# HTML & CSS

A Review of the Fundamentals

# What is **HTML**?

# HTML is the Structure

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

# More HTML
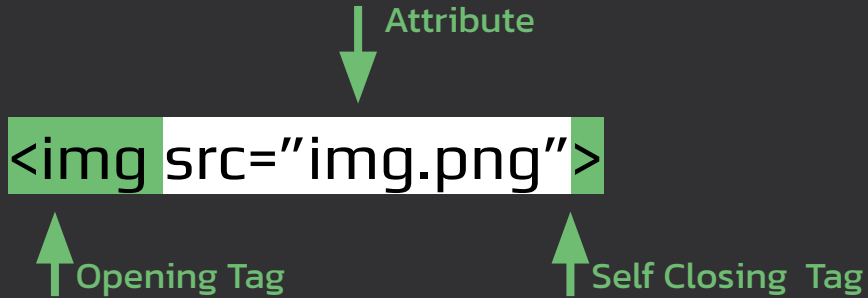
**HTML Syntax (w/ Attribute)**    Attribute    Content

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

Opening Tag    Closing  Tag

# Even More HTML

**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

# Ugly HTML

➔ Readable code is easier to maintain.

➔ Invest time to get better at this meow. It will pay dividends!

# What is **CSS**?

# HTML and CSS Definitions

**HTML**: Hypertext Markup Language (Content)

**CSS**: Cascading Style Sheets (Appearance)

**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, animation, etc.)

# Basic HTML Page

```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

## Awesome Header

### Another header, only smaller

#### Even smaller header than the last

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.

**Links to things**

- Google
- Twitter
- Instagram

**Boring**

# 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;
}
```
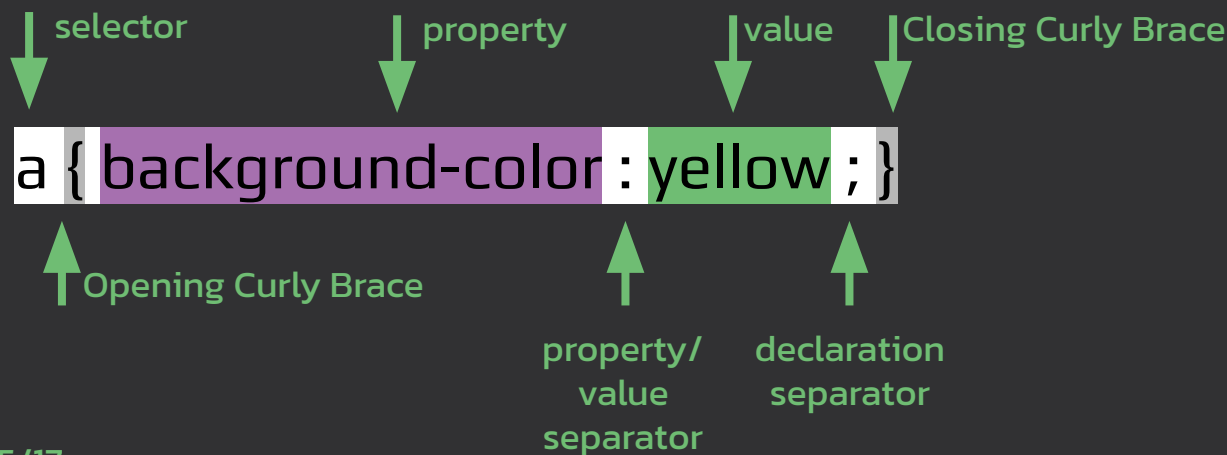
# Enter CSS: Result

# Enter CSS: Result

# 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.

selector  property  value  Closing Curly Brace

`a { background-color : yellow ; }`

Opening Curly Brace

property/
value
separator

declaration
separator

# 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">Header</p>` | `.bigBlue`<br>`{`<br>  `font-size: 100px;`<br>  `color: blue;`<br>`}` |

# 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.