

HTML

INTRODUCTION

- HTML stands for Hyper Text Markup Language
- which is the most widely used language on Web to develop web pages.
- HTML was created by Berners-Lee in late 1991 but "HTML 2.0" was the first standard HTML specification which was published in 1995.
- HTML 4.01 was a major version of HTML and it was published in late 1999.
- Though HTML 4.01 version is widely used but currently we are having HTML-5 version which is an extension to HTML 4.01, and this version was published in 2012.

Why to Learn HTML?

HTML is a MUST for students and working professionals to become a great Software Engineer specially when they are working in Web Development Domain. I will list down some of the key advantages of learning HTML:

- **Create Web site** - You can create a website or customize an existing web template if you know HTML well.
- **Become a web designer** - If you want to start a carrer as a professional web designer, HTML and CSS designing is a must skill.
- **Understand web** - If you want to optimize your website, to boost its speed and performance, it is good to know HTML to yield best results.
- **Learn other languages** - Once you understands the basic of HTML then other related technologies like javascript, php, or angular are become easier to understand.

- ◆ HTML stands for Hypertext Markup Language, and it is the most widely used language to write Web Pages.
- ◆ Hypertext refers to the way in which Web pages (HTML documents) are linked together. Thus, the link available on a webpage is called Hypertext.
- ◆ As its name suggests, HTML is a Markup Language which means you use HTML to simply "mark-up" a text document with tags that tell a Web browser how to structure it to display.
- ◆ Originally, HTML was developed with the intent of defining the structure of documents like headings, paragraphs, lists, and so forth to facilitate the sharing of scientific information between researchers.
- ◆ Now, HTML is being widely used to format web pages with the help of different tags available in HTML language.

The basic stuff of HTML coding.

- There are various tags that we must consider and include while starting to code in HTML.
- These tags help in organization and basic formatting of elements in our script or web pages.
- These step by step procedures will guide you through the process of writing HTML.

<https://www.slideshare.net/maimoustafa73/5/html-css-basics-30843378>

Web site layers

```
graph BT; Content[Content(HTML)] --> Presentation[Presentation(CSS)]; Presentation --> Behavior[Behavior(JS)]; Behavior --> Layers[Web site layers]
```

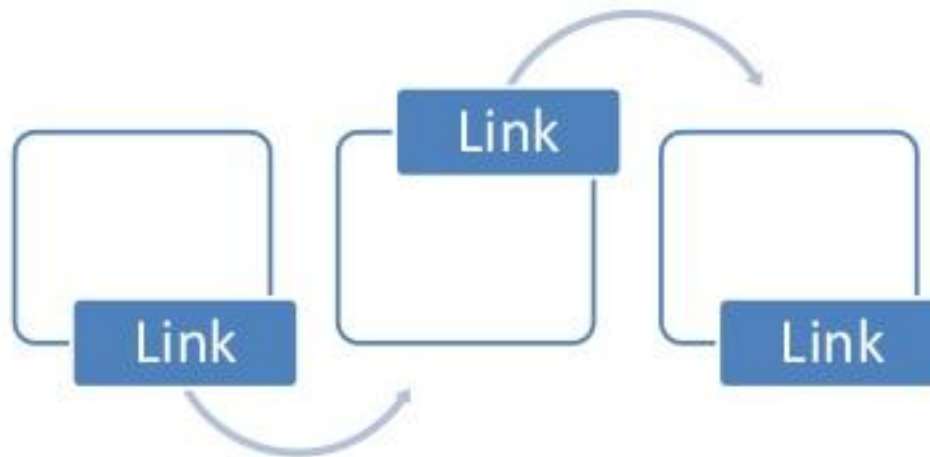
Behavior(JS)

Presentation(CSS)

Content(HTML)

What is HTML?

Hyper Text Markup Language



Tags

`<p>Content</p>`

↑
Open

↑
Close

Basic Structure

```
<!DOCTYPE HTML>  
<html>  
  <head></head>  
  <body></body>  
</html>
```

Head

```
<!DOCTYPE HTML>  
<html>  
  <head>  
    <title>Learn HTML</title>  
  </head>  
  <body></body>  
</html>
```

Preview

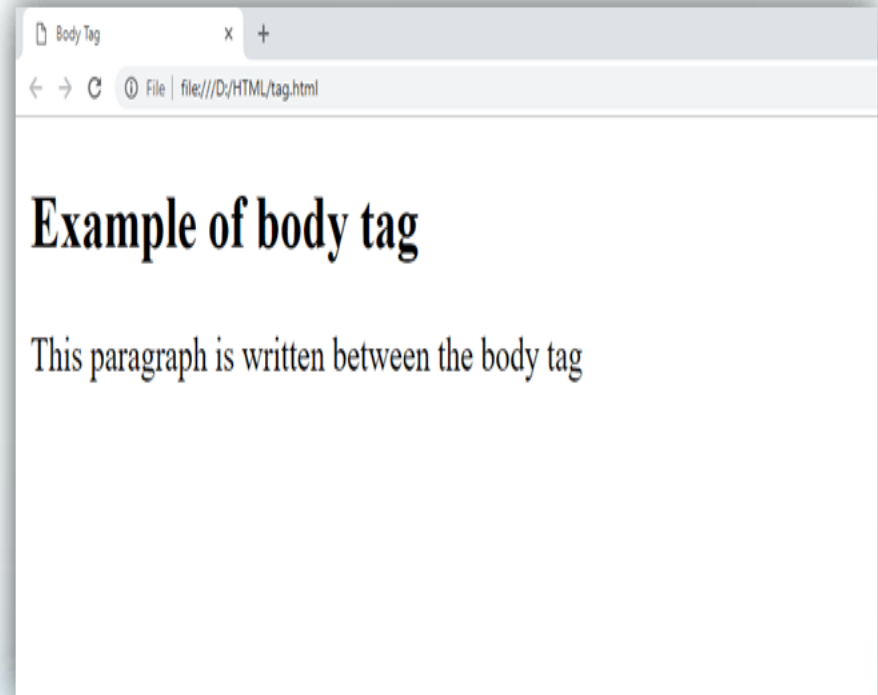


Body

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

<body>
  <h1>This is a heading</h1>
  <p>This is a paragraph.</p>
</body>

</html>
```



The Body Element

- The **BODY** element of a web page is an important element in regards to the page's appearance.
- Here are the attributes of the body tag to control all the levels.
- This element contains information about the page's background color, the background image, as well as the text and link colors.

BODY TAG

Syntax and Attribute

Syntax:

```
<body> Place your Content  
here.....</body>
```

Attribute

background: It contains the URL of the background image. It is used to set the background image.

bgcolor: It is used to specify the background color of an image.

alink: It is used to specify the color of the active link.

link: It is used to specify the color of visited links.

text: It specifies the color of the text in a document.

vlink: It specifies the color of visited links.

Background Color

BGCOLOR attribute of body tag is used to set background color

Syntax:

```
<BODY BGCOLOR=" color code"></BODY>
```

Text Color

TEXT attribute is used to control the color of all the normal text in the document. The default color for text is black.

Syntax:

```
<BODY BGCOLOR=" color code" TEXT="color code"></BODY>
```

LINK , ALINK, VLINK

These attributes control the colors of the different link states:

1. **LINK** – initial appearance – default = Blue.
2. **VLINK** – visited link – default = Purple.
3. **ALINK** –active link being clicked–default= Yellow.

Horizontal Rule , <HR>

The **<HR>** element causes the browser to display a horizontal line (rule) in your document.

<HR> does not use a closing tag, **</HR>**.

Types of HTML Tags

There are two types of HTML Tags :

1. Paired Tags (Open and Close Tags)
2. Unpaired Tags (Singular Tag)

Paired Tags

- Paired tags are a set of two tags with the same name.
- In each Paired tag set, one is an opening tag, and the other one is the closing tag. The closing tag has a / slash, it means that the tag is closed now.

Syntax: **<tag> Content </tag>**

List of paired tags are :

<html>	</html>
<body>	</body>
<p>	</p>
<a>	
<table>	</table>
<form>	</form>
	
<h1>	<h1>

Unpaired Tags (Singular Tags)

- Unpaired tags are single tags with no closing tag.
- These tags are also called Singular Tags. These are also called non-container tags because they do not contain any content.
- It is recommended to close the unpaired/singular tags also. But unfortunately, we do not have the closing tag for those. So, an unpaired tag is closed after adding a slash(/) just before the greater than > sign. For example:
.

Look below the list of some Unpaired Tags in HTML. Notice the use of slash(/) in the tags, to close them.

Some Unpaired Tags are:

Open Tag

<hr>

<meta>

<input>

Headings, <Hx> </Hx>

Inside the **BODY** element, heading elements **H1** through **H6** are generally used for major divisions of the document.

```
<HTML>
<HEAD>
<TITLE> Example
  Page</TITLE>
</HEAD>
<BODY>
<H1> Heading 1 </H1>
<H2> Heading 2 </H2>
<H3> Heading 3 </H3>
<H4> Heading 4 </H4>
<H5> Heading 5 </H5>
<H6> Heading 6 </H6>
</BODY>
</HTML>
```

Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Heading 6

Paragraphs, `<P>` `</P>`

Paragraphs allow you to add text to a document in such a way that it will automatically adjust the end of line to suite the window size of the browser in which it is being displayed. Each line of text will stretch the entire length of the window.

Syntax: `<p> some text here</p>`

Break, `
`

Line breaks allow you to decide where the text will break on a line or continue to the end of the window.

A `
` is an empty Element, meaning that it may contain attributes but it does not contain content.

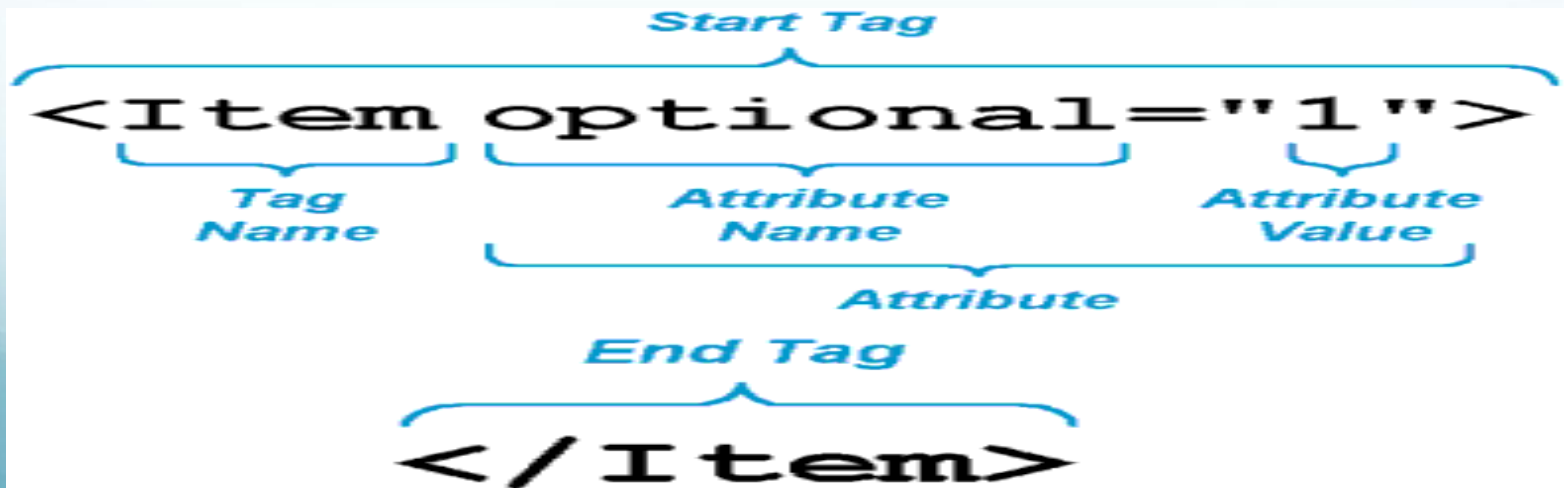
The `
` element does not have a closing tag.

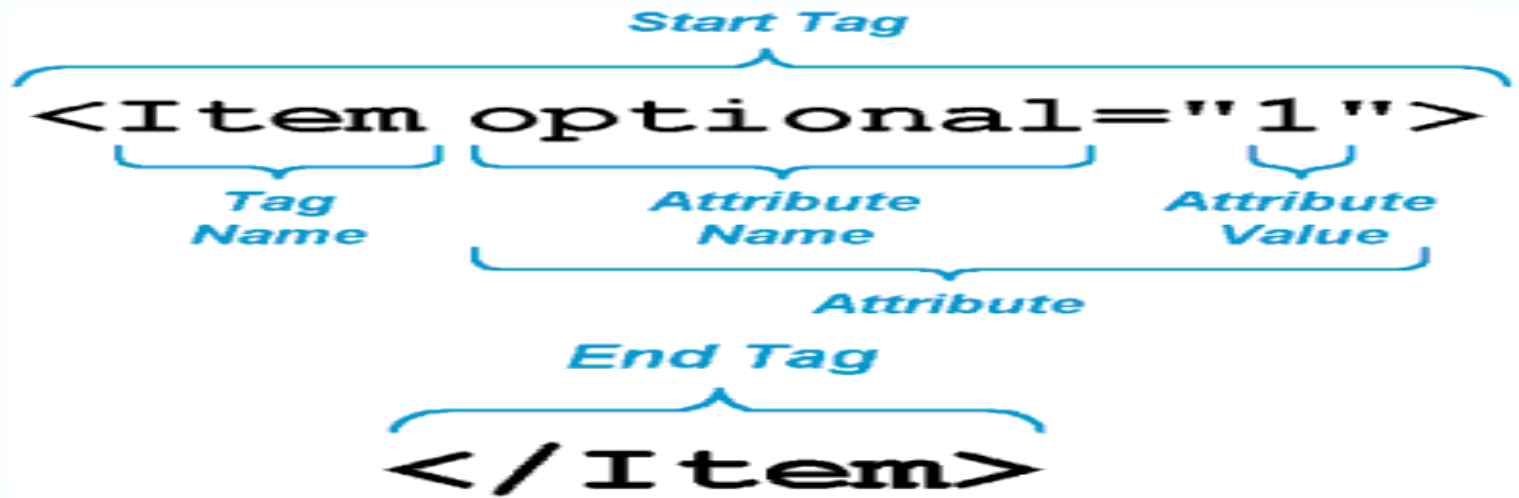
HTML Attributes

- 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"**

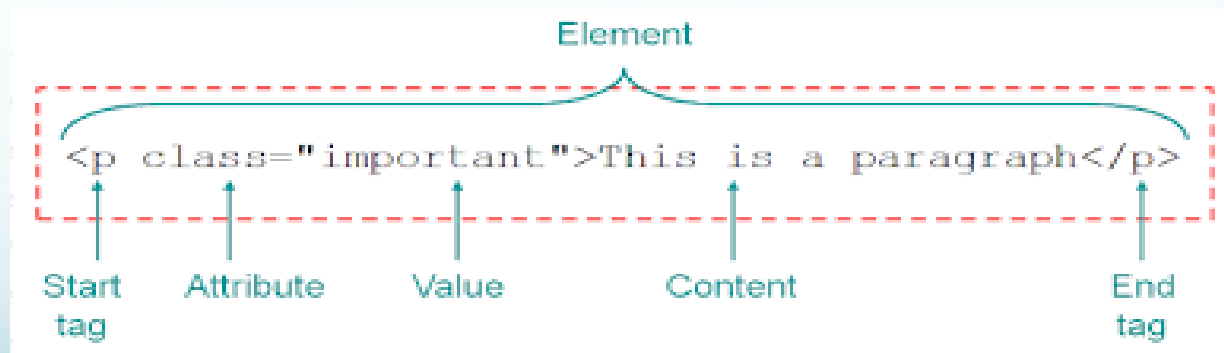
Syntax:

<element attribute_name="attribute_value">





Eg:



Below are some of the most commonly used Attributes in HTML:

1. href attribute
2. src attribute
3. width and height attribute
4. alt attribute
5. style
6. lang attribute
7. title attribute

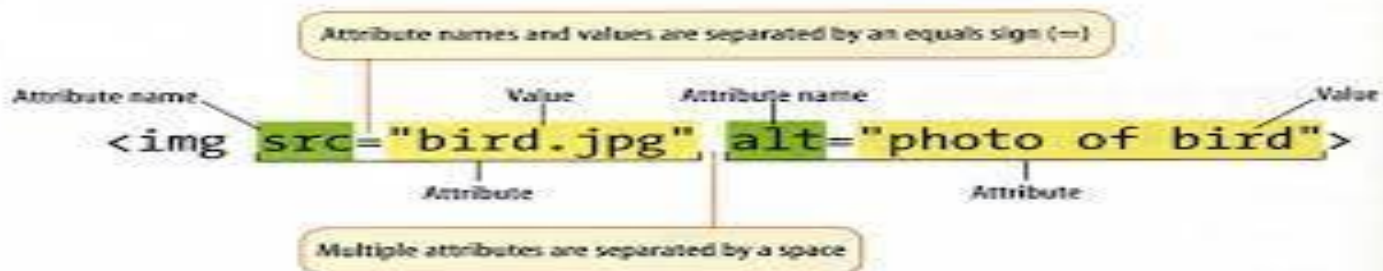


Figure 4-11. An element with attributes.

HTML style Attribute

Definition and Usage

The style attribute specifies an **inline style** for an element.

The style attribute will override any style set globally, e.g. styles specified in **the <style> tag** or in an external style sheet.

Applies to

The style attribute is part of the Global Attributes, and can be used on any HTML element.

<u>Element</u>	<u>Attribute</u>
All HTML elements	style

Example

Use of the style attribute in an HTML document:

```
<h1 style="color:blue;text-align:center">This is a header</h1>  
<p style="color:green">This is a paragraph.</p>
```

Program

```
<html>
```

```
<body>
```

```
<h1 style="color:blue;text-align:center;">This is a header</h1>
```

```
<p style="color:green;">This is a paragraph.</p>
```

```
</body>
```

```
</html>
```

This is a header

This is a paragraph.

Hypertext

- Hypertext is text which contains links to other texts.
- The term was coined by Ted Nelson around 1965 (see History).
- HyperMedia is a term used for hypertext which is not constrained to be text: it can include graphics, video and sound ,
- for example. of hypertext is the word "Facebook" that links to the Facebook page. ... Digital text that contains hyperlinks to other texts.

Hyperlink VS Hypertext

```
<a href="https://www.geeksforgeeks.org/">GeeksforGeeks</a>
```



Hyperlink

Hypertext



HTML Formatting Text

Formatting elements were designed to display special types of text:

They are:-

<code></code> -	Bold text
<code></code> -	Important text
<code><i></code> -	<i>Italic text</i>
<code></code> -	<i>Emphasized text</i>
<code><mark></code> -	Marked text
<code><small></code> -	Smaller text
<code></code> -	Deleted text
<code><ins></code> -	Inserted text
<code><sub></code> -	Subscript <small>text</small>
<code><sup></code> -	Superscript <small>text</small>