

Border

All boxes have borders even if invisible or 0px wide. It separates the edge of one box from another.

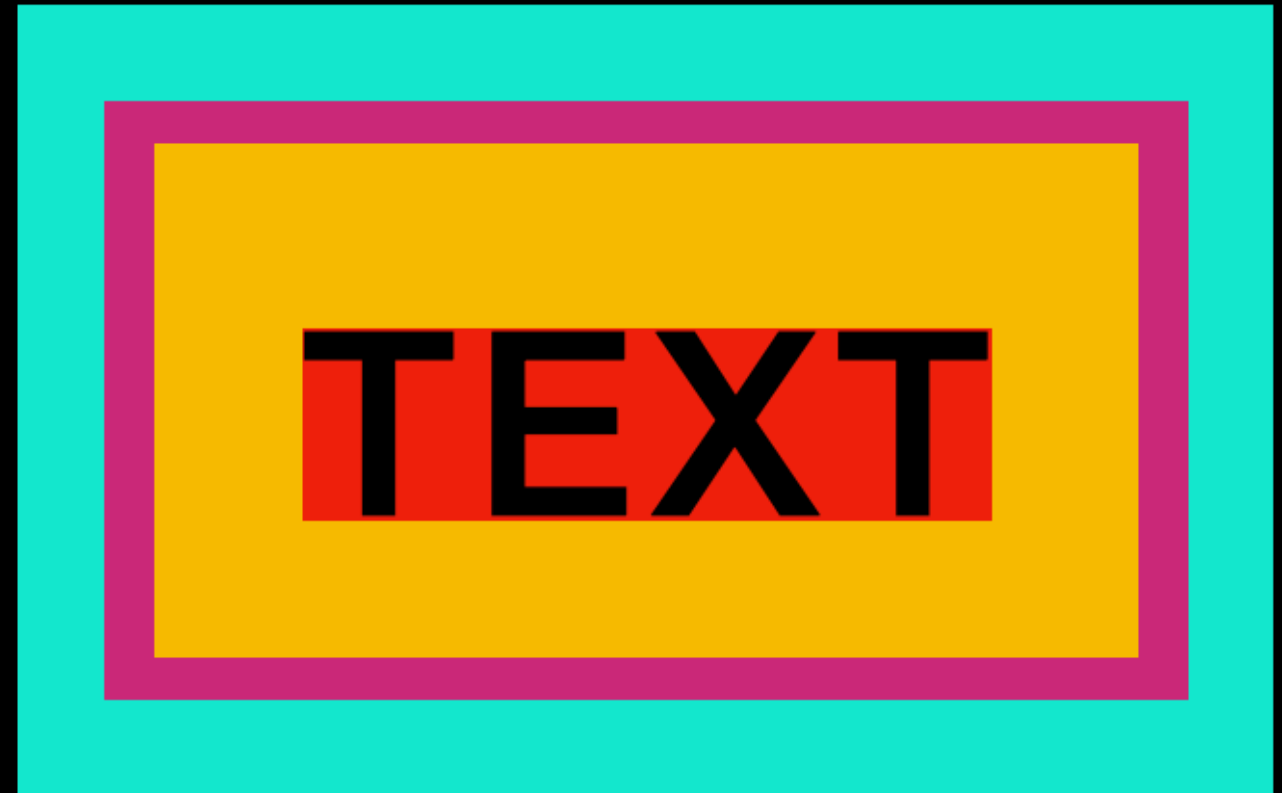
Padding

Padding is the space btw the border + any content contained within it. More padding increases the readability of its contents.

Margin

Margins sit outside the edge of the border. You can set the width to create a gap btw borders of adjacent boxes.

the Box Model



Content

HTML - Hyper Text Mark Up

is a grammar for structuring web pages. It defines paragraphs, headings, data tables + media elements. HTML describes the content of the page - not how it looks.

CSS - Cascading Style Sheet

rules for styling a web page. Setting colors, typeface, and the layout. It can be used to consider the design of your **page across different platforms and screen sizes.**



Unlike other programming languages - HTML, CSS + JavaScript were authored for their outputs to **be read or seen** by human persons on glowing rectangular screens GUIs.

The key to understanding how **CSS** works is to imagine that there is an invisible box around every **HTML** element.

Block level elements are outlined w/ red + inline elements in green.

<body> creates 1st box, then **<h1>**, **<h2>**, **<p>**, **<i>** + **<a>** each create their own boxes within it.

The Cottage Garden

The *cottage garden* is a distinct style of garden that uses an informal design, dense plantings, and a mixture of ornamental and edible plants.

The Cottage Garden originated in England and its history can be traced back for centuries, although they were re-invented in 1870's England, when stylized versions were formed as a reaction to the more structured and rigorously maintained English estate gardens.

The earliest cottage gardens were more practical than their modern descendants, with an emphasis on vegetables and herbs, along with some fruit trees.

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Metadata: `viewport`

The user's visible area of a web page

HTML5 introduced a method to let web designers take control over the viewport, through the `<meta>` tag.

<!

- - Tells the browser to match the device's width for the viewport
- Sets an initial zoom value -->

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

`<meta name="viewport" content="width=device-width, initial-scale=1.0">`



without



with

Inline Styles

```
<h1 style="color:#FF4500;">This Webpage though...</h1>
<body style="background-color: #000080;">
```

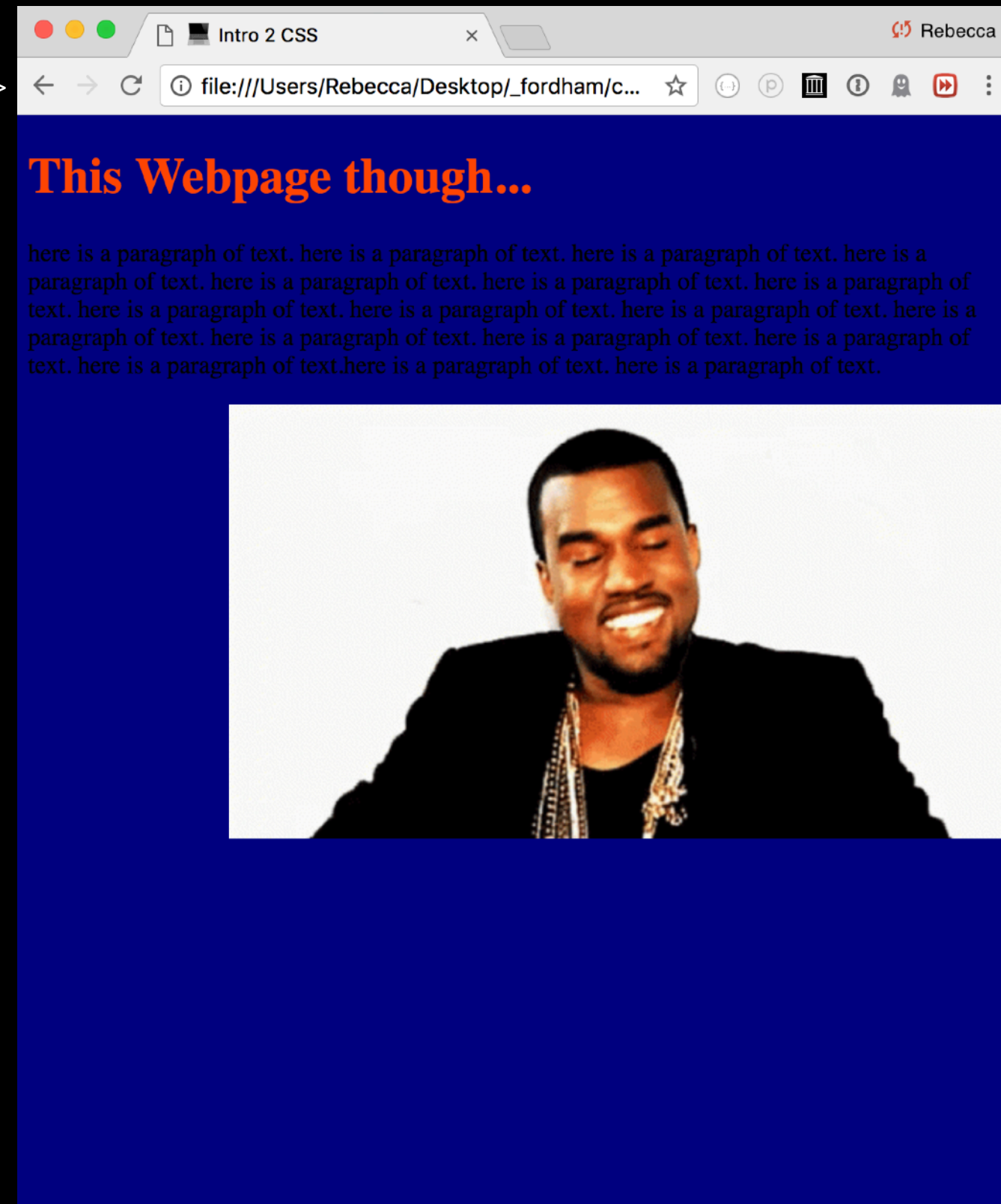
Embedded Styles

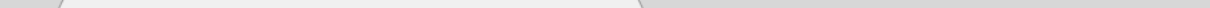
```
<html>
  <head>
    <title> 🖥 Intro 2 CSS </title>
    <style type="text/css">
      h1 {
        color: #FF4500;
      }

      body {
        background: #000080;
      }
    </style>
  </head>
```

External Styles *

```
<head>
  <title> 🖥 Intro 2 CSS </title>
  <link rel="stylesheet" type="text/css" href="theStyle.css">
</head>
```





The screenshot shows a web browser window with a single tab titled "Intro 2 CSS". The address bar displays the file path `file:///Users/Rebecca/Desktop/_fordham/c...`. The browser interface includes standard navigation buttons (back, forward, refresh) and various extension icons on the right.

This Webpage though...

A portrait of a man with short dark hair, smiling broadly with his eyes closed. He is wearing a black jacket over a dark shirt and a patterned scarf. The background is white.

```
selector { declaration }
```


Selector is a term such as **p**, **h1**, **div** that identifies the HTML element you want to format or apply a rule to. You can add multiple selectors in a declaration.

Selector	Meaning	Example
Universal Selector	Applies to all elements in the document	<code>* { }</code>
Type Selector	Matches element names	<code>h1, h2, h3 { }</code>
Class Selector	Matches an element whose class attribute has a value that matches the one specified after the period (or full stop) symbol	<code>.theNote { }</code> targets any element whose class attribute has a value of "note"
ID Selector	Matches an element whose id attribute has a value that matches then specified after the # symbol	<code>#introduction { }</code> targets the element whose id attribute has value of "introduction"

Selector

Meaning

Example

Child Selector

Matches an element that is a direct child of another

`li > a { }`

targets any `<a>` element that are children of an `` element (but not other `<a>` elements in the page).

Descendant Selector

Matches an element that is a descendent of another specified element (not just a direct child of that element)

`p a { }`

targets any `<a>` elements that sit inside a `<p>` element, even if there are other elements nested btw them

Selector

Meaning

Example

Adjacent Sibling Selector

Matches an element that is the next sibling of another

h1+p { }
targets the first **<p>** element after any **<h1>** element (but not other **<p>** elements)

General Sibling Selector

Matches an element that is a sibling of another, although it does not have to be the directly preceding element

h1~p { }
tif you have two **<p>** elements that are siblings of an **<h1>** element, this rule would apply to both

selecting multiple elements:

```
h1, h2, h3 {
```

```
    color: red;  
    background-color: blue;  
    width: 500px;
```

```
}
```

```
p,  
li {
```

```
    background-color: red;  
    font-color: blue;
```

```
}
```

HTML comments are written like this

```
<!-- This is a comment -->
```

CSS comments are written like this

```
/* This is a comment */
```


a: link {

a: visited {

: hover { Applied when a user hovers over an element w/ a mouse. This changes the appearance of links and buttons when a user places their cursor over them. Does not work on mobile.

: active { Applied when an element is being activated by a user, like when a button is pressed or a link clicked. This added to UX. Applied when an element has focus. Any thing you can interact with.

: focus { Focus occurs when a browser discovers that you are ready to interact w/ an element. For example when yr cursor is in an input - that element is said to have focus.

}

Classes and IDs

Two common attributes used to single out certain HTML elements are **class** and **id**, both are used to identify particular elements when adding CSS styling rules. **You author class + id names!!** They have no particular meaning in themselves, besides a puzzle - or code - you are creating.

Use a **class** when you have more than one element you want to share the same styling - perhaps across multiple pages.

Use an **id** when there is only one element on the page with that id, for example `id="header"`. With a class you can have as many elements with that styling as you like.

An element can have more than one **class**, but not more than one **id**. When there is more than one class, the class names are separated by spaces.

```
<h1 id="myHeader">Hello World!</h1>
```

IDs

Every HTML element can carry the id attribute. It is used to uniquely identify that element from other elements on the page.

Its value should start with a letter or an underscore (not a number or any other character). It is important that no two elements on the same page have the same value for their id attributes (otherwise the value is no longer unique).

More to read on ID naming: <https://mathiasbynens.be/notes/css-escapes>

IDs

To select these IDs in CSS
you would do so with
#myHeader syntax

(IDs may become particularly
useful when it comes to
media elements - photos,
videos + sound files.)

```
#myHeader{  
  color: blue;  
}
```

Classes

Every HTML element can also carry a **class** attribute.

Sometimes, rather than uniquely identifying one element within a document, you will want a way to identify several elements as being different from the other

```
<div class="cities">
<h2>London</h2>
<p>London is the capital of England. It is the most
Kingdom, with a metropolitan area of over 13 millio
<p>Standing on the River Thames, London has been a
millennia, its history going back to its founding b
Londinium.</p>
</div>
```

```
<div class="cities">
<h2>Paris</h2>
<p>Paris is the capital and most populous city of F
<p>Situating on the Seine River, it is at the heart
known as the région parisienne.</p>
<p>Within its metropolitan area is one of the large
with over 12 million inhabitants.</p>
</div>
```

```
<div class="cities">
<h2>Tokyo</h2>
<p>Tokyo is the capital of Japan, the center of the
populous metropolitan area in the world.</p>
<p>It is the seat of the Japanese government and th
the Japanese Imperial Family.</p>
<p>The Tokyo prefecture is part of the world's most
38 million people and the world's largest urban eco
</div>
```