

HTML TUTORIAL

What is HTML?

HTML is a language for describing web pages.

- HTML stands for **Hyper Text Markup Language**
- HTML is not a programming language, it is a **markup language**
- A markup language is a set of **markup tags**
- HTML uses **markup tags** to describe web pages

HTML Tags

HTML markup tags are usually called HTML tags

- HTML tags are keywords surrounded by **angle brackets** like <html>
- HTML tags normally **come in pairs** like and
- The first tag in a pair is the **start tag**, the second tag is the **end tag**
- Start and end tags are also called **opening tags** and **closing tags**

HTML Documents = Web Pages

- HTML documents **describe web pages**
- HTML documents **contain HTML tags** and plain text
- HTML documents are also **called web pages**

The purpose of a web browser (like Internet Explorer or Firefox) is to read HTML documents and display them as web pages. The browser does not display the HTML tags, but uses the tags to interpret the content of the page:

```
<html>
```

```
<body>
```

```
<h1>My First Heading</h1>
```

```
<p>My first paragraph.</p>
```

```
</body>
```

```
</html>
```

Example Explained

- The text between `<html>` and `</html>` describes the web page
- The text between `<body>` and `</body>` is the visible page content
- The text between `<h1>` and `</h1>` is displayed as a heading
- The text between `<p>` and `</p>` is displayed as a paragraph

Editing HTML

HTML can be written and edited using many different editors like Dreamweaver and Visual Studio.

However, in this tutorial we use a plain text editor (like Notepad) to edit HTML. We believe using a plain text editor is the best way to learn HTML.

.HTM or .HTML File Extension?

When you save an HTML file, you can use either the .htm or the .html file extension. There is no difference; it is entirely up to you.

HTML Headings

HTML headings are defined with the `<h1>` to `<h6>` tags.

Example

```
<h1>This is a heading</h1>  
<h2>This is a heading</h2>  
<h3>This is a heading</h3>
```

HTML Paragraphs

HTML paragraphs are defined with the `<p>` tag.

Example

```
<p>This is a paragraph.</p>  
<p>This is another paragraph.</p>
```

HTML Links

HTML links are defined with the `<a>` tag.

Example

```
<a href="http://www.xitecsolutions.com">This is a link</a>
```

Note: The link address is specified in the href attribute.

(You will learn about attributes in a later chapter of this tutorial).

HTML Images

HTML images are defined with the `` tag.

Example

```

```

Note: The name and the size of the image are provided as attributes.

HTML Elements

An HTML element is everything from the start tag to the end tag:

Start tag *	Element content	End tag *
<p>	This is a paragraph	</p>
	This is a link	

* The start tag is often called the **opening tag**. The end tag is often called the **closing tag**.

HTML Element Syntax

- An HTML element starts with a **start tag / opening tag**
- An HTML element ends with an **end tag / closing tag**
- The **element content** is everything between the start and the end tag
- Some HTML elements have **empty content**
- Empty elements are **closed in the start tag**
- Most HTML elements can have **attributes**

Tip: You will learn about attributes in the next chapter of this tutorial.

Nested HTML Elements

Most HTML elements can be nested (can contain other HTML elements).

HTML documents consist of nested HTML elements.

HTML Document Example

```
<html>

<body>
<p>This is my first paragraph.</p>
</body>

</html>
```

The example above contains 3 HTML elements.

HTML Example Explained

The `<p>` element:

```
<p>This is my first paragraph.</p>
```

The `<p>` element defines a paragraph in the HTML document.
The element has a start tag `<p>` and an end tag `</p>`.
The element content is: This is my first paragraph.

The `<body>` element:

```
<body>  
<p>This is my first paragraph.</p>  
</body>
```

The `<body>` element defines the body of the HTML document.
The element has a start tag `<body>` and an end tag `</body>`.
The element content is another HTML element (a `p` element).

The `<html>` element:

```
<html>  
  
<body>  
<p>This is my first paragraph.</p>  
</body>  
  
</html>
```

The `<html>` element defines the whole HTML document.
The element has a start tag `<html>` and an end tag `</html>`.
The element content is another HTML element (the `body` element).

Don't Forget the End Tag

Some HTML elements might display correctly even if you forget the end tag:

```
<p>This is a paragraph  
<p>This is a paragraph
```

The example above works in most browsers, because the closing tag is considered optional.

Never rely on this. Many HTML elements will produce unexpected results and/or errors if you forget the end tag .

Empty HTML Elements

HTML elements with no content are called empty elements.

`
` is an empty element without a closing tag (the `
` tag defines a line break).

Tip: In XHTML, all elements must be closed. Adding a slash inside the start tag, like `
`, is the proper way of closing empty elements in XHTML (and XML).

HTML Tip: Use Lowercase Tags

HTML tags are not case sensitive: `<P>` means the same as `<p>`. Many web sites use uppercase HTML tags.

HTML Attributes

- HTML elements can have **attributes**
- Attributes provide **additional information** about an element
- Attributes are always specified in **the start tag**
- Attributes come in name/value pairs like: **name="value"**

Attribute Example

HTML links are defined with the `<a>` tag. The link address is specified in the href attribute:

Example

```
<a href="http://www.xitecsolutions.com">This is a link</a>
```