**HTML** (Hyper Text Markup Language)

HTML is the standard markup language for creating Web pages. It describes the structure of Web pages using markup. HTML elements are the building blocks of HTML pages represented by tags. Browsers do not display the HTML tags, but use them to render the content of the page.

**Example:**

<!DOCTYPE html>

<html>

<head>

<title> Page Title </title>

</head>

<body>

<h1> First Heading </h1>

<p> First Paragraph. </p>

</body>

</html>

**Example Explained:**

* The <!DOCTYPE html> declaration defines this document to be HTML5
* The <html> element is the root element of an HTML page
* The <head> element contains meta information about the document
* The <title> element specifies a title for the document
* The <body> element contains the visible page content
* The <h1> element defines a large heading
* The <p> element defines a paragraph

**HTML Tags:**

HTML tags are element names surrounded by angle brackets:

<> - Angle Brackets

<> - Start Tag

</> End Tag

<!DOCTYPE> The <!DOCTYPE> declaration represents the document type, and helps browsers to display web pages correctly. It must only appear once, at the top of the page (before any HTML tags). The <!DOCTYPE> declaration is not case sensitive.

**HTML Versions:**

HTML – 1991

HTML 2.0 – 1995

HTML 3.2 – 1997

HTML 4.01 – 1999

XHTML – 2000

HTML5 – 2014

**HTML Documents:**

* All HTML documents must start with a document type declaration: **<!DOCTYPE html>**.
* The HTML document itself begins with **<html>** and ends with **</html>**.
* The visible part of the HTML document is between **<body>** and **</body>**.

**HTML Paragraphs:**

HTML paragraphs are defined with the **<p>** tag:

**Example:**

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

**HTML Headings:**

HTML headings are defined with the **<h1>** to **<h6>** tags where <h1> defines the most important heading. <h6> defines the least important heading:

**Example:**

<!DOCTYPE html>

<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 Links:**

HTML links are defined with the **<a>** tag:

**Example:**

<!DOCTYPE html>

<html>

<body>

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

</body>

</html>

The link's destination is specified in the “**href” attribute**. Attributes are used to provide additional information about HTML elements.

**HTML Images**

HTML images are defined with the **<img>** tag.

The source file (src), alternative text (alt), width, and height are provided as attributes:

<!DOCTYPE html>

<html>

<body>

<img src="w3schools.jpg" alt="W3Schools.com" width="104" height="142">

</body>

</html>

**HTML Horizontal Rules**

The <hr> tag defines a thematic break in an HTML page, and is most often displayed as a horizontal rule. The <hr> element is used to separate content (or define a change) in an HTML page:

<!DOCTYPE html>

<html>

<body>

<h1>This is heading 1</h1>

<p>This is some text.</p>

<hr>

<h2>This is heading 2</h2>

<p>This is some other text.</p>

<hr>

<h2>This is heading 2</h2>

<p>This is some other text.</p>

</body>

</html>

**HTML Tag Reference**

<html> Defines the root of an HTML document

<body> Defines the document's body

<head> A container for all the head elements (title, scripts, styles, meta information, and more)

<h1> to <h6> Defines HTML headings

<hr> Defines a thematic change in the content (Draws a Line)

**HTML Styles**

<!DOCTYPE html>

<html>

<body>

<h2 style="color:red;">I am red</h2>

<h2 style="color:blue;">I am blue</h2>

</body>

</html>

**HTML Background Color**

The **background-color** property defines the background color for an HTML element.

<!DOCTYPE html>

<html>

<body style="background-color:powderblue;">

<h1>This is a heading</h1>

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

</body>

</html>

**HTML Styles**

<!DOCTYPE html>

<html>

<body>

<h2 style="color:red;">I am red</h2>

<h2 style="color:blue;">I am blue</h2>

</body>

</html>

**HTML Text Color**

<!DOCTYPE html>

<html>

<body>

<h1 style="color:blue;">This is a heading</h1>

<p style="color:red;">This is a paragraph.</p>

</body>

</html>

**HTML Fonts**

<!DOCTYPE html>

<html>

<body>

<h1 style="font-family:verdana;">This is a heading</h1>

<p style="font-family:courier;">This is a paragraph.</p>

</body>

</html>

**HTML Text Size**

<!DOCTYPE html>

<html>

<body>

<h1 style="font-size:300%;">This is a heading</h1>

<p style="font-size:160%;">This is a paragraph.</p>

</body>

</html>

**HTML Text Alignment**

<!DOCTYPE html>

<html>

<body>

<h1 style="text-align:center;">Centered Heading</h1>

<p style="text-align:center;">Centered paragraph.</p>

</body>

</html>

**HTML Formatting Elements**

HTML also defines special elements for defining text with a special meaning. HTML uses elements like <b> and <i> for formatting output, like bold or italic text.

Formatting elements were designed to display special types of text:

* <b> - Bold text
* <strong> - Important text
* <i> - Italic text
* <em> - Emphasized text
* <mark> - Marked text
* <small> - Small text
* <del> - Deleted text
* <ins> - Inserted text
* <sub> - Subscript text
* <sup> - Superscript text

**HTML <b> and <strong> Elements**

**Example: BOLD**

<!DOCTYPE html>

<html>

<body>

<p>This text is normal.</p>

<p><b>This text is bold.</b></p>

</body>

</html>

**Example: Strong**

<!DOCTYPE html>

<html>

<body>

<p>This text is normal.</p>

<p><strong>This text is strong.</strong></p>

</body>

</html>

**HTML <i> and <em> Elements**

**Example: Italic Text**

<!DOCTYPE html>

<html>

<body>

<p>This text is normal.</p>

<p><i>This text is italic.</i></p>

</body>

</html>

**Example: Emphasized Text**

<!DOCTYPE html>

<html>

<body>

<p>This text is normal.</p>

<p><em>This text is emphasized.</em></p>

</body>

</html>

**HTML Marked Element**

<!DOCTYPE html>

<html>

<body>

<h2>HTML <mark>Marked</mark> Formatting</h2>

</body>

</html>

**HTML Table Tags**

[<table>](http://www.w3schools.com/tags/tag_table.asp) Defines a table

[<th>](http://www.w3schools.com/tags/tag_th.asp) Defines a header cell in a table

[<tr>](http://www.w3schools.com/tags/tag_tr.asp) Defines a row in a table

[<td>](http://www.w3schools.com/tags/tag_td.asp) Defines a cell in a table

[<caption>](http://www.w3schools.com/tags/tag_caption.asp) Defines a table caption

[<colgroup>](http://www.w3schools.com/tags/tag_colgroup.asp) Specifies a group of one or more columns in a table for formatting

[<col>](http://www.w3schools.com/tags/tag_col.asp) Specifies column properties for each column within a <colgroup> element

[<thead>](http://www.w3schools.com/tags/tag_thead.asp) Groups the header content in a table

[<tbody>](http://www.w3schools.com/tags/tag_tbody.asp) Groups the body content in a table

[<tfoot>](http://www.w3schools.com/tags/tag_tfoot.asp) Groups the footer content in a table

**HTML Table**

An HTML table is defined with the **<table>** tag. Each table row is defined with the **<tr>** tag. A table header is defined with the **<th>** tag. By default, table headings are bold and centered. A table data/cell is defined with the **<td>** tag

**Example:**

<!DOCTYPE html>

<html>

<body>

<table style="width:100%">

  <tr>

    <th>Firstname</th>

    <th>Lastname</th>

    <th>Age</th>

  </tr>

<tr>

<td>Jill</td>

<td>Smith</td>

<td>50</td>

</tr>

<tr>

<td>Eve</td>

<td>Jackson</td>

<td>94</td>

</tr>

<tr>

<td>John</td>

<td>Doe</td>

<td>80</td>

</tr>

</table>

</body>

</html>