Hyper Text Markup Language

What is HTML?

- HTML stands for **H**yper **T**ext **M**arkup **L**anguage
- 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**

<p> opening tags

</p> 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:

Hyper Text Markup Language

EXAMPLE

```
<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

Hyper Text Markup Language

Headings

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

```
<html>

<body>

<h1>This is heading 1</h1>

<h2>This is heading 2</h2>

<h3>This is heading 3</h3>

<h4>This is heading 4</h4>

<h5>This is heading 5</h5>

<h6>This is heading 6</h6>


</body>

</html>
```

HTML Paragraphs

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

HTML Example Explained

The <p> element:

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.

Hyper Text Markup Language

HTML Links

`<a href="http://www.w3schools.com">This is a link</a>`

HTML Images

```
<img src="w3schools.jpg" width="104"
height="142" />
```

HTML Text Formatting Tags

Tag	Description
<b>	Defines bold text
<big>	Defines big text
<em>	Defines emphasized text
<i>	Defines italic text
<small>	Defines small text
<strong>	Defines strong text
<sub>	Defines subscripted text
<sup>	Defines superscripted text
<ins>	Defines inserted text
<del>	Defines deleted text

HTML "Computer Output" Tags

Tag	Description
<code>	Defines computer code text
<kbd>	Defines keyboard text
<samp>	Defines sample computer code
<tt>	Defines teletype text
<var>	Defines a variable
<pre>	Defines preformatted text

Hyper Text Markup Language

HTML

Citations, Quotations, and Definition Tags

Tag	Description
<abbr>	Defines an abbreviation
<acronym>	Defines an acronym
<address>	Defines contact information for the author/owner of a document
<bdo>	Defines the text direction
<blockquote>	Defines a long quotation
<q>	Defines a short quotation
<cite>	Defines a citation
<dfn>	Defines a definition term

HTML Style Example - Background Color

```
<body style="background-color:yellow">
<h2 style="background-color:red">This is a heading</h2>
<p style="background-color:green">This is a paragraph.</p>
</body>
```

HTML Style Example - Font, Color and Size

```
<body>
<h1 style="font-family:verdana">A heading</h1>
<p style="font-family:arial;color:red;font-size:20px;">A
paragraph.</p>
</body>
```

Deprecated Tags and Attributes

In HTML 4, several tags and attributes are deprecated. Deprecated means that they will not be supported in future versions of HTML and XHTML.

Hyper Text Markup Language

💡 **The message is clear:** Avoid using deprecated tags and attributes!

These tags and attributes should be avoided:

Tags	Description
<center>	Deprecated. Defines centered content
<font> and <basefont>	Deprecated. Defines HTML fonts
<s> and <strike>	Deprecated. Defines strikethrough text
<u>	Deprecated. Defines underlined text
Attributes	**Description**
align	Deprecated. Defines the alignment of text
bgcolor	Deprecated. Defines the background color
color	Deprecated. Defines the text color

HTML Table Headers

Header information in a table are defined with the <th> tag.

All major browsers will display the text in the <th> element as bold and centered.

```
<table border="1">
<tr>
<th>Header 1</th>
<th>Header 2</th>
</tr>
<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>
```

How the HTML code above looks in your browser:

Header 1	Header 2
row 1, cell 1	row 1, cell 2
row 2, cell 1	row 2, cell 2

Hyper Text Markup Language

HTML Table Tags

Tag	Description
<table>	Defines a table
<th>	Defines a table header
<tr>	Defines a table row
<td>	Defines a table cell
<caption>	Defines a table caption
<colgroup>	Defines a group of columns in a table, for formatting
<col />	Defines attribute values for one or more columns in a table
<thead>	Groups the header content in a table
<tbody>	Groups the body content in a table
<tfoot>	Groups the footer content in a table

HTML Unordered Lists

An unordered list starts with the <ul> tag. Each list item starts with the <li> tag.

The list items are marked with bullets (typically small black circles).

```
<ul>
<li>Coffee</li>
<li>Milk</li>
</ul>
```

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.

Hyper Text Markup Language

```
<ol>
<li>Coffee</li>
<li>Milk</li>
</ol>
```

How the HTML code above looks in a browser:

1. Coffee
2. Milk

HTML Definition Lists

A definition list is a list of items, with a description of each item.

The <dl> tag defines a definition list.

The <dl> tag is used in conjunction with <dt> (defines the item in the list) and <dd> (describes the item in the list):

```
<dl>
<dt>Coffee</dt>
<dd>- black hot drink</dd>
<dt>Milk</dt>
<dd>- white cold drink</dd>
</dl>
```

How the HTML code above looks in a browser:

Coffee

- black hot drink

Milk

- white cold drink

Hyper Text Markup Language

HTML List Tags

Tag	Description
	Defines an ordered list
	Defines an unordered list
	Defines a list item
<dl>	Defines a definition list
<dt>	Defines an item in a definition list
<dd>	Defines a description of an item in a definition list

Color Values

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

The lowest value that can be given to one of the light sources is 0 (in HEX: 00). The highest value is 255 (in HEX: FF).

HEX values are specified as 3 pairs of two-digit numbers, starting with a # sign.

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)

Hyper Text Markup Language