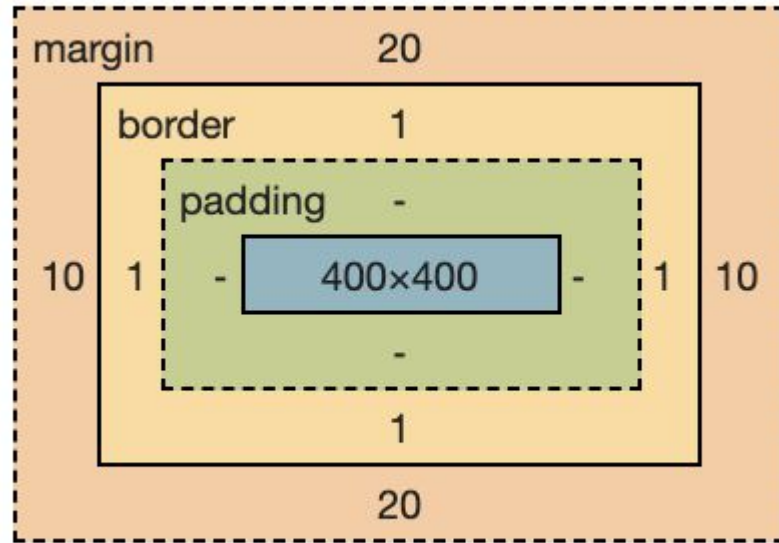
The content is what is found inside of the HTML element



# Box Model

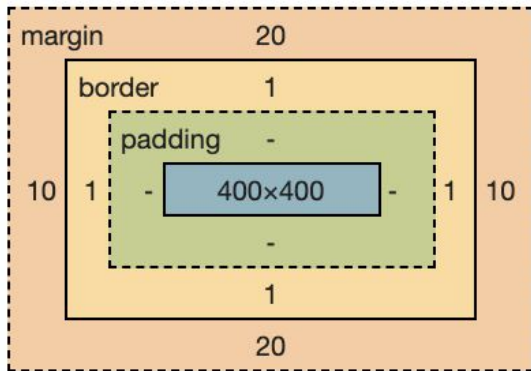
Some HTML tags come in with  
inherit margins.

Let's look at an h1 tag in the  
inspector.



# Box Model

The light peach color is the margin. The `<h1>` tag comes with a set margin automatically. But with CSS, we can manipulate it. From hovering over this, we can see there is no padding or border.



## The CSS Box Model

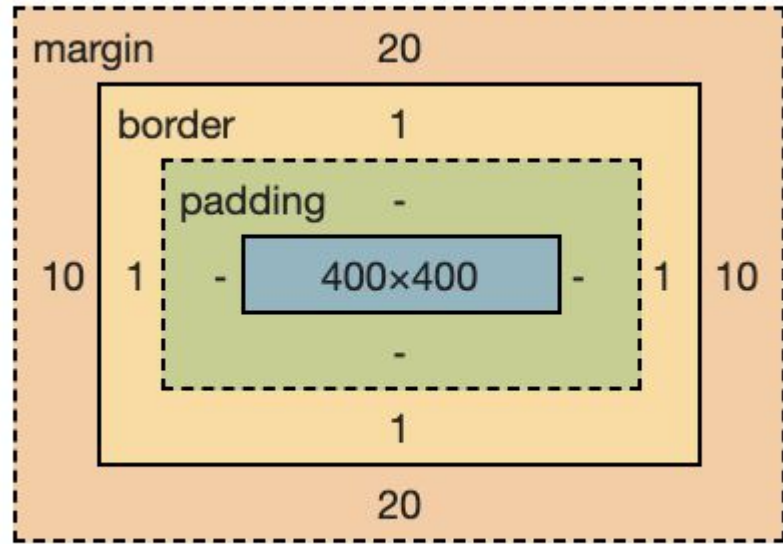
**h1** 730.8 × 37 **Layout out CSS box model properties.**

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote

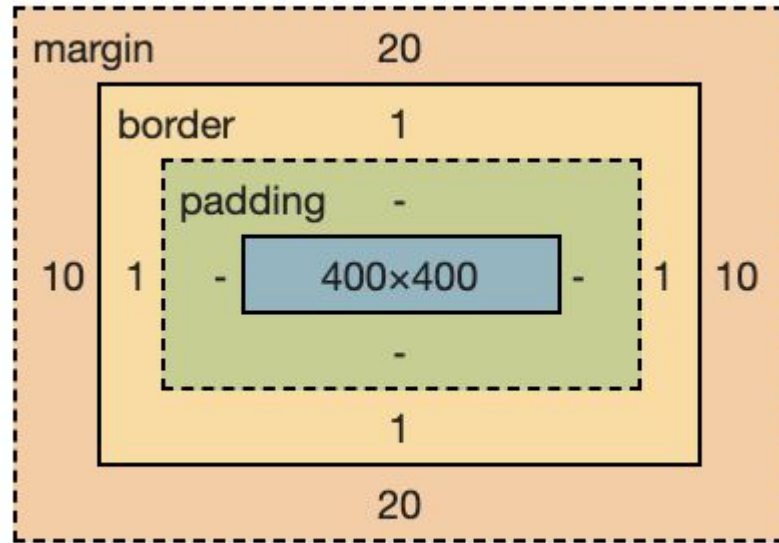
# Box Model

Margin and padding can seem very similar, and many times you can't really see the different. But they add spacing in different areas.



# Box Model

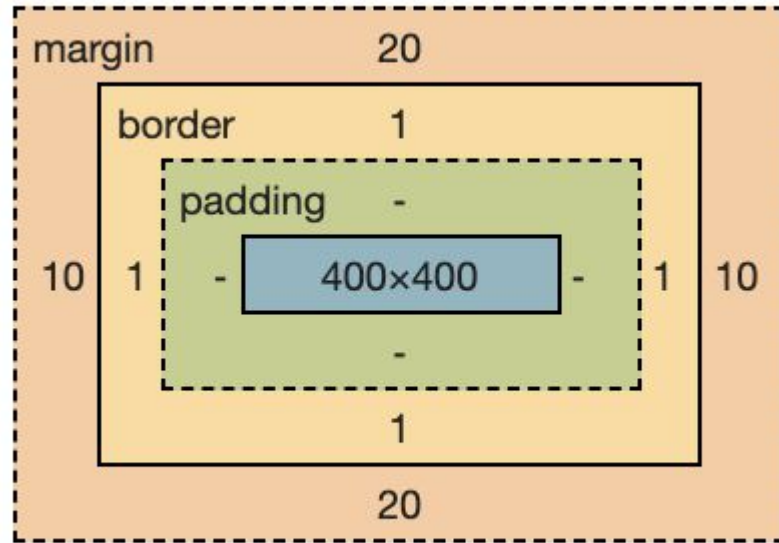
The padding (the green area) is the space between the content and the border. It is space inside of the element.



# Box Model

The padding (the green area) is the space between the content and the border. It is space inside of the element.

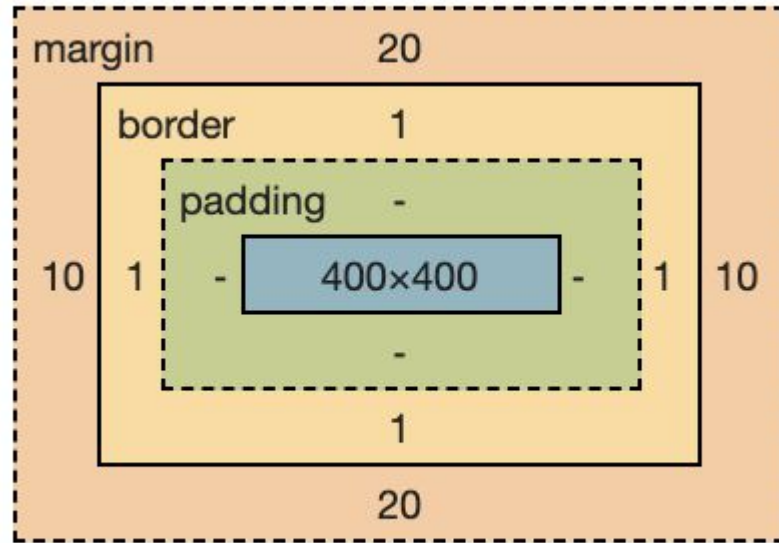
The margin (the peach area) is the space between the border and the HTML elements around the content.



# Box Model

The border exists in between the margin and padding.

Let's look at an example.





# Box Model

Let's apply the box model to the demoSection class

```
<!DOCTYPE html>
<html class= "html" lang="en">
  <head>
    <!--meta tags -->
    <link rel="stylesheet"
href="./styles/boxmodel.css">
  </head>
  <body>
    <header>
      <h1>The CSS Box Model</h1>
      <h2>A file to try out CSS box model
properties.</h2>
    </header>
    <main>
      <section class="demoSection">
        <h3>Demonstrating the box model</h3>
        <p>Jane had already written a few lines to her
sister to announce their safe arrival in London; and
when she wrote again, Elizabeth hoped it would be in
her power to say something of the Bingleys.</p>
      </section>
    </main>
  </body>
</html>
```

# Box Model: Border

## The CSS Box Model

A file to try out CSS box model properties.

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

```
.demoSection {  
  border-width: 2px;  
  border-style: solid;  
  border-color: red;  
}
```

```
<!DOCTYPE html>  
<html class= "html" lang="en">  
  <head>  
    <!--meta tags -->  
    <link rel="stylesheet"  
href="./styles/boxmodel.css">  
  </head>  
  <body>  
    <header>  
      <h1>The CSS Box Model</h1>  
      <h2>A file to try out CSS box model  
properties.</h2>  
    </header>  
    <main>  
      <section class="demoSection">  
        <h3>Demonstrating the box model</h3>  
        <p>Jane had already written a few lines to her  
sister to announce their safe arrival in London; and  
when she wrote again, Elizabeth hoped it would be in  
her power to say something of the Bingleys.</p>  
      </section>  
    </main>  
  </body>  
</html>
```

# Box Model: Border

## The CSS Box Model

A file to try out CSS box model properties.

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

```
/* border order: width, style  
(solid, dotted, dashed, etc.),  
color */  
.demoSection {  
  border: 2px solid red;  
}
```

```
<!DOCTYPE html>  
<html class= "html" lang="en">  
  <head>  
    <!--meta tags -->  
    <link rel="stylesheet"  
href="./styles/boxmodel.css">  
  </head>  
  <body>  
    <header>  
      <h1>The CSS Box Model</h1>  
      <h2>A file to try out CSS box model  
properties.</h2>  
    </header>  
    <main>  
      <section class="demoSection">  
        <h3>Demonstrating the box model</h3>  
        <p>Jane had already written a few lines to her  
sister to announce their safe arrival in London; and  
when she wrote again, Elizabeth hoped it would be in  
her power to say something of the Bingleys.</p>  
      </section>  
    </main>  
  </body>  
</html>
```

# Box Model: Padding

## The CSS Box Model

A file to try out CSS box model properties.

section.demoSection 730.8 × 135.44

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

```
/* border order: width, style (solid, dotted,
dashed, etc.), color */
.demoSection {
  border: 2px solid red;
  padding-top: 10px;
  padding-right: 10px;
  padding-bottom: 10px;
  padding-left: 10px;
}
```

```
<!DOCTYPE html>
<html class= "html" lang="en">
  <head>
    <!--meta tags -->
    <link rel="stylesheet"
href="./styles/boxmodel.css">
  </head>
  <body>
    <header>
      <h1>The CSS Box Model</h1>
      <h2>A file to try out CSS box model
properties.</h2>
    </header>
    <main>
      <section class="demoSection">
        <h3>Demonstrating the box model</h3>
        <p>Jane had already written a few lines to her
sister to announce their safe arrival in London; and
when she wrote again, Elizabeth hoped it would be in
her power to say something of the Bingleys.</p>
      </section>
    </main>
  </body>
</html>
```

# Box Model: Padding

## The CSS Box Model

A file to try out CSS box model properties.

section.demoSection 730.8 × 135.44

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

```
/* Border order: width, style (solid, dotted,
dashed, etc.), color */
/* Padding order: top, right, bottom, left
(clockwise) */
.demoSection {
  border: 2px solid red;
  padding: 10px 10px 10px 10px;
}
```

```
<!DOCTYPE html>
<html class= "html" lang="en">
  <head>
    <!--meta tags -->
    <link rel="stylesheet"
href="./styles/boxmodel.css">
  </head>
  <body>
    <header>
      <h1>The CSS Box Model</h1>
      <h2>A file to try out CSS box model
properties.</h2>
    </header>
    <main>
      <section class="demoSection">
        <h3>Demonstrating the box model</h3>
        <p>Jane had already written a few lines to her
sister to announce their safe arrival in London; and
when she wrote again, Elizabeth hoped it would be in
her power to say something of the Bingleys.</p>
      </section>
    </main>
  </body>
</html>
```

# Box Model: Padding

## The CSS Box Model

A file to try out CSS box model properties.

section.demoSection 730.8 × 135.44

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

```
/* Border order: width, style (solid, dotted,
dashed, etc.), color */
/* Padding order: top/bottom, left/right */
.demoSection {
  border: 2px solid red;
  padding: 10px 10px;
}
```

```
<!DOCTYPE html>
<html class= "html" lang="en">
  <head>
    <!--meta tags -->
    <link rel="stylesheet"
href="./styles/boxmodel.css">
  </head>
  <body>
    <header>
      <h1>The CSS Box Model</h1>
      <h2>A file to try out CSS box model
properties.</h2>
    </header>
    <main>
      <section class="demoSection">
        <h3>Demonstrating the box model</h3>
        <p>Jane had already written a few lines to her
sister to announce their safe arrival in London; and
when she wrote again, Elizabeth hoped it would be in
her power to say something of the Bingleys.</p>
      </section>
    </main>
  </body>
</html>
```

# Box Model: Padding

## The CSS Box Model

A file to try out CSS box model properties.

section.demoSection 730.8 × 135.44

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

```
/* Border order: width, style (solid, dotted,
dashed, etc.), color */
/* Padding order: all the same*/
.demoSection {
  border: 2px solid red;
  padding: 10px;
}
```

```
<!DOCTYPE html>
<html class= "html" lang="en">
  <head>
    <!--meta tags -->
    <link rel="stylesheet"
href="./styles/boxmodel.css">
  </head>
  <body>
    <header>
      <h1>The CSS Box Model</h1>
      <h2>A file to try out CSS box model
properties.</h2>
    </header>
    <main>
      <section class="demoSection">
        <h3>Demonstrating the box model</h3>
        <p>Jane had already written a few lines to her
sister to announce their safe arrival in London; and
when she wrote again, Elizabeth hoped it would be in
her power to say something of the Bingleys.</p>
      </section>
    </main>
  </body>
</html>
```

# Box Model: Padding

## The CSS Box Model

A file to try out CSS box model properties.

section.demoSection 730.8 × 135.44

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

```
/* Border order: width, style (solid, dotted,
dashed, etc.), color */
/* Padding order: top, right, bottom, left*/
.demoSection {
  border: 2px solid red;
  padding: 10px 0px;
}
```

```
<!DOCTYPE html>
<html class= "html" lang="en">
  <head>
    <!--meta tags -->
    <link rel="stylesheet"
href="./styles/boxmodel.css">
  </head>
  <body>
    <header>
      <h1>The CSS Box Model</h1>
      <h2>A file to try out CSS box model
properties.</h2>
    </header>
    <main>
      <section class="demoSection">
        <h3>Demonstrating the box model</h3>
        <p>Jane had already written a few lines to her
sister to announce their safe arrival in London; and
when she wrote again, Elizabeth hoped it would be in
her power to say something of the Bingleys.</p>
      </section>
    </main>
  </body>
</html>
```



# Box Model: Margin

## The CSS Box Model

section.demoSection 730.8 × 135.44

model properties.

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

```
/* Border order: width, style (solid, dotted,
dashed, etc.), color */
/* Padding order: top, right, bottom, left*/
.demoSection {
  border: 2px solid red;
  padding: 10px 0px;
  margin-top: 20px;
  margin-right: 0px;
  margin-bottom: 20px;
  margin-left: 0px;
}
```

```
<!DOCTYPE html>
<html class= "html" lang="en">
  <head>
    <!--meta tags -->
    <link rel="stylesheet"
href="./styles/boxmodel.css">
  </head>
  <body>
    <header>
      <h1>The CSS Box Model</h1>
      <h2>A file to try out CSS box model
properties.</h2>
    </header>
    <main>
      <section class="demoSection">
        <h3>Demonstrating the box model</h3>
        <p>Jane had already written a few lines to her
sister to announce their safe arrival in London; and
when she wrote again, Elizabeth hoped it would be in
her power to say something of the Bingleys.</p>
      </section>
    </main>
  </body>
</html>
```

# Box Model: Margin

## The CSS Box Model

section.demoSection 730.8 × 135.44

model properties.

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

```
/* Border order: width, style (solid, dotted,
dashed, etc.), color */
/* Padding and margin order: all the same*/
.demoSection {
  border: 2px solid red;
  padding: 10px 0px;
  margin: 20px 0px;
}
```

```
<!DOCTYPE html>
<html class= "html" lang="en">
  <head>
    <!--meta tags -->
    <link rel="stylesheet"
href="./styles/boxmodel.css">
  </head>
  <body>
    <header>
      <h1>The CSS Box Model</h1>
      <h2>A file to try out CSS box model
properties.</h2>
    </header>
    <main>
      <section class="demoSection">
        <h3>Demonstrating the box model</h3>
        <p>Jane had already written a few lines to her
sister to announce their safe arrival in London; and
when she wrote again, Elizabeth hoped it would be in
her power to say something of the Bingleys.</p>
      </section>
    </main>
  </body>
</html>
```

# Box Model: Margin

## The CSS Box Model

section.demoSection 730.8 × 135.44

model properties.

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

```
/* Border order: width, style (solid, dotted,
dashed, etc.), color */
/* Padding order: all the same*/
.demoSection {
  border: 2px solid red;
  padding: 10px 0px;
  margin: 20px auto;
}
```

```
<!DOCTYPE html>
<html class= "html" lang="en">
  <head>
    <!--meta tags -->
    <link rel="stylesheet"
href="./styles/boxmodel.css">
  </head>
  <body>
    <header>
      <h1>The CSS Box Model</h1>
      <h2>A file to try out CSS box model
properties.</h2>
    </header>
    <main>
      <section class="demoSection">
        <h3>Demonstrating the box model</h3>
        <p>Jane had already written a few lines to her
sister to announce their safe arrival in London; and
when she wrote again, Elizabeth hoped it would be in
her power to say something of the Bingleys.</p>
      </section>
    </main>
  </body>
</html>
```

# Box Model

Before

## The CSS Box Model

A file to try out CSS box model properties.

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

**Lentils is the best cat in the world**

After

## The CSS Box Model

A file to try out CSS box model properties.

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

**Lentils is the best cat in the world**

# Box Model

1. Margins can have negative values! (But padding cannot)
2. Like in the last example, margin accepts the “auto” property value.
3. HTML elements can exist without paddings, borders and margins. The box model still operates the same even if there is just one of these properties present.
4. Margins, paddings, and border accept px, rem, em, and % for sizing.
5. Margins are very useful when trying to center elements. Read more about it here: <https://developer.mozilla.org/en-US/docs/Web/CSS/margin>

# Box Model

Let's use the box model to have the text wrap around the photo of Lentils, my cat.



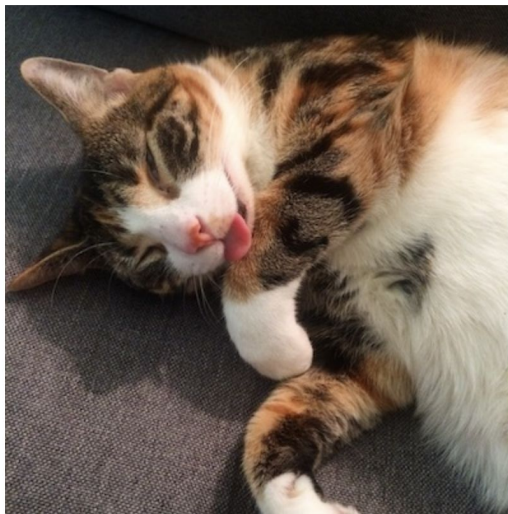
## The CSS Box Model

A file to try out CSS box model properties.

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

### Lentils is the best cat in the world



Lentils is an 8-year-old calico that was adopted from the D.C. Humane Society 6 years ago. She is the most unloyal cat and would gladly run away with anyone that pets her. This is why I love her.

While she does wakeup the household asking for breakfast everyday at 6 p.m., Lentils still likes to believe she's a fearcly indepent cat that doesn't need a human.

# Box Model

Let's use the box model to have the text wrap around the photo of Lentils, my cat.

First, let's apply a float property.

```
.catImage {  
  float: left;  
}
```

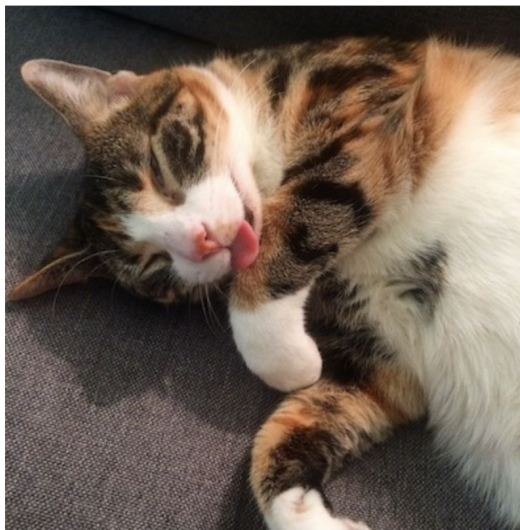
## The CSS Box Model

A file to try out CSS box model properties.

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

### Lentils is the best cat in the world



Lentils is an 8-year-old calico that was adopted from the D.C. Humane Society 6 years ago. She is the most unloyal cat and would gladly run away with anyone that pets her. This is why I love her.

While she does wake up the household asking for breakfast everyday at 6 p.m., Lentils still likes to believe she's a fiercely independent cat that doesn't need a human.

The wedding took place; the bride and bridegroom set off for Kent from the church door, and everybody had as much to say, or to hear, on the subject as usual. Elizabeth soon heard from her friend; and their correspondence was as regular and frequent as it had ever been; that it should be equally unreserved was impossible. Elizabeth could never address her without feeling that all the comfort of intimacy was over, and though determined not to slacken as a correspondent, it was for the sake of what had been, rather than what was. Charlotte's first letters were received with a good deal of eagerness; there could not but be

curiosity to know how she would speak of her new home, how she would like Lady Catherine, and how happy she would dare pronounce herself to be; though, when the letters were read, Elizabeth felt that Charlotte expressed herself on every point exactly as she might have foreseen. She wrote cheerfully, seemed surrounded with comforts, and mentioned nothing which she could not praise. The house, furniture, neighbourhood, and roads were all to her taste, and Lady Catherine's behaviour was most friendly and obliging. It was Mr. Collins's

# Box Model

Let's use the box model to have the text wrap around the photo of Lentils, my cat.

Let's give it a padding!

```
.catImage {  
  float: left;  
  padding: 0px 20px 20px 0px;  
}
```

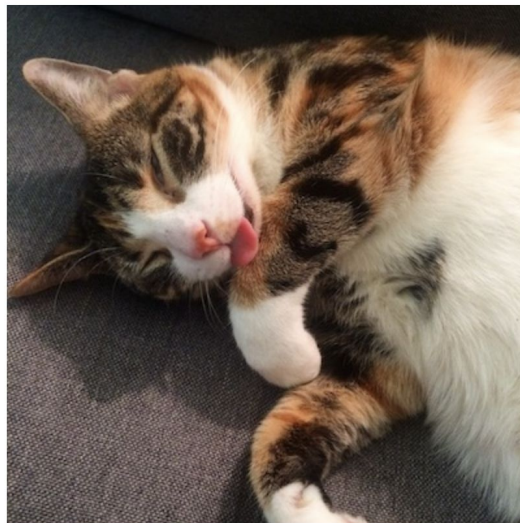
## The CSS Box Model

A file to try out CSS box model properties.

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

### Lentils is the best cat in the world



Lentils is an 8-year-old calico that was adopted from the D.C. Humane Society 6 years ago. She is the most unloyal cat and would gladly run away with anyone that pets her. This is why I love her.

While she does wakeup the household asking for breakfast everyday at 6 p.m., Lentils still likes to believe she's a fearfully independent cat that doesn't need a human.

The wedding took place; the bride and bridegroom set off for Kent from the church door, and everybody had as much to say, or to hear, on the subject as usual. Elizabeth soon heard from her friend; and their correspondence was as regular and frequent as it had ever been; that it should be equally unreserved was impossible. Elizabeth could never address her without feeling that all the comfort of intimacy was

over, and though determined not to slacken as a correspondent, it was for the sake of what had been, rather than what was. Charlotte's first letters were received with a good deal of eagerness; there could not to know how she would speak of her new home, how she would like Lady Catherine, and



# Box Model

Let's use the box model to have the text wrap around the photo of Lentils, my cat.

Let's give it a margin!

```
.catImage {  
  float: left;  
  padding: 0px 20px 20px 0px;  
  margin: 0px 20px 20px 0px;  
}
```

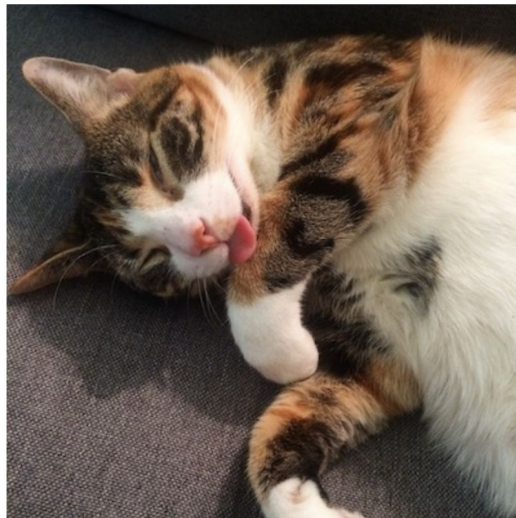
## The CSS Box Model

A file to try out CSS box model properties.

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

### Lentils is the best cat in the world



Lentils is an 8-year-old calico that was adopted from the D.C. Humane Society 6 years ago. She is the most unloyal cat and would gladly run away with anyone that pets her. This is why I love her.

While she does wake up the household asking for breakfast everyday at 6 p.m., Lentils still likes to believe she's a fearfully independent cat that doesn't need a human.

The wedding took place; the bride and bridegroom set off for Kent from the church door, and everybody had as much to say, or to hear, on the subject as usual. Elizabeth soon heard from her friend; and their correspondence was as regular and frequent as it had ever been; that it should be equally unreserved was impossible. Elizabeth could never address her without feeling that all the comfort

of intimacy was over, and though determined not to slacken as a correspondent, it was for the sake of what had been, rather than what was. Charlotte's first letters were received with a good deal of eagerness; there could not but be curiositv to know how she would speak of her new home. how she would like

# Box Model

Let's use the box model to have the text wrap around the photo of Lentils, my cat.

Let's be a little fun!

```
.catImage {  
  float: left;  
  padding: 0px 20px 20px 0px;  
  margin: 0px 20px 20px 0px;  
  border-radius: 50px;  
}
```

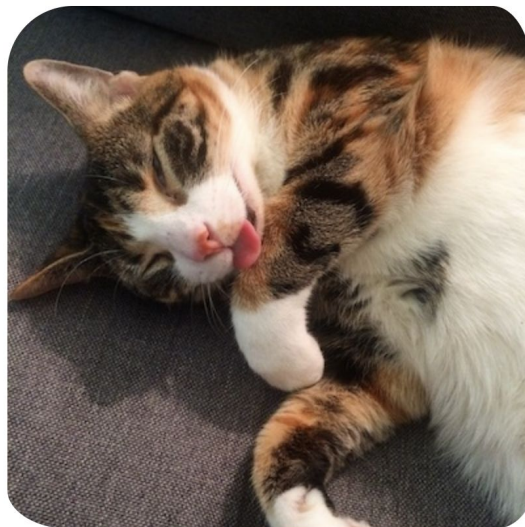
## The CSS Box Model

A file to try out CSS box model properties.

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

### Lentils is the best cat in the world



Lentils is an 8-year-old calico that was adopted from the D.C. Humane Society 6 years ago. She is the most unloyal cat and would gladly run away with anyone that pets her. This is why I love her.

While she does wake up the household asking for breakfast everyday at 6 p.m., Lentils still likes to believe she's a fearfully independent cat that doesn't need a human.

The wedding took place; the bride and bridegroom set off for Kent from the church door, and everybody had as much to say, or to hear, on the subject as usual. Elizabeth soon heard from her friend; and their correspondence was as regular and frequent as it had ever been; that it should be equally unreserved was impossible. Elizabeth could never address her without feeling that all the comfort

of intimacy was over, and though determined not to slacken as a correspondent, it was for the sake of what had been, rather than what was. Charlotte's first letters were received with a good deal of eagerness; there could not but be curiosity to know how she would speak of her new home, how she would like

# Box Model

Remember the box model set up.

If you add a border, it would appear between the padding and the margin

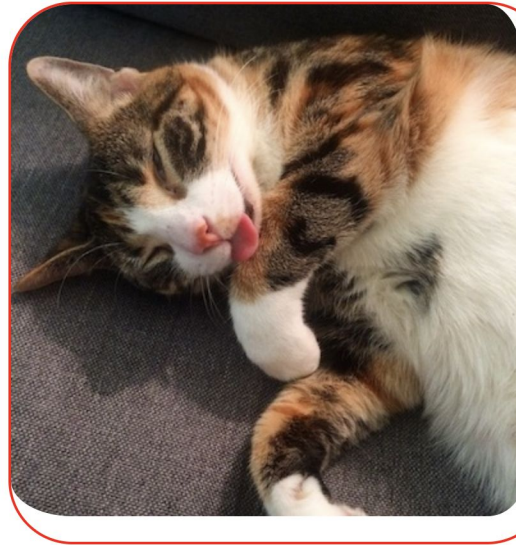
## The CSS Box Model

A file to try out CSS box model properties.

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.

### Lentils is the best cat in the world



Lentils is an 8-year-old calico that was adopted from the D.C. Humane Society 6 years ago. She is the most unloyal cat and would gladly run away with anyone that pets her. This is why I love her.

While she does wakeup the household asking for breakfast everyday at 6 p.m., Lentils still likes to believe she's a fearcly indepent cat that doesn't need a human.

The wedding took place; the bride and bridegroom set off for Kent from the church door, and everybody had as much to say, or to hear, on the subject as usual. Elizabeth soon heard from her friend; and their correspondence was as regular and frequent as it had ever been; that it should

be equally unreserved was impossible. Elizabeth could never address her without feeling that all the comfort of intimacy was over, and though determined not to slacken as a correspondent, it was for the sake of what had been, rather than what was. Charlotte's first letters were received with a good deal of eagerness: there could not but be curiosity to know how she would sneak of her new

# Box Model

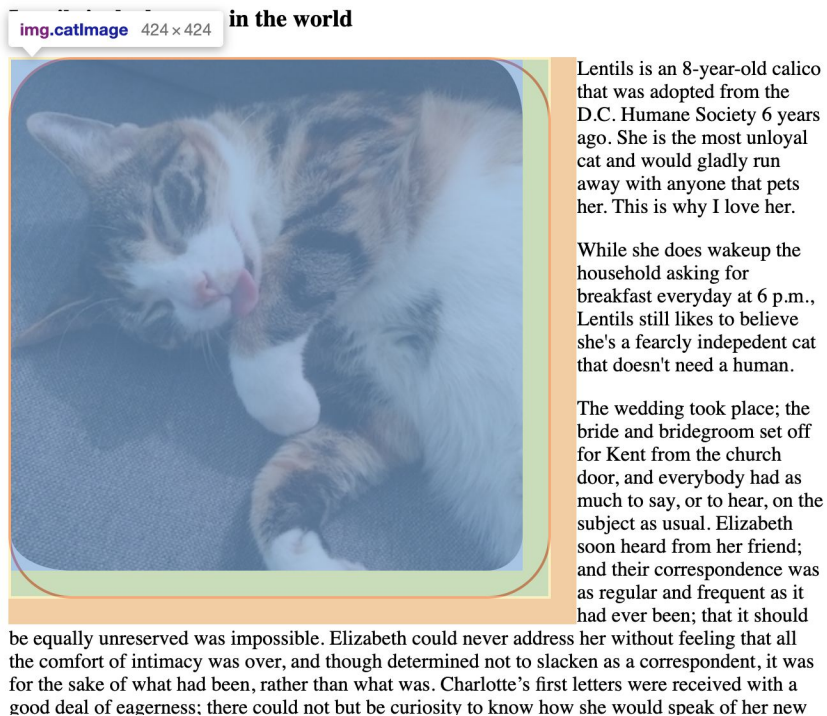
If we use the inspector tool, it will highlight each of the box model properties: content (blue), padding (green), border (yellow) and margin (peach)

## The CSS Box Model

A file to try out CSS box model properties.

### Demonstrating the box model

Jane had already written a few lines to her sister to announce their safe arrival in London; and when she wrote again, Elizabeth hoped it would be in her power to say something of the Bingleys.





# Box Model

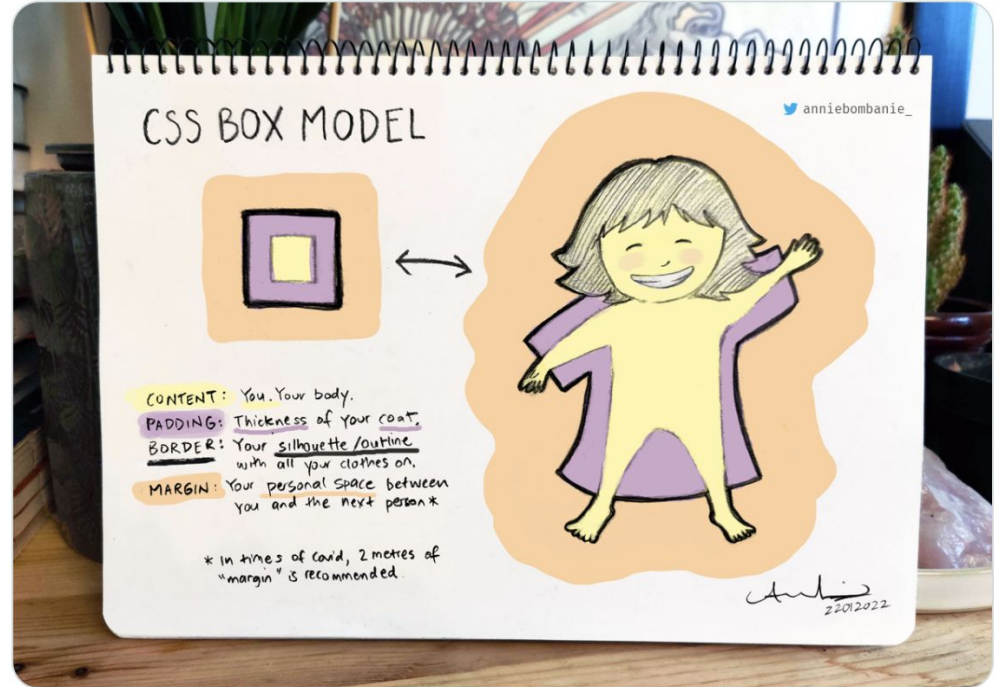
The more you use these CSS properties, the more sense it'll make!

<https://twitter.com/anniebombanie/status/1485600904720101380>



Annie 🦄⚡  
@anniebombanie\_

CSS Box Model — an illustrated analogy.



5:10 AM · Jan 24, 2022 · FeedHive.io



# Homework

<https://journ220.github.io>

**Note to students:**

Please help close  
the windows  
when leaving