

What is HTML?

Lesson Time: 10 Minutes

THE CONTENT OF A WEB PAGE.

HTML stands for HyperText Markup Language. HTML is a **markup language**, which means it's used to annotate a document. Unlike a programming language, HTML can not add $2 + 2$ or perform any kinds of calculations. HTML works by adding additional information to a document to describe how it should be displayed in a web browser.

HTML uses **tags** to markup a document. When a tag is placed around text in an HTML file, the web browser will change how it treats the text based on the tag. When the browser translates the HTML tags, text is rendered as the webpage we see.

HTML tells the browser about the **CONTENT** of the page. It describes things such as the parts of the documents, headings, paragraphs, lists, images, and links.

A web page that only uses HTML will appear pretty boring. This is because HTML is not concerned about the **PRESENTATION** of the page. HTML doesn't worry about things like colors, fonts, and spacing and the positioning of items on screen. It does not describe the "look and feel" of the page.

The current version of HTML is version 5, introduced in 2016. It replaced HTML 4.01, originally released in 1999.

Key Concepts:

- What is the difference between a programming language and a markup language?
- What is an HTML tag?
- What is the difference between **CONTENT** and **PRESENTATION**?

Key Terms	Markup language, tags
Lesson Files	
Additional Resources	
Further Learning	

HTML Syntax

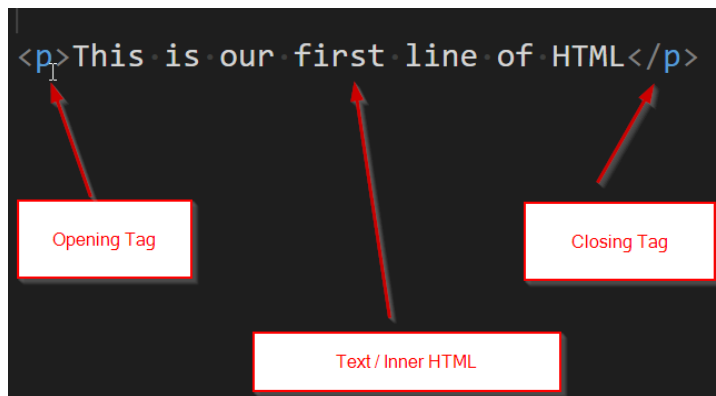
Lesson Time: 10 Minutes

**“THE DOG BIT JOHNNY.” OR “JOHNNY BIT THE DOG.”?
HOW YOU SAY IT MATTERS.**

Syntax is the order and structure we must type our commands so that they are understood by the computer.

HTML syntax uses a set of angle brackets `<>` to markup the page. They are called **tags**. Each tag uses a keyword that tells the browser what the tag will do to the document.

Most HTML tags appear in pairs and have an **opening tag** and a **closing tag**.



The `<p>` tag stands for paragraph and it's the opening tag.

The `</p>` is the closing tag, which tells the browser where the paragraph ends.

The `</>` indicates this is a closing tag.

The text is said to be *inside* the tag, or *the inner HTML* of the tag.

There are a few tags, like the `` (the insert image tag) that do not require a closing tag. A tag that doesn't use a closing tag is called a self-enclosing tag.

Key Terms	Opening tag, closing tag, self-enclosing tag, Syntax
Lesson Files	
Additional Resources	https://marksheet.io/html-syntax.html
Further Learning	

Proper Spacing

Lesson Time: 10 Minutes

HOW TO NOT BE KILLED BY YOUR CO-WORKERS.

In HTML, we will often place tags inside of another tag. This is called a nested tag. When we use a nested tag, we should indent the tag on a new line using 2 spaces. Look at the example below.

```
1  <!DOCTYPE html>
2  <html>
3      <head>
4          <title>This is the title of my page.</title>
5      </head>
6
7      <body>
8          <h1>Hello World</h1>
9          <p>This is our first line of HTML</p>
10     </body>
11
12 </html>
13
14
```

The `<html>` `</html>` tag indicates the start and end of the html document.

The `<body>` tag is inside of the `<html>` tag and is indented two spaces inside.

The `<h1>` and `<p>` tags are inside of the `<body>` tags, and indented two spaces inside.

When we use proper spacing, it's clear when we read the code that the `<h1>` and `<p>` tags belong to the `<body>` tag. We say the `<body>` tag is the parent and the inside tags are the children.

Key Terms	
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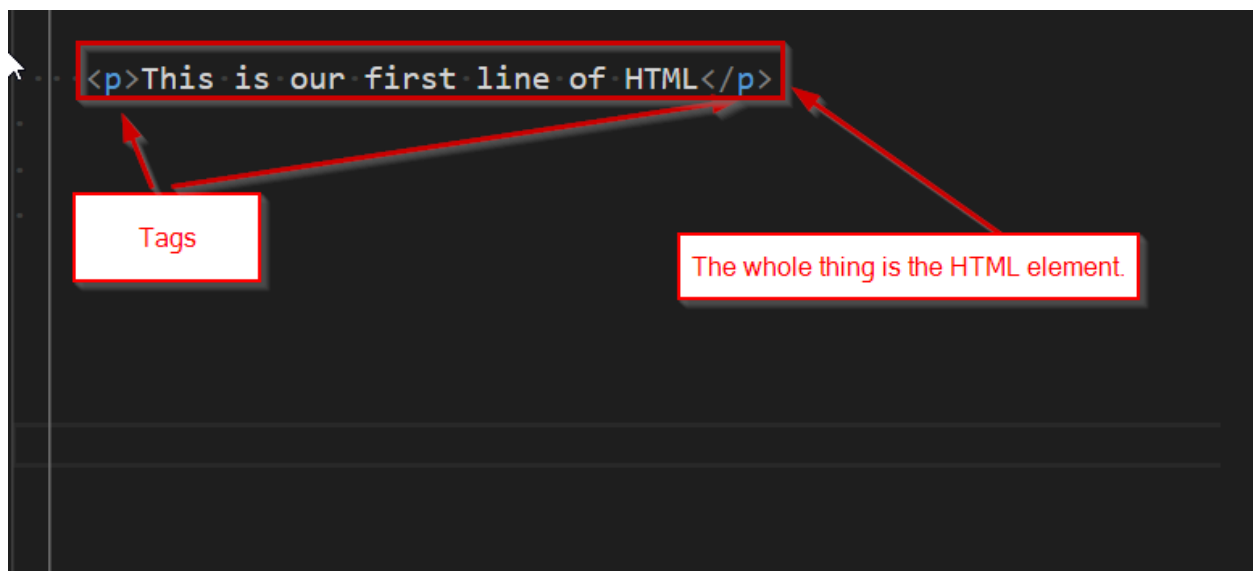
Lesson Files	
Additional Resources	
Further Learning	

HTML Elements

Lesson Time: 15 Minutes

THE BUILDING BLOCKS OF HTML.

HTML Elements are almost the same thing as tags. We can almost use the terms interchangeably.



The HTML element is the opening and closing tag and all of the content inside of the tag. When looking at online documentation, you will typically see the term element used. **Throughout this course, we will use the term HTML element over tags. So in this example, we would call this a `<p>` element, not a `<p>` tag.**

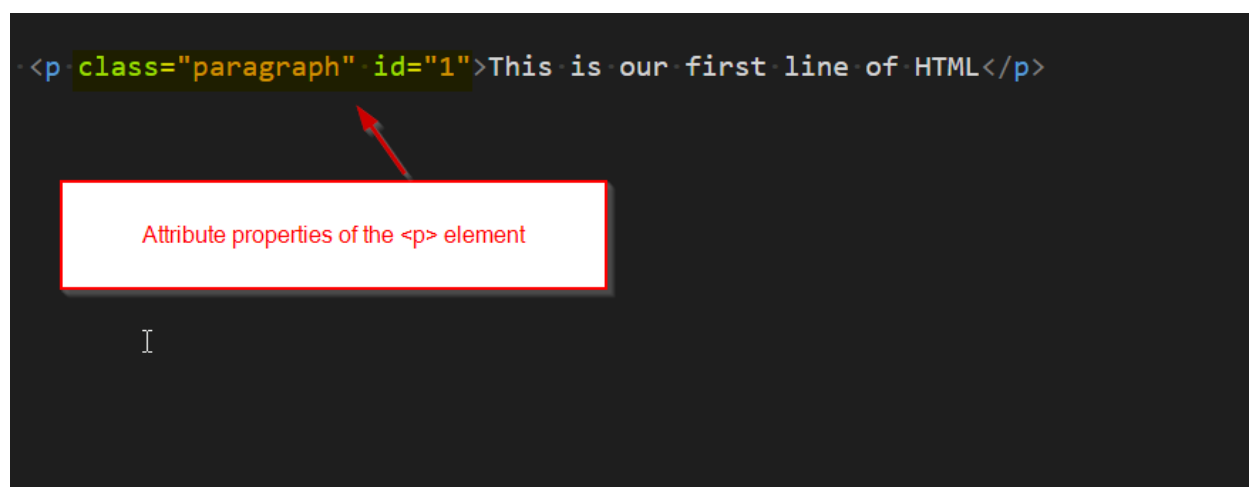
Key Terms	elements
Lesson Files	
Additional Resources	https://www.w3schools.com/html/html_elements.asp
Further Learning	

HTML Attributes

Lesson Time: 15 Minutes

OPTIONS! OPTIONS! OPTIONS!

HTML elements can have optional components we call **attributes**. Attributes are like the additional properties of an HTML element. Most elements don't require any attributes, however some do such as the `` element and the `<input>` element.



- A `<p>` element with attributes class and id

In the opening tag, we list any attributes we want to include in the format of **attributename="value"**

Each attribute is separated by a space. The closing tag does not change. More examples are below. Don't worry right now what these example attributes do, we will talk more about what each of them soon.


```


I

<input type="button" name="myButton">

```

- An element with attributes src, width, and height
- An <input> element with the attributes type and name

Key Terms	attributes
Lesson Files	
Additional Resources	https://www.w3schools.com/html/html_attributes.asp
Further Learning	