**HTML**

**1.What is HTML?**

HTML is the basic building block of a webpage.It provides structure to the content appearing on a website, such as [images](https://www.codecademy.com/resources/docs/html/images), text, or

[videos](https://www.codecademy.com/resources/docs/html/videos).

HTML stands for HyperText Markup Language:

* A ***markup* language** is a computer language that defines the structure and presentation of raw text.

In HTML, the computer can interpret *raw text* that is wrapped in HTML [elements](https://www.codecademy.com/resources/docs/html/elements).

* ***HyperText*** is text displayed on a computer or device that provides access to other text through , also known as *hyperlinks*.

**We’re going to focus on how to add and modify basic content on a page, like text, images, and videos.**

**HTML Syntax**

HTML is composed of [elements](https://www.codecademy.com/resources/docs/html/elements?page_ref=catalog). These elements structure the webpage and define its content.

The diagram to the right displays an HTML paragraph element. As we can see, the paragraph element is made up of:

1. An *opening tag* (<p>)
2. The content (“Hello World!” text)
3. A *closing tag* (</p>)

A tag and the content between it is called an HTML element. There are many tags that we can use to organize and display text and other types of content.

Let’s quickly review each part of the element pictured:

* HTML element (or simply, element) — a unit of content in an HTML document formed by HTML tags and the text or media it contains.
* HTML Tag — the element name, surrounded by an opening (<) and closing (>) angle bracket.
* Opening Tag — the first HTML tag used to start an HTML element. The tag type is surrounded by opening and closing angle brackets.
* Content — The information (text or other elements) contained between the opening and closing tags of an HTML element.
* Closing tag — the second HTML tag used to end an HTML element. Closing tags have a forward slash (/) inside of them, directly a after the left angle bracket.

### The Body tag

One of the key HTML [elements](https://www.codecademy.com/resources/docs/html/elements) we use to build a webpage is the body element. Only content inside the opening and closing body [tags](https://www.codecademy.com/resources/docs/html/tags) can be displayed to the screen( many different types of content eg. text, [images](https://www.codecademy.com/resources/docs/html/images), and button).

### HTML Structure

### When an element is contained inside another element, it is considered the child of that element. The child element is said to be nested inside of the parent element.

### In the example above, the <p> element is nested inside the <body> element. The <p> element is considered a child of the <body> element, and the <body> element is considered the parent.

### \**indentation (using the space bar) for better readability.*

### There can be multiple levels of nesting eg. grandchildren, great-grandchildren, and beyond.

### You’ll learn more about webpage hierarchy when you start digging into CSS.

### Headings

Headings are great for labeling different sections in a website.

In HTML, there are six different heading elements with h1 being the largest sized heading and h6 being the smallest. <h1>-<h6>

1. <h1> — used for main headings. All other smaller headings are used for subheadings.

**\*Only one h1 per page. Do not use heading elements to resize text. We’ll do that with CSS.**

**\*Do not skip heading levels: always start from h1, followed by h2 and so on.**

### Divs

One of the most popular elements in HTML is the <div> element.

Represents a generic division of content. It has no semantic meaning, but will separate its contents from the rest of the document.[<div>](https://www.codecademy.com/resources/docs/html/elements/div?page_ref=catalog) is short for “division” or a container that divides the page into sections.

Divs are very useful when we want to apply custom styles to our HTML elements. <div>s allow us to group HTML elements to apply the same styles for all HTML elements inside. We can also style the <div> element as a whole.

If you want to divide your content into blocks, it’s better to use a <div>.

### Attributes

Attributes can be added to the opening tag of an HTML element to change the elements default behavior or to provide additional data about it.

Attributes are made up of the following two parts:

* The *name* of the attribute
* The *value* of the attribute

One commonly used attribute is the id. Id helps us identify content on our page.

When we add an id to a <div>, we place it in the opening tag:

<div id="intro">

<h1>Introduction</h1>

</div>

### Displaying Text

If you want to display text in HTML, you can use a paragraph or span:

* Preview: Docs Contains and displays a block of text that defines a paragraph.

[*Paragraphs* (<p>)](https://www.codecademy.com/resources/docs/html/elements/p) contain a block of plain text.

[<span>](https://www.codecademy.com/resources/docs/html/elements/span?page_ref=catalog) contains short pieces of text or other HTML. They are used to separate small pieces of content that are on the same line as other content.

It’s best to use a <span> element when you want to target a specific piece of content that is inline, or on the same line as other text.

Take a look at each of these elements in action below:

<div>  
  <h1>Technology</h1>  
</div>  
<div>  
  <p><span>Self-driving cars</span> are anticipated to replace up to 2 million jobs over the next two decades.</p>  
</div>

In the example above, there are two different <div>. The second <div> contains a <p> with <span>Self-driving cars</span>. This <span> element separates “Self-driving cars” from the rest of the text in the paragraph.

It’s best to use a <span> element when you want to target a specific piece of content that is *inline*, or on the same line as other text. If you want to divide your content into *blocks*, it’s better to use a <div>.

Remember to always add two spaces of indentation when you nest elements inside of <div>s for better readability.