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HTML

HyperText Markup Language

META TAGS

The <meta> tag defines metadata about an HTML document. Metadata is data (information) about data.

<meta> tags always go inside the <head> element, and are typically used to specify character set, page description, keywords, author of the document, and viewport settings.

Metadata will not be displayed on the page, but is machine parsable.

This tag accepts four attributes which are mentioned and described below.

Name: This attribute is used to define the name of the property.

http-equiv: This attribute is used to get the HTTP response message header.

Content: This attribute is used to specify properties value.

Charset: This attribute is used to specify a character encoding for an HTML file.

HTML ELEMENTS AND ATTRIBUTE

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

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

Examples of some HTML elements:

    <h1>My First Heading</h1>

    <p>My first paragraph</p>

HTML elements with no content are <u>called empty elements</u>. The <br> tag defines a line break, and is an empty element without a closing.

HTML Attributes: It is used to define the character of an HTML element. It always placed in the opening tag of an element. It generally provides additional styling (attribute) to the element.

<u>Example:</u>

<p align="center">This is paragraph.</p>

This is paragraph.

- 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:
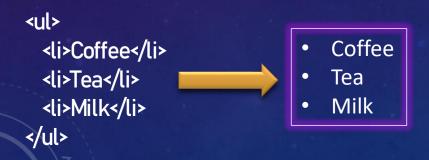
    name="value"

HTML LIST

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

UNORDERED LIST:

An unordered list starts with the <ul> tag. Each list item starts with the <li> tag. The list items will be marked with bullets (small black circles) by default:

Example:

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

- Coffee
- Tea
- Milk

ORDERED LIST:

An ordered list starts with the <ol> tag. Each list item starts with the <li> tag.The list items will be marked with numbers by default:

Example:

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

1. Coffee
2. Tea
3. Milk

HTML LINKS

Links are found in nearly all web pages. Links allow users to click their way from page to page.

- HTML links are hyperlinks.

- You can click on a link and jump to another document.

- When you move the mouse over a link, the mouse arrow will turn into a little hand.

<a> tag:

The HTML <a> tag defines a hyperlink. It has the following syntax:
  link text

Example:

  Google

HTML TABLES

A table in HTML consists of table cells inside rows and columns.
Each table cell is defined by a <td> and a </td> tag.
Each table row starts with a <tr> and end with a </tr> tag.
Sometimes you want your cells to be headers, in those cases use the <th> tag instead of the <td>

Tag	Description
<table>	Defines a table
<th>	Defines a header cell in a table
<tr>	Defines a row in a table
<td>	Defines a cell 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

Example:

```
<table>
  <tr>
    <th>Person 1</th>
    <th>Person 2</th>
    <th>Person 3</th>
  </tr>
  <tr>
    <td>Pooja</td>
    <td>Shikhar</td>
    <td>Manas</td>
  </tr>
  <tr>
    <td>16</td>
    <td>14</td>
    <td>10</td>
  </tr>
</table>
```

Person1	Person2	Person3
Pooja	Shikhar	Manas
16	14	10

HTML FORMS

An HTML form is used to collect user input.

The user input is most often sent to a server for processing.

The HTML <form> element is used to create an HTML form for user input. There are different types of form controls that you can use to collect data using HTML form −

- Text Input Controls
- Checkboxes Controls
- Radio Box Controls
- Select Box Controls
- File Select boxes
- Hidden Controls
- Clickable Buttons
- Submit and Reset Button

BLOCK AND INLINE ELEMENTS

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.
The <div> element is a block-level element.
<address>
<article>
<aside>
<blockquote>

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 <span> element inside a paragraph.
<a>
<abbr>
<acronym>
<b>

HTML ID ATTRIBUTE:

The id attribute is a unique identifier which is used to specify the document. It is used by CSS and JavaScript to perform a certain task for a unique element. In CSS, the id attribute is written using # symbol followed by id.
Syntax:
<element id="id_name"> In CSS Stylesheet: #id_name { // CSS Property }

HTML CLASS ATTRIBUTE:

The class attribute is used to specify one or more class names for an HTML element. The class attribute can be used on any HTML element. The class name can be used by CSS and JavaScript to perform certain tasks for elements with the specified class name. The class name in CSS stylesheet using **"."** symbol.
Syntax:
<element class="class_name"> In CSS Stylesheet: .class { // CSS Property }

HTML - ENTITIES

Some characters are reserved in HTML and they have special meaning when used in HTML document. Character entities are used to display reserved characters in HTML.

A character entity looks like this:

&*entity_name*;OR
&#*entity_number*;

Result	Description	Entity Name	Entity Number
<	less than	<	<
>	greater than	>	>
&	ampersand	&	&

SEMANTIC TAGS

A semantic element clearly describes its meaning to both the browser and the developer.
Examples of **non-semantic** elements: <div> and <span> - Tells nothing about its content.
Examples of **semantic** elements: <form>, <table>, and <article> - Clearly defines its content.

In HTML there are some semantic elements that can
be used to define different parts of a web page:
•<article>
•<aside>
•<details>
•<figcaption>
•<figure>
•<footer>
•<header>
•<main>
•<mark>