

Web Design

By: Dr. Galal AL-Marzoqi

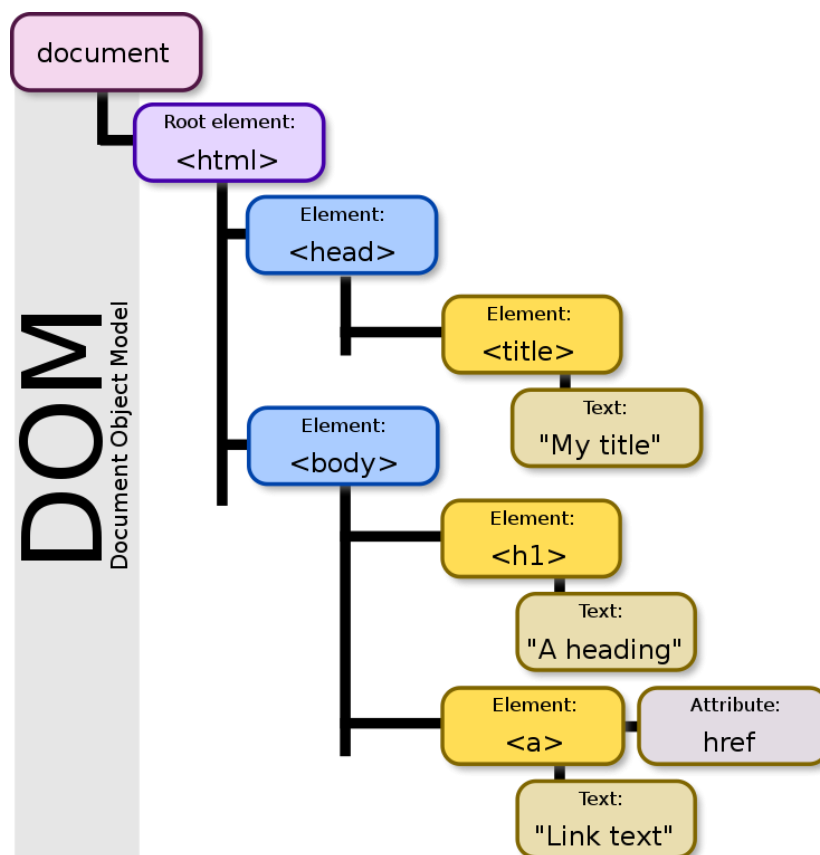
Document Object Model, Elements, Attributes and Properties

➤ **The Document Object Model (DOM)** is an interface that represents how your HTML and XML documents are read by the browser.

It supports a language (JavaScript) to use, structure, and style your website.

✓ **DOM standard is separated into three different parts:**

- Core DOM - standard model for all document types.
- XML DOM - standard model for XML documents.
- HTML DOM - standard model for HTML documents.

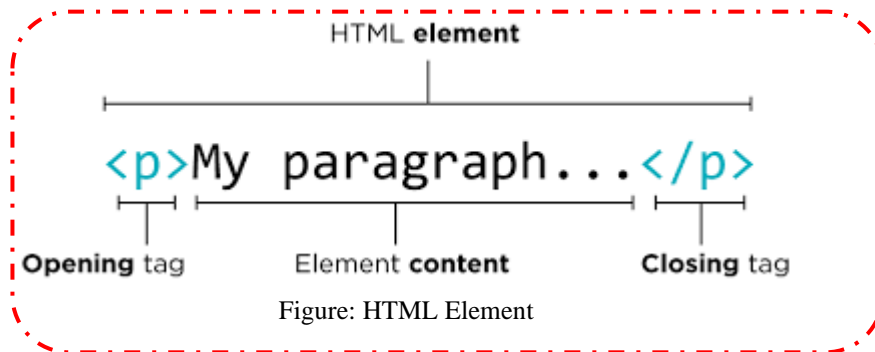


HTML DOM - standard model for HTML documents.

- ✓ **The HTML Element** is defined by a (**starting tag** `<..>`). If the element includes other content, it needs to end (**closing tag** `</..>`).

So here `<p>.....</p>` is an HTML element, `<h1>...</h1>` is another HTML element.

There are some HTML elements which don't need to be closed, such as `<img.../>`, `<hr />` and `
` elements. These are known the void elements.



Start tag <.>	Element content	End tag </.>	Example
<h1>	My First Heading	</h1>	<pre> <!DOCTYPE> <html> <head> <title> This is my page </title> </head> <body> <h1>My First Heading</h1> <p>My first paragraph.</p> </body> </html> </pre>
<p>	My first paragraph.	</p>	
 	none	none	

Note: Some HTML elements have no content (like the `
` element). These elements are called empty elements. Empty elements do not have an end tag!

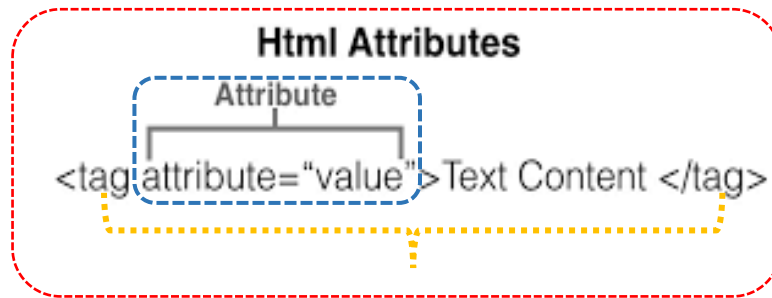
HTML comments are placed in between `<!-- ... -->` tags. So, any content placed with-in `<!-- .. -->` tags will be treated comment and will be completely **ignored by the browser.**

```

<!DOCTYPE>
<html>
  <head> <!-- Document Header Starts -->
    <title>This is document title</title>
  </head> <!-- Document Header Ends -->
  <body>
    <p>Document content goes here</p>
  </body>
</html>

```

- ✓ **HTML Attributes** are special words used inside the **opening tag** to control the element's performance. **HTML attributes** are a **modifier of an HTML element type**. **Attributes provide additional information about elements**, **Attributes are always specified in the start tag**, **Attributes usually come in name/value like: name="value"**.



✓ **Example:**

The **<a>** tag defines a hyperlink. The **href** attribute specifies the URL of the page the link goes to:

<!DOCTYPE>

<html>

<html>

<head> <title> This is my page </title> </head>

<body>

<h2>The href Attribute</h2>

<p>HTML links are defined with a tag:</p>

< a > is element and href is attribute and URL is value for attribute and content tage

Visit facebook

</body>

</html>

✓ Properties

There are three properties:

(Color property, Image property, and Position property)

➤ Color property:

In this property, you can use paragraph (Text) background and page background for any element of the page, or a table or set one-colour for a page.

✓ Syntax:

- Text background: ``
- Page background: `<body style="background|hex_number|rgb_number">`

Value	Description
<i>color_name</i>	Specifies the text color with a color name (like "red")
<i>hex_number</i>	Specifies the text color with a hex code (like "#ff0000")
<i>rgb_number</i>	Specifies the text color with an rgb code (like "rgb(255,0,0)")

Know, we will give some examples about:

Text background: ``

<i>Example1 represents text background by colour name values.</i>	<i>Example2 represents text background by hex number colour values.</i>
<pre><!DOCTYPE> <html> <head> <title> This is my page </title> </head> <body> <h> My web page text in red color : </h> "This is red color!" </body> </html></pre>	<pre><!DOCTYPE> <html> <head> <title> This is my page </title> </head> <body> <h> My web page text in red color : </h> "This is red color!" </body> </html></pre>
<i>Example3 represents text background by rgb colour name values.</i>	
<pre><!DOCTYPE> <html> <head> <title> This is my page </title> </head> <body> <h> My web page text in red color : </h> "This is red color!"</body> </html></pre>	

Know, we will give some examples about:

Page background: `<body style="background | hex_number | rgb_number">`

<i>Example1 represents text background color name values.</i>	<i>Example2 represents text background by hex number color values.</i>
<pre> <!DOCTYPE> <html> <head> <title> This is my page </title> </head> <body style="background-colour:yellow;"> <h> My web page text in red colour : </h> </body> </html> </pre>	<pre> <!DOCTYPE> <html> <head> <title> This is my page </title> </head> <body style="background-colour:#ff0000;"> <h> My web page text in red colour : </h> </body> </html> </pre>
<i>Q. Design web page that has yellow colour and page text by red color using name color?</i>	<i>Q. Design web page that has yellow colour and paragraph <p> is red color using name color?</i>
<pre> <!DOCTYPE> <html> <head> <title> This is my page </title> </head> <body style="background-colour:yellow;"> <h> My web page text in red colour : </h> "This is red colour!" </body> </html> </pre>	<pre> <!DOCTYPE> <html> <head> <title> This is my page </title> </head> <body style="background-colour:yellow;"> <p> My web page text in red colour
 My page is so good
 It has cute color: </p> </body> </html> </pre>

➤ **Image property:**

In this property you can use an image background and stander image.

- The **Image background** defines by (<div> tag with style attribute) for any a separate element on your site.

Example1 represents repeat image background	Example2 represents no repeat image background
<pre><!DOCTYPE> <html> <head> <title> This is my page </title> </head> <body> <div style="background-image:url(C:\google.jpeg); width:1000px; height:1000px"> This is my best image </div> </body> </html></pre>	<pre><!DOCTYPE> <html> <head> <title> This is my page </title> </head> <body> <div style="background-image:url(C:\google.jpeg); background-repeat:no-repeat; width:1000px; height:1000px" > <h3> This is my best image </h3> </div> </body> </html></pre>

- **Stander image** defines by (tag with **src** attribute. Typically, the **src** is a URL.

Example3 represents stander image
<pre><!DOCTYPE> <html> <head> <title> This is my page </title> </head> <body> </body> </html></pre>

➤ **Position property**

The position property specifies the type of positioning method used for an element (static, relative, absolute, or fixed).

Note:

Top:50px	<i>If increase number the image will be down, while if decrease number the image will be top.</i>
Left:100px	<i>If increase number the image will be right, while if decrease number the image will be left.</i>

Example1 represents position image using absolute

```
<!DOCTYPE>
<html>
<head>
<title> This is my page </title>
</head>
<body>
<img style="position:absolute; Top:50px; Left:100px; Width:50px; Height:80px"; Src="C:\google.jpg">
</img>
This is my best image </body>
</html>
```

Example2 represents position image using static

```
<!DOCTYPE>
<html>
<head>
<title> This is my page </title>
</head>
<body>
<img style="position:static; Top:50px; Left:100px; Width:50px; Height:80px"; Src="C:\google.jpg">
</img>
This is my best image </body>
</html>
```

Example3 represents position image using relative

```
<!DOCTYPE>
<html>
<head>
<title> This is my page </title>
</head>
<body>
<img style="position: relative; Top:50px; Left:100px; Width:50px; Height:80px"; Src="C:\google.jpg">
</img>
This is my best image </body>
</html>
```


(Q).What's Properties of HTML?

(Q). Why we use HTML?

1. HTML is used to create web pages.
2. HTML used many tags to make a web page.
3. The tags of HTML are surrounded by the angular (bracket (< >)).
4. It can use wide ranges of colours, objects, and layouts.
5. Very useful for beginners in web designing field.

(Q). What are Advantages and disadvantages of HTML

HTML has many advantages that are table below:

Advantages of HTML	Disadvantages of HTML
Every browser supports HTML language.	Need to write a lot of code for making a simple web page.
Easy to learn and use. Don't need to buy any software.	Security features are not good in HTML.
It is by default in every window so you don't need to purchase extra software.	we need to write long code for making a web page.
You can integrate HTML with CSS, JavaScript, php etc.	