HTML

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

This is a link

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 <img> 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 <br> tag defines a line break).

Tip: In XHTML, all elements must be closed. Adding a slash inside the start tag, like <br />, 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

This is a link

Always Quote Attribute Values

Attribute values should always be enclosed in quotes.

Double style quotes are the most common, but single style quotes are also allowed.

Tip: In some rare situations, when the attribute value itself contains quotes, it is necessary to use single quotes: name='John "ShotGun" Nelson'

HTML Tip: Use Lowercase Attributes

Attribute names and attribute values are case-insensitive.

Newer versions of (X)HTML will demand lowercase attributes.

HTML Attributes Reference

A complete list of legal attributes for each HTML element is listed in our:

Below is a list of some attributes that are standard for most HTML elements:

Attribute	Value	Description
class	*classname*	Specifies a classname for an element
id	*id*	Specifies a unique id for an element
style	*style_definition*	Specifies an inline style for an element
title	*tooltip_text*	Specifies extra information about an element (displayed as a tool tip)

For more information about standard attributes:

HTML Headings

Headings are defined with the <h1> to <h6> tags.

<h1> defines the most important heading. <h6> defines the least important heading.

Example

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

Note: Browsers automatically add some empty space (a margin) before and after each heading.

Headings Are Important

Use HTML headings for headings only. Don't use headings to make text **BIG** or **bold**.

Search engines use your headings to index the structure and content of your web pages.

Since users may skim your pages by its headings, it is important to use headings to show the document structure.

H1 headings should be used as main headings, followed by H2 headings, then the less important H3 headings, and so on.

HTML Lines

The <hr /> tag creates a horizontal line in an HTML page.

The hr element can be used to separate content:

Example

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

HTML Comments

Comments can be inserted into the HTML code to make it more readable and understandable. Comments are ignored by the browser and are not displayed.

Comments are written like this:

Example

<!-- This is a comment -->

Note: There is an exclamation point after the opening bracket, but not before the closing bracket.

HTML Tip - How to View HTML Source

Have you ever seen a Web page and wondered "Hey! How did they do that?"

To find out, right-click in the page and select "View Source" (IE) or "View Page Source" (Firefox), or similar for other browsers. This will open a window containing the HTML code of the page.

HTML Tag Reference

You will learn more about HTML tags and attributes in the next chapters of this tutorial.

Tag	Description
<html>	Defines an HTML document
<body>	Defines the document's body
<h1> to <h6>	Defines HTML headings
<hr />	Defines a horizontal line
<!-->	Defines a comment

HTML Paragraphs

Paragraphs are defined with the <p> tag.

Example

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

Note: Browsers automatically add an empty line before and after a paragraph.