Html Tutorials by Muhammad Farhan

WEB DESIGNING

What is web designing?

Web design refers to the design of websites that are displayed on the internet. It usually refers to the user experience aspects of website development rather than software development. A web designer works on the appearance, layout, and, in some cases, content of a website.

Which technology use in web designing?

- HTML
- CSS
- Bootstrap

You can use JavaScript, jQuery and so on …

What is HTML?

The Hypertext Markup Language, or HTML is the standard markup language for documents designed to be displayed in a web browser.

- HTML stands for Hyper Text Markup Language
- Html like a skeleton in website
- 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.
- Without html you don’t create a website
- Html based on Element

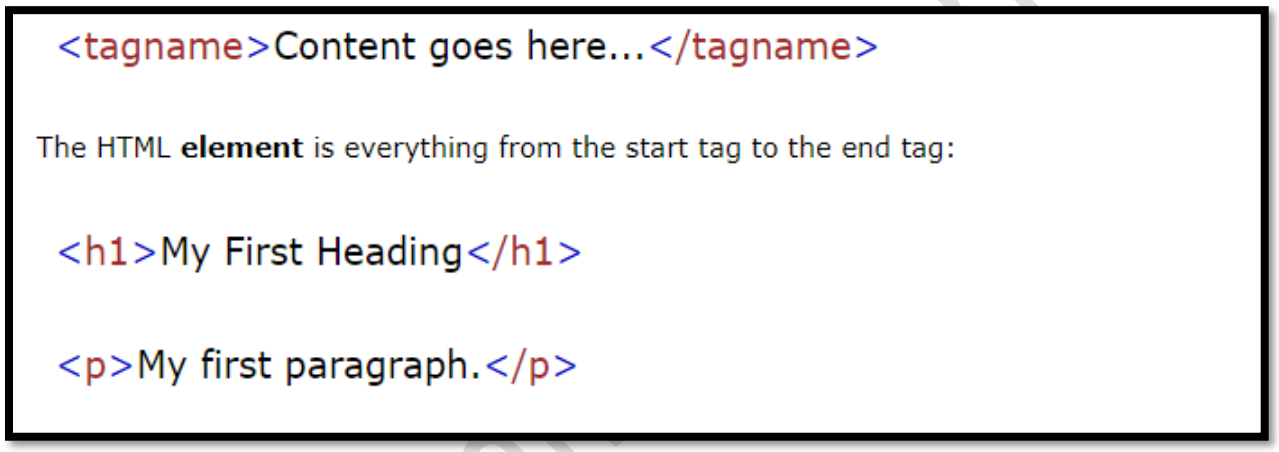
What is Tag?

In html we only use tags for create a website or design a website. It is use in < and > sign. Like <tag>

If any tag open so this is compulsory it will be close.

What is Element?

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



What is Web Browsers?

The purpose of a web browser (Chrome, Edge, Firefox, Safari) is to read HTML documents and display them correctly. A browser does not display the HTML tags, but uses them to determine how to display the document.

What is Text Editor?

- Learn HTML Using Notepad or any Text Editor
- Web pages can be created and modified by using professional HTML editors.
- However, for learning HTML we recommend a simple text editor like Notepad (PC).
- We believe in that using a simple text editor is a good way to learn HTML.

Create One Html Document using Notepad.

Define Text Editor?

Text editor is the software for create a document.

Some Text Editors:

Notepad

Sublime

Dreamweaver

notepad++

Atom

VS (visual studio) code

But we use visual studio code because it is use in professional level.

```
<!DOCTYPE html>
    <html>

        <head>
            <title> Title here </title>
        </head>

        <body>
            Web page content goes here.
        </body>

    </html>
```

Text Editor are also called IDE (**Integrated Development Environment**).

Use Some Tags in Html Document

- **html**
- **head**
- **title**
- **body**
- **h1**
- **h6**
- **p**

basically there are two types of tags.

- **Pair tag**
- **Unpair Tag**

Pair Tag?

Pair tag is that tags if it is open It will be close.

Example:

<h1></h1>

Unpair tag?

Un Pair tag is that tags it is open It will be self-close.

Example:

<hr/>

Discuss some Formatting Tags?

- ****
- ****
- **<u></u>**
- **<s></s>**
- ****
- ****
- **<small></small>**
- **<del></del>**
- ****
- ****
- **<mark></mark>**

WHAT IS HTML ATTRIBUTES?

HTML attributes provide additional information about HTML elements.

- 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"**

Some Attributes:

title=”value”,

bgcolor=”value”

and so on…

Entity Names

** ** for non-breaking space

< for less than sign <

> for greater than >

& ampersand &

" double quotation mark "

' single quotation mark (apostrophe) '

¢ for cent mark ¢

£ for pound mark £

¥ for yen mark ¥

€ for euro mark €

© for copyright mark ©

® registered trademark ®

What is Comment?

HTML comments are not displayed in the browser, but they can help document your HTML source code.

HTML Comment Tag

Syntax:

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

Html Images:

Images can improve the design and the appearance of a web page.

Html Image Syntax:

The HTML <img/> tag is used to embed an image in a web page.

Images are not technically inserted into a web page; images are linked to web pages. The <img> tag creates a holding space for the referenced image.

The <img> tag is empty, it contains attributes only, and does not have a closing tag.

The <img> tag has two required attributes:

- src - Specifies the path to the image
- alt - Specifies an alternate text for the image

Example:

url stand for Uniform Resource Locator

you can also use the width and height attributes for sizing image:

Example:

<img src="img_girl.jpg" alt="Girl in a jacket" width="500" height="600">

Html Lists:

HTML lists allow web developers to group a set of related items in lists.

Unordered HTML List

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

It is have a type attribute.

Ordered HTML List

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

It is also have a type attribute.

HTML Description Lists

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

HTML <a> Tag:

The <a> tag defines a hyperlink, which is used to link from one page to another.

The most important attribute of the <a> element is the href attribute, which indicates the link's destination.

Hyper link has two types:

- External
- Internal using id attribute

Target attribute

- _blank
- _self
- _parent
- _top
- Frame name

HTML IFRAMES:

An HTML iframe is used to display a web page within a web page. The HTML <iframe> tag specifies an inline frame.

Syntax:

<iframe src="*url*" > </iframe>

Iframe - Set Height and Width

Use the height and width attributes to specify the size of the iframe.

The height and width are specified in pixels by default:

```
<iframe src="demo_iframe.htm" height="200" width="300" title="Iframe Example"></iframe>
```

Another Example with Anchor:

```
<iframe src="demo_iframe.htm" name="iframe_a" title="Iframe Example"></iframe>

<a href="https://www.w3schools.com" target="iframe_a">W3Schools.com</a>
```


HTML TABLES:

HTML tables allow web designers to arrange data into rows and columns.

A table in HTML consists of table cells inside rows and columns.

Example:

```
<table>
  <tr>
    <th>Name </th>
    <th>Address</th>
    <th>Country</th>
  </tr>
  <tr>
    <td>Ali Raza</td>
    <td>Korangi Crossing</td>
    <td>Pakistan</td>
  </tr>
  <tr>
    <td>Arif Alvi </td>
    <td>Korangi 6 </td>
    <td>Pakistan </td>
  </tr>
</table>
```

What is Table Cell?

Each table cell is defined by a <td> and a </td> tag.

td stands for table data

Everything between <td> and </td> are the content of the table cell.

Table data elements are the data containers of the table.
They can contain all sorts of HTML elements; text, images, lists, other tables, etc.

What is Table Row?

tr stands for table row.

You can have as many rows as you like in a table, just make sure that the number of cells are the same in each row.

Table Header

Sometimes you want your cells to be headers, in those cases use the <th> tag instead of the <td> tag

```
<table>
  <tr>
```

```
  <th>Person 1</th>
  <th>Person 2</th>
  <th>Person 3</th>
 </tr>
 <tr>
  <td>Emil</td>
  <td>Tobias</td>
  <td>Linus</td>
 </tr>

</table>
```

By default, the text in <th> elements are bold and centered, but you can change that with CSS.

Table Attributes:

Add a Border in table:

HTML tables can have borders of different styles and shapes.

```
<table border="1" width="100%">
    <tr height="80px" align="center" bgcolor="red">
      <td>Header</td>
    </tr>
 </table>
```

Colspan & Rowspan Attribute

Colspan: Add two or more columns in one cell

Rowspan: two or more rows in one row

```
<table>
  <tr>
    <th colspan="2">Name</th>
    <th>Age</th>
  </tr>
<tr>
    <td rowspan="3">Jill</td>
```

```
    <td>Smith</td>
    <td>50</td>
  </tr>
</table>
```

Padding and Spacing Attributes in Table

HTML tables can adjust the padding inside the cells, and also the space between the cells.

With Padding

hello	hello	hello
hello	hello	hello
hello	hello	hello

With Spacing

hello	hello	hello
hello	hello	hello
hello	hello	hello

Example:

```
<table border="1" cellpadding="10px" cellspacing="0px" width="100%">
      <tr height="80px" align="center" bgcolor="red">
        <td colspan="2">Header</td>
      </tr>
      <tr height="60px" align="center" bgcolor="yellow">
        <td colspan="2">Navigation</td>
      </tr>
      <tr height="430px" align="center" bgcolor="green">
          <td width="75%">Content</td>
          <td>Sidebar</td>
      </tr>
      <tr height="60px" align="center" bgcolor="blue">
        <td colspan="2">Footer</td>
      </tr>
    </table>
```

HTML Block and Inline Elements:

Every HTML element has a default display value, depending on what type of element it is.

There are two display values: block and inline.

Block-level Elements:

A block-level element always starts on a new line.

A block-level element always takes up the full width available (stretches out to the left and right as far as it can).

A block level element has a top and a bottom margin, whereas an inline element does not.

Example:

Hello World

<dd> <dl> <dt> <footer> <form> <h1>-<h6> <header>

<hr> <main> <nav>   <p> <pre> <section>

<table> <tfoot> <video>

Inline Elements:

An inline element does not start on a new line.

An inline element only takes up as much width as necessary.

This is a element inside a paragraph.

Hello World

<a> <b> <big>
 <button> <i> <img> <input> <label>
<select> <small>   <sub> <sup> <textarea>

What are Semantic Elements?

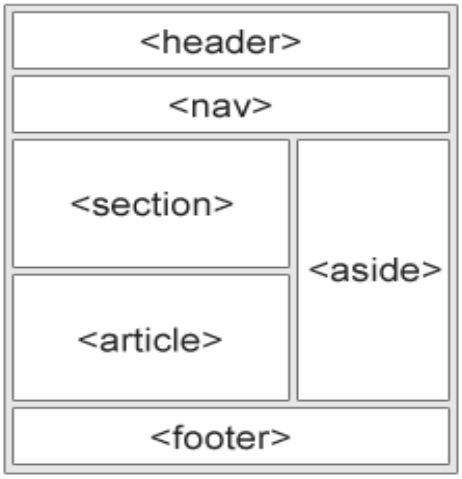
A semantic element clearly describes its meaning to both the browser and the developer.

Examples of **non-semantic** elements: and - Tells nothing about its content.

Examples of **semantic** elements: <form>, <table>, and <section> - Clearly defines its content.

Following is the list of some semantic elements:

- article
- aside
- footer
- form
- header
- main
- mark
- nav
- table
- section



Difference between semantic and non-semantic elements:

Semantic elements	Non-Semantic elements
they have meaning	they don't have meaning
they describe how the content within them is supposed to behave	they can contain anything
they have specific attributes for their structure	'class' attribute can be used to work with their structure

HTML FORMS:

HTML Forms are required, when you want to collect some data from the site visitor. For example, during user registration you would like to collect information such as name, email address, credit card, etc.

The <form> Element:

The HTML <form> element is used to create an HTML form. The <form> element is a container for different types of input elements, such as: text fields, checkboxes, radio buttons, submit buttons, etc.

The Html Form Elements:

1. **<input>**
2. **<label>**
3. **<datalist> use with input attribute list.**
4. **<select>**
5. **<option>**
6. **<optgroup>**
7. **<textarea>**
8. **<button>**
9. **<fieldset>**
10. **<legend>**

Autocomplete Attribute:

The autocomplete attribute specifies whether a form should have autocomplete on or off.

By default, autocomplete attribute value is off.

Example:

```
<form action="" autocomplete="on ">
```

1. ## The <input> Element:

The HTML <input> element is the most used form element.

An <input> element can be displayed in many ways, depending on the type attribute.

Here are All types values:

- <input type="text">
- <input type="email">
- <input type="password">
- <input type="submit">
- <input type="reset">
- <input type="button">
- <input type="radio">
- <input type="checkbox">
- <input type="color">
- <input type="date">

- <input type="datetime-local">
- <input type="file">
- <input type="hidden">
- <input type="image">
- <input type="month">
- <input type="number">
- <input type="range">
- <input type="search">
- <input type="tel">
- <input type="time">
- <input type="url">
- <input type="week">

Input have more Attributes:

- **value** set a default value in input element
- **readonly** input will be readonly you cannot write some thing
- **required** input will be put something blank input can't submit
- **placeholder** show example in input tag
- **disabled** a set input disabled for not working
- **name** name specify the element name. in the backend it will use.
- **size** size specify the width on input.
- **maxlength** it is for limit the input field (text).
- **minlength** it is for minimum limit
- **autofocus** input field should automatically get focus when the page loads
- **id** use with for attribute.
- **min** is limits the minimum value is.
- **max** is limits the maximum value is.
- **multiple** is only use in type=" file" for uploading two or more files.
- **step** if step="3", legal numbers could be -3, 0, 3, 6, etc.
- **pattern** regular expression that the input field's value is checked against.
- **Accept** it is accept only file extension.
- **list** refers to a <datalist> element that contains pre-defined options for an <input> element.

Note: Min & Max attributes work only with input types: number, range, date, datetime-local, month, time and week.

Example:

```
<form>
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname" size="50" placeholder=”Enter Name” required ><br>
  <label for="lname">Last Name:</label><br>
<input type="text" id="lname" name="lname " maxlength="4" size="4" readonly>
</form>
```

Another Example:

```
<form>
  <label for="datemax">Enter a date before 1995-04-03:</label>
  <input type="date" id="datemax" name="datemax" max="1995-14-03"><br><br>

  <label for="datemin">Enter a date after 2000-01-01:</label>
  <input type="date" id="datemin" name="datemin" min="2000-01-02"><br><br>

 <label for="quantity">Quantity (between 1 and 5):</label>
 <input type="number" id="quantity" name="quantity" min="1" max="5">
</form>
```

Pattern Example:

```
<form>
  <label for="country_code">Country code:</label>
  <input type="text" id="country_code" name="country_code"
  pattern="[A-Za-z]{3}" title="Three letter country code">
</form>
```

List Attribute Example:

```
<form>
  <input list="browsers">

  <datalist id="browsers">
    <option value="Internet Explorer">
    <option value="Firefox">
    <option value="Chrome">
    <option value="Opera">
    <option value="Safari">
  </datalist>

</form>
```

Select and Option Element:

The <select> element is used to create a drop-down list.

The <option> tags inside the <select> element define the available options in the drop-down list.

Example:

```
<label for="country">Select Country:</label>

<select name="country" id="country">
  <option value="pakistan">Pakistan</option>
  <option value="india">India</option>
  <option value="bangladesh">Bangladesh </option>
  <option value="canada">Canada</option>
</select>
```

Select & Option with optgroup:

Select & option use with optgroup. This optgroup use for make option groups.

Example:

```
<label for="cars">Choose a car:</label>
<select name="cars" id="cars">
  <optgroup label="Japnese Cars">
    <option value="move">Move</option>
    <option value="mira">Mira</option>
    <option value="chr">CHR</option>
  </optgroup>
  <optgroup label="German Cars">
    <option value="mercedes">Mercedes</option>
    <option value="audi">Audi</option>
  </optgroup>
</select>
```

The textarea Element:

The <textarea> tag defines a multi-line text input control.
The <textarea> element is often used in a form, to collect user inputs like comments or reviews.

The size of a text area is specified by the cols and rows attributes (or with CSS).

Example:

```
<textarea id="comment" name="comment" rows="4" cols="20"></textarea>
```

The Button Element:

The <button> tag defines a clickable button.

Inside a <button> element you can put text (and tags like <i>, <b>, ,
, <img>, etc.). That is not possible with a button created with the <input> element!

Example:

```
<button type="button">Click Me! </button>
```

The fieldset Element use with legend:

The <fieldset> tag is used to group related elements in a form.

The <fieldset> tag draws a box around the related elements.

Example:

```
<form>

<fieldset>
   <legend>Personal:</legend>
   <label for="fname">First name:</label>
   <input type="text" id="fname" name="fname"><br><br>
   <label for="lname">Last name:</label>
   <input type="text" id="lname" name="lname"><br><br>
   <input type="submit" value="Submit">
 </fieldset>

<fieldset>
   <legend>Academic Info:</legend>
   <label for="fname">First name:</label>
   <input type="text" id="fname" name="fname"><br><br>
   <label for="lname">Last name:</label>
   <input type="text" id="lname" name="lname"><br><br>
   <input type="submit" value="Submit">
 </fieldset></form>
```