

Lecture - 2 Basics HTML

Course Code: CIS 133 & 133 L

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Overview

- Attributes
- HTML Elements
- HTML Formatting
- Nested Tag
- Lists Data

HTML Attributes

- Tags are sometimes enhanced by **attributes**, which are name **value** pairs that modify the tag.
- HTML attributes are special words which provide additional information about the elements or attributes are the modifier of the HTML element.
- Each element or tag can have attributes, which defines the behavior of that element.
- Attributes should always be applied with start tag.
- The Attribute should always be applied with its name and value pair.
- The Attributes name and values are case sensitive, and it is recommended by W3C that it should be written in Lowercase only.
- You can add multiple attributes in one HTML element, but need to give space between two attributes.

For example, the tag (used to embed an image into a page) usually includes the following attributes:

```
<img src = "logo.jpg" Alt = "this is logo" />
```

The src attribute describes where the image file can be found, and the alt attribute describes alternate text that is displayed if the image is unavailable.

An HTML file is made of elements. These elements are responsible for creating web pages and define content in that webpage. An element in HTML usually consists of a start tag <tag name>, close tag </tag name> and content inserted between them. Technically, an element is a collection of start tag, attributes, end tag, content between them. all the elements are divided into three categories:

- 1. Void elements
- 2. Block-level elements
- 3. Inline elements

1. Void element

All the elements in HTML do not require to have start tag and end tag, some elements do not have content and end tag such elements are known as Void elements or empty elements. These elements are also called as unpaired tag.

Some Void elements are
 (represents a line break), <hr> (represents a horizontal line), etc.

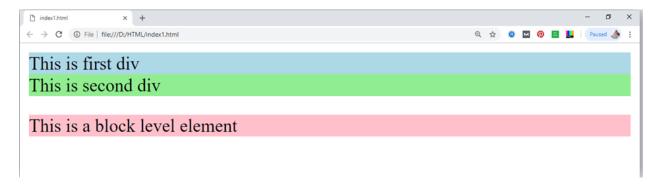
2. Block-level element

- These are the elements, which structure main part of web page, by dividing a page into coherent blocks.
- A block-level element always starts with new line and takes the full width of web page, from left to right.
- These elements can contain block-level as well as inline elements.

Following are the block-level elements in HTML.

```
<div>, <dl>, <dt>, <fieldset>, <figcaption>, <figure>, <footer>,
<form>, <h1>-<h6>, <header>, <hr>, , <main>, <nav>, ,
, <section>, ,  and <video>.
```

- Example:
- <body>
- <div style="background-color: lightblue">This is first div</div>
- <div style="background-color: lightgreen">This is second div</div>
- This is a block level element
- </body>



In the above example we have used tag, which defines a section in a web page, and takes full width of page.

We have used style attribute which is used to styling the HTML content, and the background color are showing that it's a block level element.

3. Inline element

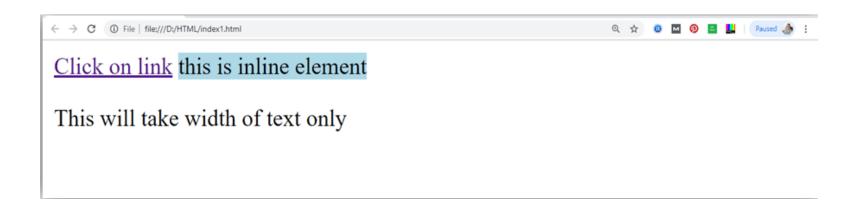
- Inline elements are those elements, which differentiate the part of a given text and provide it a particular function.
- These elements do not start with new line and take width as per requirement.
- The Inline elements are mostly used with other elements.

Following are the inline elements in HTML:

```
<a>>, <abbr>, <acronym>, <b>, <br>, <br/><img>, <input>, <label>, <map>, <script>, <select>, <span>, <strong>, <sub>, <sup>, <textarea>, <time>, <var>.
```

Example:

```
<body>
<a href="https://google.com">Click on link</a>
<span style="background-color: lightblue">this is inline element</span>
This will take width of text only
</body>
```



HTML Formatting

HTML Formatting is a process of formatting text for better look and feel. HTML provides us ability to format text without using CSS. There are many formatting tags in HTML. These tags are used to make text bold, italicized, or underlined.

Here, we are going to learn some HTML formatting tags. Following is the list of HTML formatting text.

Elements	Description
	This is a physical tag, which is used to bold the text written between it.
	This is a logical tag, which tells the browser that the text is important.
<i>></i>	This is a physical tag which is used to make text italic.
	This tag is used to highlight text.
<u>></u>	This tag is used to underline text written between it.
	It displays the content slightly above the normal line.
	It displays the content slightly below the normal line.
	This tag is used to display the deleted content.
<ins></ins>	This tag displays the content which is added
<big></big>	This tag is used to increase the font size by one conventional unit.
<small></small>	This tag is used to decrease the font size by one unit from base font size.

Nested Tag

Tags can be (and frequently are) nested inside each other. Tags cannot overlap, so <a> is not legal, but <math><a> is fine.

Example:

```
<a href="https://www.qries.com/">
<img alt="Try again" src="banner_logo.png" width=150" height="70">
</a>
```

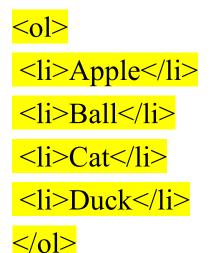
HTML Lists are used to specify lists of information. All lists may contain one or more list elements. There are three different types of HTML lists:

- 1. Ordered List or Numbered List (ol)
- 2. Unordered List or Bulleted List (ul)
- 3. Description List or Definition List (dl)

1. HTML Ordered List or Numbered List

In the ordered HTML lists, all the list items are marked with numbers by default. It is known as numbered list also. The ordered list starts with tag and the list items start with tag.

Example:



Output:

- 1. Apple
- 2. Ball
- 3. Cat
- 4. Duck

2. HTML Unordered List or Bulleted List

In HTML Unordered list, all the list items are marked with bullets. It is also known as bulleted list also. The Unordered list starts with tag and list items start with the tag.

Example:

ul>

Apple

Ball

Cat

Duck

Output:

- Apple
- Ball
- Cat
- Duck

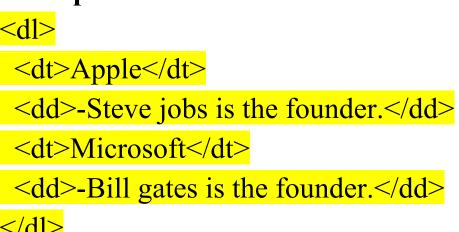
3. HTML Description List or Definition List

HTML Description List or Definition List displays elements in definition form like in dictionary.

The 3 HTML description list tags are given below:

- 1. <dl> tag defines the start of the list.
- 2. <dt> tag defines a term.
- 3. <dd> tag defines the term definition (description).

Example:



Output:

Apple
-Steve jobs is the founder
Microsoft
-Bill gates is the founder