PHP Web Development

Lesson 1 - HTML



What is HTML?

- HTML stands for Hyper Text Markup Language
- HTML is the standard markup language for creating Web pages

- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>
<h1>This is a Heading</h1>
This is a paragraph.
</body>
</html>
```

Example Explained

- The <!DOCTYPE html> declaration defines that this document is an HTML5 document
- The <html> element is the root element of an HTML page
- The <head> element contains meta information about the HTML page
- The <title> element specifies a title for the HTML page (which is shown in the browser's title bar or in the page's tab)
- The <body> element defines the document's body, and is a container for all the visible contents, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
- The <h1> element defines a large heading
- The element defines a paragraph

What is an HTML Element?

An HTML element is defined by a start tag, some content, and an end tag:

<tagname>Content goes here...</tagname>

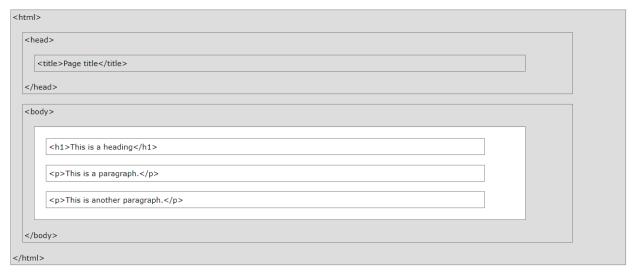
The HTML element is everything from the start tag to the end tag:

<h1>My First Heading</h1>

My first paragraph.

HTML Page Structure

Below is a visualization of an HTML page structure:



HTML Attributes

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

```
<a href="https://devz.lk">Visit Devz</a>
<img src="sri_lanka.jpg">
<img src="img_girl.jpg" width="500" height="600">
<img src="img_girl.jpg" alt="Girl with a jacket">
This is a red paragraph.
```

HTML Headings

HTML headings are defined with the $\langle h1 \rangle$ to $\langle h6 \rangle$ tags.

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

```
<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>
```

HTML Paragraphs

HTML paragraphs are defined with the tag:

```
This is a paragraph.
This is another paragraph.
```

HTML Horizontal Rules

```
<h1>This is heading 1</h1>
This is some text.
<hr>
<h2>This is heading 2</h2>
This is heading 2</h2>
This is some other text.
<hr>
```

HTML Line Breaks

```
This is<br/>p> a paragraph<br/>with line breaks.
```

HTML Element

The HTML element defines preformatted text.

```
My Bonnie lies over the ocean.
My Bonnie lies over the sea.
My Bonnie lies over the ocean.
Oh, bring back my Bonnie to me.
```

HTML Text Formatting

Formatting elements were designed to display special types of text:

- Bold text
- Important text
- <i> Italic text
- Emphasized text
- <mark> Marked text
- <small> Smaller text
- Deleted text
- <ins> Inserted text
- <sub> Subscript text
- <sup> Superscript text

HTML Comments

```
This is a paragraph.
<!--
<p>Look at this cool image:
<img border="0" src="pic_trulli.jpg" alt="Trulli">
-->
This is a paragraph too.
```

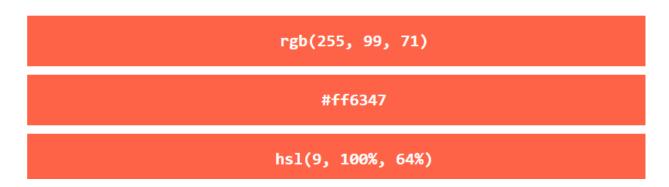
HTML Colors

Color Values

In HTML, colors can also be specified using RGB values, HEX values, HSL values, RGBA values, and HSLA values.

The following three <div> elements have their background color set with RGB, HEX, and HSL values:

<h1 style="color:Tomato;">Hello World</h1>



HTML RGB

In HTML, a color can be specified as an RGB value, using this formula:

rgb(red, green, blue)



HTML Links

link text

HTML Links - Use an Image as a Link

```
<a href="NewServlet">
<img src="smiley.gif" alt="HTML tutorial"
style="width:42px;height:42px;">
</a>
```

HTML Images

```
<img src="img_chania.jpg" alt="Flowers in Chania">
<img src="img_girl.jpg" alt="Girl in a jacket"
style="width:500px;height:600px;">
<img src="img_girl.jpg" alt="Girl in a jacket" width="500"
height="600">
<img src="/images/html5.gif" alt="HTML5 Icon"
style="width:128px;height:128px;">
```

HTML Favicon

```
<head>
    <title>My Page Title</title>
    <link rel="icon" type="image/x-icon" href="/images/favicon.ico">
</head>
```

HTML Tables

```
Company
 Contact
 Country
Alfreds Futterkiste
 Maria Anders
 Germany
Centro comercial Moctezuma
 Francisco Chang
 Mexico
```

HTML Lists

Unordered HTML List

```
Coffee
Tea
Milk
```

Ordered HTML List

```
    Coffee
    Tea
    Milk
```

HTML Description Lists

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

HTML Forms

<form> Element

```
<form>
.
form elements
.
</form>
```

<input> Element

<input type="text"/>	Displays a single-line text input field
<input type="radio"/>	Displays a radio button (for selecting one of many choices)
<input type="checkbox"/>	Displays a checkbox (for selecting zero or more of many choices)

```
<input type="submit">
                                  Displays a submit button (for submitting
                                  the form)
 <input type="button">
                                  Displays a clickable button
<form>
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname">
</form>
<form>
  <input type="radio" id="html" name="fav language" value="HTML">
  <label for="html">HTML</label><br>
  <input type="radio" id="css" name="fav language" value="CSS">
  <label for="css">CSS</label><br>
  <input type="radio" id="javascript" name="fav language"</pre>
value="JavaScript">
  <label for="javascript">JavaScript</label>
</form>
```