

# Module 3 Day 1

An Introduction to HTML & CSS



# Can you/Do You...?

- Understand the basics of HTML
  - HTML document structure
  - HTML tags & attributes
- Understand the following basic HTML tags:
  - Headings (h1, h2, etc)
  - Paragraphs
  - Links
  - Images
- Utilize the different elements that go into building a form
- Understand the action attribute of the form tag
- Describe what Semantic HTML
- Demonstrate a basic understanding of what CSS is and how to create style declarations
- Understand how fonts work in the browser and some of the different properties available for styling them
- Understand how colors work and some of the different properties for working with them

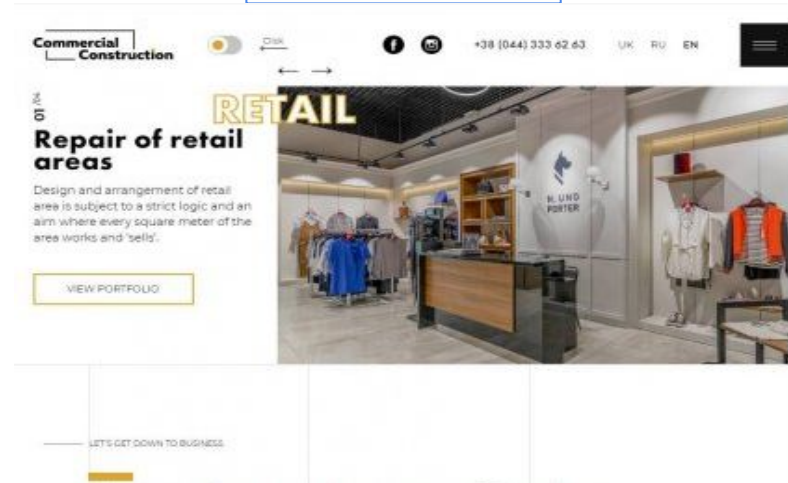
# What is HTML - Structure & Tags

**HTML** ( Hypertext Markup Language) Is the standard language of web browsers that enables them to format and decode documents from a web server based on a standardized collection of markup tags, which create discrete elements of content.

1989 - 1991 Birth of HTML



2020 HTML-5



# HTML Document Structure

Every HTML document has the same basic structure consisting of:

`<!DOCTYPE html>`

← Document Type Declaration

`<html>`

← Root **Element** declaring the beginning of HTML content

`<head>`

← Element containing page meta-data, Title, and links to **CSS**

`</head>`

`<body>`

← The Content element declaring the “guts” of the page; images, media, and text

`</body>`

`</html>`

# Anatomy of an Element: Tags & Attributes

**The Element**

```
graph TD; A[The Element] --> B[<p>]; A --> C[</p>];
```

**<p>** The text I want to display is here. **</p>**

Opening Tag

Closing Tag

An **Attribute** provides additional information about the element as a Name Value pair.

```
graph TD; A[Attribute] --> B[Name]; A --> C[Value];
```

**<p lang="eng-us">** This paragraph is in American Standard English. **</p>**

**Name** **Value**

# The Basic Text Elements

## Headings:

Headings are ordered from 1 to 6 from Largest to Smallest in size. The size is relative to each other and is controlled, in some part, by the user's browser settings.

<code>&lt;h1&gt;</code> Main Heading	<code>&lt;/h1&gt;</code>
--------------------------------------	--------------------------

<code>&lt;h2&gt;</code> Sub-Heading	<code>&lt;/h2&gt;</code>
-------------------------------------	--------------------------

<code>&lt;h3&gt;</code> Sub-Sub-Heading	<code>&lt;/h3&gt;</code>
---	--------------------------

<code>&lt;h4&gt;</code> So on	<code>&lt;/h4&gt;</code>
-------------------------------	--------------------------

<code>&lt;h5&gt;</code> and	<code>&lt;/h5&gt;</code>
-----------------------------	--------------------------

<code>&lt;h6&gt;</code> so forth	<code>&lt;/h6&gt;</code>
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# The Basic Text Elements

## Paragraphs:

The Paragraph `<p>` tag is used to display words together as a paragraph with some space between it and any subsequent paragraph `<p>` elements.

`<p>` This is my first paragraph of HTML goodness. `</p>`

`<p>` This is the second paragraph of text that follows the first! `</p>`

This is my first paragraph of HTML goodness.

This is the second paragraph of text that follows the first!

# The Basic Text Elements

## Format, Placement, and Layout:

Although Cascading Style Sheets are widely used to control the overall look and feel of a website, there are a few tags that we can use to enforce basic formatting and layout.

<p> **Bolds your text** </b> in-line either alone or within another tag </p>

<p> *Italicizes your text* </i> in-line either alone or within another tag </p>

<p> E=MC<sup>2</sup> </sup> makes your text superscript, like in exponents </p>

<p> Water is also known as H<sub>2</sub>O in chemical formulas </p>

<p> The <br/> tag adds a line break in the middle of a paragraph </p>

<hr/> <p> While the horizontal rule adds a separating line between elements </p>



# Defining Links

The <a> (anchor) tag defines a Hyperlink, the Hypertext part of HTML, that will cause the browser to navigate to another website, page in the current site, or jump to another place on the current page.

Navigation to a new website:

```
<a href="http://www.google.com"> Go To Google!</a>
```

Navigation to another page in the same website:

```
<a href="about.html"> About Us </a>
```

Navigation to another place on the same page using an ID attribute:

```
<a href="#notes"> Notes </a>
```

# Images

The `<img/>` tag defines a picture that you wish to display to the user. Notice the slash at the end of the tag? The image tag is known as a self closing tag, it does not have any *inner-html* associated with it.

```

```

All image tags should have three attributes:

**src**: defines the absolute, relative, or url of the image file

**alt**: provides the text to display if the image cannot be rendered

**title**: provides the image title, which will be displayed when the user hovers over the image

Ready ???

**Let's Code!**

(then we'll talk some more about semantic HTML, Forms, and CSS!)

# Forms

Creating controls and Defining Behavior

## Methods

Method Attribute: GET or POST ?

**GET** sends form contents in the query string using the typical Name=Value pair pattern.

**POST** sends form contents in the body of the HTTP Request

`<form method="GET" action ="/api/reservation"> ... inner HTML content ...</form>`

# Forms

## Controls

Form controls are created using `<input />` tags

Input tags have three (3) key attributes:

- id=""** Defines the identity of the element on your page
- name=""** Defines the data element or query string key name
- type=""** Defines the type of control to display

```
<input id="over18" name="legal-age" type="checkbox" />
```

# Forms

## Labels

Form control Labels are created using `<label> </label>` elements

Label tags have one (1) key attribute:

**`for=""`**

Defines the input element associated with the label

`<label id="lblOver18" for="over18">Are you 18 years of age or older?</label>`

# Cascading Style Sheets ( CSS )

- CSS allows us to define and control how elements appear on our web pages
- Styles can be applied by Element, ID, or Class attributes
- To visualize how CSS is applied to elements, imagine that there is a box surrounding each Block and Inline element. CSS rules will be applied to that box and everything in it unless that rule is overridden by another rule

LET'S GO TO VS CODE AND SEE HOW THIS WORKS!