HTML & CSS

A Review of the Fundamentals

HTML and CSS Definitions

HTML: Hypertext Markup Language (content display)

CSS: Cascading Style Sheets (appearance of display)

HTML/CSS are the "languages of the web": Together they define both the content and aesthetics of a webpage, including layouts, colors, fonts, and content placement. (JavaScript is the language that deals with logic, decision making, etc.)

How do we write **HTML**?

HTML is the Structure of Display

HTML is a base language found on most every website.
It defines all of the basic content and a bit of formatting.

Content / Inner HTML

HTML Syntax (Basic)

`<h1>`This is where the content goes`</h1>`

Opening Tag   Closing Tag

Displaying a link

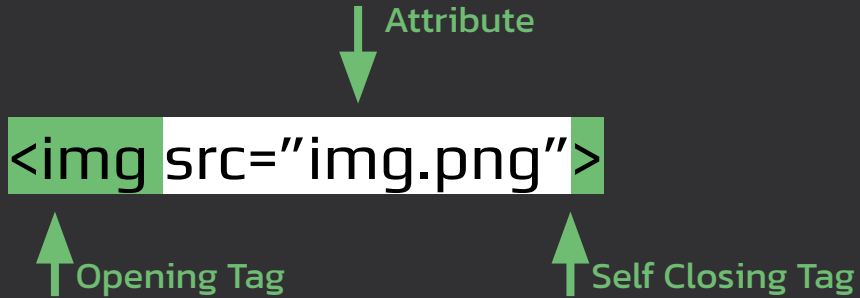**HTML Syntax (w/ Attribute)**   Attribute   InnerHTML

`<a href="www.google.com">Link</a>`

Opening Tag   Closing Tag

Displaying an Image

Self-Closing Tags

Attribute

`<img src="img.png">`

Opening Tag

Self Closing Tag

Important Common Tags

Headings:

`<h1></h1>` Heading 1 (largest heading)
`<h2></h2>` Heading 2 (next largest heading)
`<h3></h3>` Heading 3

Containers:

`<html></html>` Wraps the entire page
`<head></head>` Wraps the header of the page
`<body></body>` Wraps the main content
`<div></div>` Logical container
`<p></p>` Wraps individual paragraphs

Others:

`<strong></strong>` bold
`<em></em>` emphasis
`<img/>` image
`<a href></a>` links
`<li></li>` list items
`<title></title>` tab title
`<br/>` line break
`<table></table>` tables
`<!-- -->` comments

Unreadable HTML

➜ **Invest time to get better at this now. It will pay dividends!**

```
firstfile.html          Quick.html

1   <!DOCTYPE html> <html> <head> <title>1.2.6 Exercise</title> </head>
    <body> <header> <img src="assets/RutgersBanner.png" alt="Rutgers
    Coding Bootcamp" width="797" height="107"> <h1>Student Bio</h1> </
    header> <div> <section> <h2>Your Name</h2> <img src="http://
    placehold.it/200x200" alt="Your Name"> <p>Write a short paragraph
    or two about yourself, or use placeholder text from <a href="http://
    www.lipsum.com/">www.lipsum.com</a></p> </section> <section> <h2>
    Contact Info</h2> <ul> <li><strong>Email:</strong> <a href="#">
    someplace@gmail.com</a></li> <li><strong>Github:</strong> <a href="#
    ">sampleName</a></li> <li><strong>Portfolio:</strong> <a href="#">
    coming soon</a></li> </ul> </section> </div> </body> </html>
```

Basic HTML Page

➔ **Readable code is easier to maintain.**

```html
<!DOCTYPE html>
<html lang="en" dir="ltr">
  <head>
    <meta charset="utf-8">
    <title>My Beautiful Website!</title>
  </head>
  <body>

    <h1>Awesome Header</h1>
    <h2>Another header, only smaller</h2>
    <h3>Even smaller header than the last</h3>

    <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna
    aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.
    Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint
    occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.</p>

    <img src="https://www.uokpl.rs/fpng/f/513-5139361_bean-clipart-large.png" alt="Fantastic Ballerina" height="200px">

    <h3>Links to things</h3>
    <ul>
      <li><a href="http://www.google.com">Google</a></li>
      <li><a href="http://www.twitter.com">Twitter</a></li>
      <li><a href="http://www.instagram.com">Instagram</a></li>
    </ul>

  </body>
</html>
```

Basic HTML Page: Result

Basic HTML Page: Result

How do we write **CSS**?

CSS is the Style

CSS works by hooking onto selectors added into HTML using classes and identifiers.

Once hooked up, we apply styles to those HTML elements using CSS.

```
h1 {
    background-color : yellow ;
}
```

CSS is the Style

In the following example, the header would become blue and much larger because of the CSS.

We can incorporate an element's class or ID to apply a CSS style to a particular part of the document. Just remember to include the necessary symbol before the CSS: "." for class, "#" for ID.

Example (HTML)	Example (CSS)

`<p class="bigBlue">Hello World</p>`	`.bigBlue {`
	`  font-size: 100px;`
	`  color: blue;`
	`}`

Enter CSS

```css
#all {
  background-color: rgba(72, 209, 204, 0.5);
}

h1 {
  font-size: 60px;
  text-align: center;
  text-decoration: underline;
  background-color: lawngreen;
  color: white;
  text-shadow: 2px 2px #ff0000;
}

h2 {
  font-size: 40px;
  text-align: center;
  text-shadow: 2px 2px #ffffff;
}

h3 {
  font-size: 20px;
  text-align: center;
  text-shadow: 1px 1px #ffffff;
}
```

```css
p {
  text-align: center;
  font-weight: bold;
  border-style: dashed;
  border-radius: 5px;
  border-color: plum;
}

ul {
  list-style-position: inside;
  border-style: dotted;
  border-radius: 3px;
  width: 100px;
  margin-left: auto;
  margin-right: auto;
}

img {
  display: block;
  margin-left: auto;
  margin-right: auto;
}
```

Key CSS Attributes

Font and Color

color sets color of text
font-size sets size of the font
font-style sets italics
font-weight sets bold

Alignment and Spacing

padding(top/right/bottom/left) space between content and border
margin (top/right/bottom/left): space between elements
float (left/right) pushes elements to one side

Background

background-color sets background color
background-image sets background image

Powerful Duo

Believe it or not, HTML and CSS are all you need to develop a vivid, full-blown website.

Enter CSS: Result

Enter CSS: Result

HTML and **CSS** are the foundation that we will build on as devs!