HTML 101 Takeaway

Terminology

HTML (The Skeleton)

Hypertext Markup Language is a markup language defined by sets of matching tags that determine the structure and format of webpages as we view them.

CSS (The Skin)

Cascading Style Sheets is a style sheet language that gives the browser information about how the HTML elements on the page should be presented.

Javascript (The Muscles)

(JS) A programming language that executes code directly in the user's browser. It allows your site to be interactive.

HTML Attributes

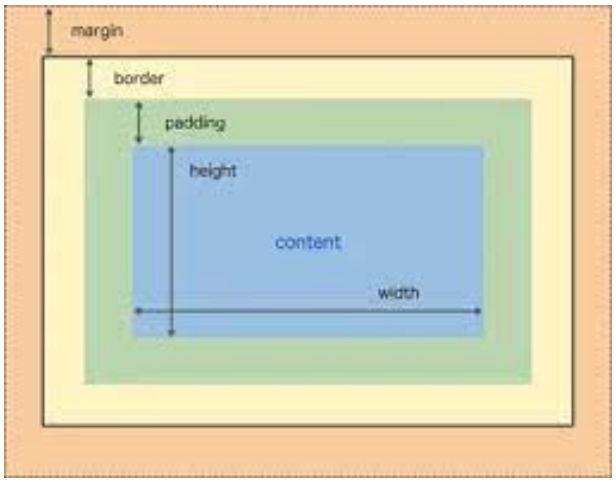
Additional Information about the HTML Element. They are written in the format AttributeName="AttributeValue" and can be added to opening and self-closing tags.

```
<div id="my-div">Content of div.</div>

<img src="https://placekitten.com/g/200/200" />
```

Components of an HTML Element

Content: text/image/etc
Padding: whitespace between content and border
Border: border
Margin: whitespace between element and other elements



HTML Elements

Bold and Italic

Styles the text within as bold or italic

```
<b>I am bold</b>
<i>I am italicized</i>
```

I am bold
I am italicized

List

A list of items, can be ordered, unordered, or a definition list. Made up of multiple tags, the start and end of your list (<ul>), and then individual list items (<li>) within. Lists can be nested.

```
<ul>
    <li>Item One</li>
    <li>Item Two
        <ul>
            <li>Sub-item One</li>
        </ul>
    </li>
</ul>
```

- Item One
- Item Two
    - Sub-item One

Ordered List (<ol>) will display a numbered list
Unordered List (<ul>) will display a list with dots
Description List (<dl>) has some other tags that can be used within

Paragraph

A paragraph

```
<p>I am a paragraph.</p>
```

I am a paragraph.

Anchor

A link

```
<a href="https://google.com">Display
Text</a>
```

Display Text

Linebreak

A break tag makes sure there is a line break before continuing the content.

```
Line One<br/>Line Two
```

Line One
Line Two

Headers

Titles for sections on your page. Range in size from h1 to h6 where 1 is the largest.

```
<h1>Really Big</h1>
<h6>Kinda Big</h6>
```

Really Big

Kinda Big

CSS Selectors

The blue html is what would be targeted by the selector.

ID	 	#foo
Class	 	.bar
Element	 	div
Any Child .child is any descendant of .parent	 	.parent .child
Direct Child .child is nested directly in a .parent	 	.parent > .child
Adjacent First matching .bar directly after a .foo	 	.foo + .bar
Attribute All a tags with an href attribute	 <a><a/>	a[href]
Attribute Value All a tags with an attribute color that's value is blue	 	a[color="blue"]
Attribute Value All a tags where the href begins with https	 	a[href^="https"]]

[W3Schools Full Reference]

https://www.w3schools.com/cssref/css_selectors.asp

CSS Specificity

Chaining CSS selectors allows you to target more specific elements. If two CSS rules select the same item and change the same property, the more specific one will be rendered. This is how specificity is calculated.

Universal	`*`	0
Element	`p`	1
Class	`.foo`	10
ID	`#foo`	100
Inline Style	`<div style="color: blue;"></div>`	1000

Example

```
<div id="foo" class="parent">
  <div class="child
bar"></div>
  <div class="child">
    <div class="bar"></div>
  </div>
</div>
```

```
<style>
div {                              1
  background-color: lightgrey;
  min-height: 100px;
  border: 2px solid grey;
  border-radius: 4px;
  padding: 8px;
}
.child {                           10
  background-color: lightgreen;
}
.bar + .child {                    10 + 10 = 20
  background-color: pink;
}
div#foo {                          1 + 100 = 101
  background-color: lightblue;
}
* {                                0
  min-height: 500px;
}
</style>
```

[W3Schools Full Reference]

https://www.w3schools.com/css/css_specificity.asp

Bootstrap Helper Classes

Bootstrap has a large library of classes to help with styling elements without the need for custom CSS.

Spacing

Helper classes exist for adding padding and margin to an element. The format for the class name will be: `type-location-amount`

Type: p or m

This will determine if we are adding padding to the inside of the element or margin outside the element.

Location: t, b, y, l, r, x

This will determine if we are adding the spacing to the top, bottom, top and bottom, left, right, or left and right sides of the element. This class is optional and can be omitted if spacing should be added to all sides.

Amount: 1, 2, 3, 4

1 will add a small amount of space, 4 will add a larger amount of space.

You combine them to get the desired effect. Padding is highlighted green, margin is orange.


py-1
px-1
pt-1
pb-1
p-1
py-4
px-4
pl-4
pr-4
p-4
my-1
mx-1
mt-1
mb-1
m-1
my-4
mx-4
ml-4
mr-4
m-4