

## Lecture2

### Introduction to HTML

#### 1. HTML(Hypertext markup language ):

- This is the language used to “write” web pages and it describes what is “on” a web page
- HTML is necessary because without it, your web page is empty.
- HTML is not a programming language
- HTML: set of tags(labels, markers) to describe the content

#### 2. HTML Versions

Version	Year
HTML	1991
HTML 2.0	1995
HTML 3.2	1997
HTML 4.01	1999
XHTML	2000
HTML5	2014

#### 3. HTML Document Structure

##### 1. <!DOCTYPE html>

- Always add the <!DOCTYPE> declaration to your HTML documents, so that the browser knows what type of document to expect.
- The <!DOCTYPE>declaration is NOT case sensitive.
- <!DOCTYPE> is not html tags and it always written before the html tag.

##### 2. <html>, <head>, <title>, and <body> tags

```
<!DOCTYPE html>
<html>
<head>
<title>Title of the document</title>
```

<!-- appear on the page title bar

1. Defines a title in the browser tab

2. Provides a title for the page when it is added to favorites

3. Displays a title for the page in search engine results->

```
</head>
<body>
<!-- The page content (appear to the users/visitors of your web) -->

</body>
</html>
```

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

3. **Comments in HTML:** `<!-- comment text -->`

#### 4. HTML Tags Structure:

HTML tags are element names surrounded by angle brackets.

1. `<tag-name>Tag Content</tag-name>` , this is called **Closed tags**(tags should be closed)

Ex: `<p>This is a paragraph </p>`

`<h1>This is a header tag</h1>`

2. `<tag-name />` - means the tag has no content (Empty elements do not have an end tag so they can be "closed" in the opening tag) this tag is called **Open tags**

Ex: `<hr/>` : horizontal line

`<br/>`: Break line (go to new line)

3. `<tag-name attribute(s)>tag-content</tag-name>`

`<p align="center">Asma'a</p>`

#### 4. <tag-name attribute(s) />

```

```

#### 5. HTML Attributes Structure: Attribute(s) is /are design for the content.

##### 1. attribute-name = "attribute-value"

Examples:

```
<p align="center">This a center align paragraph</p>
```

```
<hr width="100px" />
```

Note that: each tag has a set of possible attributes, and the attribute has set of possible values

#### 6. Text Formatting Tags

A formatting tag were designed to display special types of text:

<mark> Hello</mark>	Marked text (highlighted text)
<small> Hello </small>	text appeared smaller
<i>-----</i> <em>-----</em>	makes the text italic
<b>-----</b> <strong>----</strong>	makes the text bold
<u>-----</u>	makes the text underlined
<del>-----</del> <strike>----</strike>	makes a line through the text
<sup>-----</sup>	makes the text superscript
<sub>-----</sub>	makes the text subscript

<code>&lt;!DOCTYPE html&gt;</code>	This is a normal text.
<code>&lt;HTML&gt;</code>	<b>This is a bold text.</b>
<code>&lt;head&gt;</code>	<i>This is an italic text.</i>
<code>&lt;/head&gt;</code>	<u>This is an underlined text.</u>
<code>&lt;body&gt;</code>	<b>This is an highlighted text.</b>
<code>&lt;P&gt;This is a normal text.&lt;/p&gt;</code>	This is an small text.
<code>&lt;P&gt;&lt;b&gt;This is a bold text.&lt;/b&gt;&lt;/p&gt;</code>	<del>This is an strike text.</del>
<code>&lt;P&gt;&lt;i&gt;This is an italic text.&lt;/i&gt;&lt;/p&gt;</code>	<del>This is an strike text.</del>
<code>&lt;P&gt;&lt;u&gt;This is an underlined text.&lt;/u&gt;&lt;/p&gt;</code>	2 <sup>nd</sup> part: image
<code>&lt;P&gt;&lt;mark&gt;This is an highlighted text.&lt;/mark&gt;&lt;/p&gt;</code>	H <sub>2</sub> O
<code>&lt;P&gt;&lt;small&gt;This is an small text.&lt;/small&gt;&lt;/p&gt;</code>	
<code>&lt;P&gt;&lt;strike&gt;This is an strike text.&lt;/strike&gt;&lt;/p&gt;</code>	
<code>&lt;P&gt;&lt;del&gt;This is an strike text.&lt;/del&gt;&lt;/p&gt;</code>	
<code>&lt;sup&gt;2nd&lt;/sup&gt; part: image</code>	
<code>&lt;p&gt; H&lt;sub&gt;2&lt;/sub&gt;&lt;/sub&gt;0 &lt;/p&gt;</code>	
<code>&lt;/body&gt;</code>	
<code>&lt;/html&gt;</code>	
<code>&lt;HTML&gt;</code>	

## 7. Heading Tags

Used with the **main title** in the text, to give more attention for the content. Headings should be automatically spaced from the body text. Browsers automatically add **some white space** (a margin) before and after a heading.

`<h1>Heading 1 level text</h1>`

`<h2>Heading 2 level text</h2>`

`<h3>Heading 3 level text</h3>`

`<h4>Heading 4 level text</h4>`

`<h5>Heading 5 level text</h5>`

`<h6>Heading 6 level text</h6>`

## 8. Paragraph Tag

<p>-----</p>

In <p> The browser will **remove any extra spaces and extra lines** when the page is displayed.

```
<!DOCTYPE html>
<html>
<body>

<p>
This paragraph
contains a lot of lines
in the source code,
but the browser
ignores it.
</p>

<p>
This paragraph
contains      a lot of spaces
in the source  code,
but the browser
ignores it.
</p>

<p>
The number of lines in a paragraph depends on the size of the browser window. If you resize the browser window,
the number of lines in this paragraph will change.
</p>

</body>
</html>
```

### Output

This paragraph contains a lot of lines in the source code, but the browser ignores it.

This paragraph contains a lot of spaces in the source code, but the browser ignores it.

The number of lines in a paragraph depends on the size of the browser window. If you resize the browser window, the number of lines in this paragraph will change.

### Paragraph attributes:

<p align="center">This a center align paragraph</p>

#### align attribute values:

- align="left"
- align="right"
- align="center"
- align="justify"

### 9. <Pre >Tag: keeps format as you write

Element is displayed in a fixed-width font (usually Courier), and it preserves both spaces and line breaks

**Example:**

```
<pre>
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.
</pre>
```