



<HTML>

Hypertext Markup Language

WHAT IS HTML?

- HTML is a language for describing web pages.
- HTML stands for **H**yper **T**ext **M**arkup **L**anguage
- HTML is a **markup** language
- A markup language is a set of markup **tags**
- The tags **describe** document content
- HTML documents contain HTML **tags** and plain **text**
- HTML documents are also called **web pages**

HTML TAGS

- HTML markup tags are usually called HTML tags
- HTML tags are keywords (tag names) 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**
- The end tag is written like the start tag, with a **forward slash** before the tag name
- Start and end tags are also called **opening tags** and **closing tags**

HTML ELEMENTS

- "HTML tags" and "HTML elements" are often used to describe the same thing.

HTML Element:

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

WEB BROWSERS

- The purpose of a web browser (such as Google Chrome, Internet Explorer, Firefox, Safari) is to read HTML documents and display them as web pages.
- The browser does not display the HTML tags, but uses the tags to determine how the content of the HTML page is to be presented/displayed to the user

HTML PAGE STRUCTURE

```
<html>
```

```
<body>
```

```
<h1>This a heading</h1>
```

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

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

```
</body>
```

```
</html>
```

HTML VERSIONS

Version	Year
HTML	1991
HTML+	1993
HTML 2.0	1995
HTML 3.2	1997
HTML 4.01	1999
XHTML 1.0	2000
HTML5	2012
XHTML5	2013

HTML EDITORS

- HTML can be edited by using a professional HTML editor like:
- Adobe Dreamweaver
- Microsoft Expression Web
- CoffeeCup HTML Editor
- Notepad ++ / Notepad

HTML BASICS

- 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 BASICS

- 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

HTML BASICS

- HTML Images
- HTML images are defined with the tag.
- Example

```

```

HTML ELEMENTS

- HTML documents are defined by HTML elements.
- An HTML element is everything from the start tag to the end tag.
- The start tag is often called the **opening tag**. The end tag is often called the **closing tag**
- Example

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

HTML DOCUMENT EXAMPLE

```
<!DOCTYPE html>  
<html>
```

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

```
</html>
```

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).

HTML ATTRIBUTES

- Attributes provide additional information about HTML elements.
- 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"**
- Example

`This is a link`

HTML HEADINGS

- 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>

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 -->`

HTML PARAGRAPHS

- Paragraphs are defined with the `<p>` tag.
- Example

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

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

HTML LINE BREAKS

- Use the `
` tag if you want a line break (a new line) without starting a new paragraph:
- `<p>This is
a para
graph with line breaks</p>`
- The `
` element is an empty HTML element. It has no end tag.

HTML TEXT FORMATTING

- HTML uses tags like `` and `<i>` for formatting output, like **bold** or *italic* text.

Tag	Description
<u><code></code></u>	Defines bold text
<u><code></code></u>	Defines emphasized text
<u><code><i></code></u>	Defines a part of text in an alternate voice or mood
<u><code><small></code></u>	Defines smaller text
<u><code></code></u>	Defines important text
<u><code><sub></code></u>	Defines subscripted text
<u><code><sup></code></u>	Defines superscripted text
<u><code><ins></code></u>	Defines inserted text
<u><code></code></u>	Defines deleted text
<u><code><mark></code></u>	Defines marked/highlighted text

HTML HYPERLINKS (LINKS)

- The HTML `<a>` tag defines a hyperlink.
- A hyperlink (or link) is a word, group of words, or image that you can click on to jump to another document.
- When you move the cursor over a link in a Web page, the arrow will turn into a little hand.
- The most important attribute of the `<a>` element is the href attribute, which indicates the link's destination.
- By default, links will appear as follows in all browsers:
 - An unvisited link is underlined and blue
 - A visited link is underlined and purple
 - An active link is underlined and red

HTML <HEAD>

- The <head> element is a container for all the head elements. Elements inside <head> can include scripts, instruct the browser where to find style sheets, provide meta information, and more.

THE HTML <TITLE> ELEMENT

- The <title> tag defines the title of the document.
- The <title> element is required in all HTML/XHTML documents.
- The <title> element:
 - defines a title in the browser toolbar
 - provides a title for the page when it is added to favorites
 - displays a title for the page in search-engine results

THE HTML <STYLE> ELEMENT

- The <style> tag is used to define style information for an HTML document.
- Inside the <style> element you specify how HTML elements should render in a browser:

```
<head>  
<style type="text/css">  
body {background-color:yellow;}  
p {color:blue;}  
</style>  
</head>
```

HTML STYLES - CSS

- CSS was introduced together with HTML 4, to provide a better way to style HTML elements.
- CSS can be added to HTML in the following ways:
 1. Inline - using the style **attribute** in HTML elements
 2. Internal - using the <style> **element** in the <head> section
 3. External - using an external CSS **file**

HTML IMAGES

- In HTML, images are defined with the `` tag.
- The `` tag is empty, which means that it contains attributes only, and has no closing tag.
- To display an image on a page, you need to use the `src` attribute. `Src` stands for "source". The value of the `src` attribute is the URL of the image you want to display.
- **Syntax for defining an image:**

```

```

HTML TABLES

- Tables are defined with the <table> tag.
- A table is divided into rows (with the <tr> tag), and each row is divided into data cells (with the <td> tag). td stands for "table data," and holds the content of a data cell. A <td> tag can contain text, links, images, lists, forms, other tables, etc.

```
<table border="1">  
<tr>  
<td>row 1, cell 1</td>  
<td>row 1, cell 2</td>  
</tr>  
<tr>  
<td>row 2, cell 1</td>  
<td>row 2, cell 2</td>  
</tr>  
</table>
```

HTML UNORDERED LISTS

- An unordered list starts with the `` tag. Each list item starts with the `` tag.
- The list items are marked with bullets (typically small black circles).
- ```

Coffee
Milk

```
- How the HTML code above looks in a browser:
- Coffee
- Milk

# HTML ORDERED LISTS

- An ordered list starts with the `<ol>` tag. Each list item starts with the `<li>` tag.
- The list items are marked with numbers.
- ```
<ol>  
<li>Coffee</li>  
<li>Milk</li>  
</ol>
```
- How the HTML code above looks in a browser:
 1. Coffee
 2. Milk

HTML FORMS

- HTML forms are used to pass data to a server.
- The <form> tag is used to create an HTML form:
- <form>
 - *input elements*
 - </form>

HTML FORMS - THE INPUT ELEMENT

- The most important form element is the `<input>` element.
- The `<input>` element is used to select user information.
- An `<input>` element can vary in many ways, depending on the type attribute. An `<input>` element can be of type text field, checkbox, password, radio button, submit button, and more.

HTML IFRAMES

- An iframe is used to display a web page within a web page.
- **Syntax for adding an iframe:**
`<iframe src="URL"></iframe>`
- The URL points to the location of the separate page.

HTML COLORS

- HTML colors are defined using a hexadecimal notation (HEX) for the combination of Red, Green, and Blue color values (RGB).

Color Values		
Color	Color HEX	Color RGB
	#000000	rgb(0,0,0)
	#FF0000	rgb(255,0,0)
	#00FF00	rgb(0,255,0)
	#0000FF	rgb(0,0,255)
	#FFFF00	rgb(255,255,0)
	#00FFFF	rgb(0,255,255)
	#FF00FF	rgb(255,0,255)
	#C0C0C0	rgb(192,192,192)
	#FFFFFF	rgb(255,255,255)



THANK
YOU