WEB PROGRAMMING 06016322

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HMTL REVISION

Src: https://www.W3schools.Com/html/html_intro.Asp

WHAT IS HTML?



- HTML is the standard markup language for creating Web pages.
 - HTML stands for "Hyper Text Markup Language"
 - HTML describes the structure of Web pages using markup
 - HTML elements are the building blocks of HTML pages
 - HTML elements are represented by tags
 - HTML tags label pieces of content such as "heading", "paragraph", "table", and so on
 - Browsers do not display the HTML tags, but use them to render the content of the page

<hea< th=""><th>id></th><th></th></hea<>	id>	
<	title>Page title	
<td>ad></td> <td></td>	ad>	
<bod< th=""><th>ly></th><th></th></bod<>	ly>	
	<h1>This is a heading</h1>	
	This is a paragraph.	
	This is another paragraph.	
	dy>	

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 <hl> element defines a large heading
- The element defines a paragraph

HTML HEAD

- The <head> element is a container for metadata (data about data) and is placed between the <html> tag and the <body> tag.
- HTML metadata is data about the HTML document. Metadata is not displayed.
- The following tags describe metadata: <title>, <style>, <meta>, <link>, <script>, and <base>.

METADATA TAGS

- The <title> element:
 - defines a title in the browser tab
 - provides a title for the page when
 it is added to favorites
 - displays a title for the page in search engine results

```
<head>
<title>Page Title</title>
</head>
```

```
(18) Facebook × +

← → C ♠ facebook.com
```

 The <style> element is used to define style information for a single HTML page:

```
    tolor: red;}

    p {color: blue;}

</style>
```

The link> element is used to link to external style sheets:

```
<link rel="stylesheet" href="mystyle.css">
```

METADATA TAGS

• The <meta> element is used by browsers (how to display content), by search engines (keywords), and other web services.

```
<meta charset="UTF-8">
<meta name="description" content="Free Web tutorials">
<meta name="keywords" content="HTML,CSS,XML,JavaScript">
<meta name="author" content="John Doe">
```

HTML TAGS

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

- HTML headings are defined with the <h l > to <h6> tags.
- <h | > defines the most important heading. <h6> defines the least important heading

```
<h1>This is heading 1</h1><h2>This is heading 2</h2>
```

HTML paragraphs are defined with the tag

```
This is a paragraph.
```

HTML TAGS

• HTML links are defined with the <a> tag.

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

HTML images are defined with the tag

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

• HTML lists are defined with the (unordered/bullet list) or the (ordered/numbered list) tag, followed by tags (list items):

```
CoffeeTeaMilk
```

HTML ATTRIBUTES

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

Attribute	Description
alt	Specifies an alternative text for an image, when the image cannot be displayed
disabled	Specifies that an input element should be disabled
href	Specifies the URL (web address) for a link
id	Specifies a unique id for an element
src	Specifies the URL (web address) for an image
style	Specifies an inline CSS style for an element
title	Specifies extra information about an element (displayed as a tool tip)

HTML STYLES

• Setting the style of an HTML element, can be done with the **style** attribute.

```
<tagname style="property:value;">
```

Cagname Style- property. Vacue,

• Examples:

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

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

The **property** is a CSS property.

The **value** is a CSS value.

HTML COMMENTS

```
<!-- Write your comments here -->
```

IMPORTANT HTMLTAGS

HTML LINKS - HYPERLINKS

```
<a href="url">link text</a>
```

```
<h2 id="C4">Chapter 4</h2>
<a href="#C4">Jump to Chapter 4</a>
```

HTML IMAGES

- In HTML, images are defined with the tag.
- The tag is empty, it contains attributes only, and does not have a closing tag.
- The **src** attribute specifies the URL (web address) of the image.
- The **alt** attribute provides an alternate text for an image, if the user for some reason cannot view it
 -
 - <img src="img_girl.jpg" alt="Girl in a
 jacket" style="width:500px;height:600px;">

HTML TABLE

- An HTML table is defined with the tag.
- Each table row is defined with the

 tag. A table header is defined with the tag.
- By default, table headings are bold and centered. A table data/cell is defined with the tag.

```
• 
 Firstname
 Lastname
 Age
 Jill
 Smith
 50
 >
 Eve
 Jackson
 94
```

HTML TABLE CELLS THAT SPAN MANY COLUMNS

 To make a cell span more than one column, use the colspan attribute:

```
>
 Name
 Telephone
Bill Gates
 55577854
 55577855
```

Name	Telephone	
Bill Gates	55577854	55444778

HTML TABLE CELLS THAT SPAN MANY ROWS

• To make a cell span more than one row, use the rowspan attribute:

Name:	Bill Gates
Talambanas	55577854
Telephone:	55444778

```
Name:
 Bill Gates
Telephone:
 55577854
>
 55577855
```

EXERCISES



HTML LISTS

Unordered HTML List

```
CoffeeTeaMilk
```

- Coffee
- Milk
- Tea

```
• Ordered HTML List

    Coffee
    Tea
    Milk
```

- 1. Coffee
- 2. Milk
- 3. Tea

EXERCISES

- Item I
- Item 2
 - Item 2.1
 - Item 2.2
 - Item 2.3
 - Item 2.3.1
 - Item 2.3.2
- Item 3

- I. Item I
- 2. Item 2
- 3. Item 3
 - Item 3.1
 - Item 3.2
 - Item 3.3
- 4. Item 4

HTML BLOCK AND INLINE ELEMENTS

- Block-level Elements
 - A block-level element always starts on a new line and takes up the full width available (stretches out to the left and right as far as it can).

<div>Hello</div> <div>World</div>

<figure> <article> <footer> <aside> <form> <blockquote> <h1>-<h6> <header> <canvas> <dd> <hr>> <div> <1i>> <d1> <main> <dt> <nav> <fieldset> <noscript>

<address>

<figcaption>

<output> > < <section> <tfoot> <l <video>

HTML BLOCK AND INLINE ELEMENTS

<dfn>

- An inline element does not start on a new line and only takes up as much width as necessary.
- This is an inline element inside a paragraph:

Hello
World

<u><a>></u>		<select></select>
<abbr></abbr>	<u><i></i></u>	<small></small>
<acronym></acronym>		
<u></u>	<input/>	
<bd><</bd>	<kbd></kbd>	
<big></big>	<label></label>	
	<map></map>	<textarea< td=""></textarea<>
<button></button>	<object></object>	<time></time>
<cite></cite>	<u><q></q></u>	<tt></tt>
<code></code>	<samp></samp>	<var></var>

<script>

THE <DIV> ELEMENT

- The <div> element is often used as a container for other HTML elements.
- The <div> element has no required attributes, but style, class and id are common.
- When used together with CSS, the <div> element can be used to style blocks of content:

THE ELEMENT

- The element is often used as a container for some text.
- The element has no required attributes, but style, class and id are common.
- When used together with CSS, the element can be used to style parts of the text:

<h1>My Important Heading</h1>



HTML FORM

• The HTML <form> element defines a form that is used to collect user input:

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

- An HTML form contains form elements.
- Form elements are different types of input elements, like text fields, checkboxes, radio buttons, submit buttons, and more

KEY ATTRIBUTES

- The action attribute defines the action to be performed when the form is submitted.
 - Normally, the form data is sent to a web page on the server when the user clicks on the submit button.
- The **target** attribute specifies if the submitted result will open in a new browser tab, a frame, or in the current window.
 - The default value is "_self" which means the form will be submitted in the current window.
- The **method** attribute specifies the HTTP method (**GET** or **POST**) to be used when submitting the form data.

```
<form action="/action_page.php" method="POST">
```

WHEN TO USE GET?

- The default method when submitting form data is GET.
- However, when GET is used, the submitted form data will be visible in the page address field: /action_page.php?firstname=Mickey&lastname=Mouse

NOTE:

- Appends form-data into the URL in name/value pairs
- The length of a URL is limited (about 3000 characters)
- Never use GET to send sensitive data! (will be visible in the URL)
- Useful for form submissions where a user wants to bookmark the result
- GET is better for non-secure data, like query strings in Google

WHEN TO USE POST?

- Always use POST if the form data contains sensitive or personal information.
- The POST method does not display the submitted form data in the page address field.
- NOTE:
 - POST has no size limitations and can be used to send large amounts of data.
 - Form submissions with POST cannot be bookmarked

THE <INPUT> ELEMENT

| Туре | Description |
|------------------------|--|
| <input type="text"/> | Defines a one-line text input field |
| <input type="radio"/> | Defines a radio button (for selecting one of many choices) |
| <input type="submit"/> | Defines a submit button (for submitting the form) |

```
<form action="/action_page.php">
  First name:<br>
    <input type="text" value="Mickey"><br>
    Last name:<br>
    <input type="text" name="lastname" value="Mouse"><br>
    <input type="submit" value="Submit">
    </form>
```

THE NAME ATTRIBUTE



- Each input field must have a name attribute to be submitted.
- If the name attribute is omitted, the data of that input field will not be sent at all.
- This example will only submit the "Last name" input field:

```
<form action="/action_page.php">
  First name:<br>
    <input type="text" value="Mickey"><br>
    Last name:<br>
    <input type="text" name="lastname" value="Mouse"><br>
    <input type="submit" value="Submit">
    </form>
```

HTML INPUT TYPES

- The <input> element can be displayed in several ways, depending on the type attribute.
 - Text
 - Password
 - Submit
 - Reset
 - Radio
 - Checkbox
 - Button

- HTML5 added several new input types:
 - Color
 - Date
 - Datetime-local
 - Email
 - Month
 - Number
 - Range

- Search
- Tel
- Time
- Url
- Week

HTML INPUT ATTRIBUTES

- The <input> element can have attributes that specify its behavior
 - Value
 - Readonly
 - Disabled
 - Size
 - Maxlength

- HTML5 added the following attributes for <input>:
- Autocomplete
- Autofocus
- Height and width
- List
- Min and max
- Multiple

- Pattern (regexp)
- Placeholder
- Required
- Step

OTHER FORM ELEMENTS

 The <select> element defines a dropdown list:

```
• The <textarea> element defines a multi-line input field (a text area):
```

```
<textarea name="message" rows="10" cols
="30">
The cat was playing in the garden.
</textarea>
```

OTHER FORM ELEMENTS

- The <button> element defines a clickable **button**:
- <button type="button" onclick="
 alert('Hello World!')">Click
 Me!</button>

- HTML5 added the following form elements:
 - <datalist>
 - <output>

TRY TO SEND POST AND GET REQUEST TO THIS URL

https://www.w3schools.com/action_page.php