

HTML Attributes

An attribute is used to define the characteristics of an HTML element and is placed inside the element's opening tag. All attributes are made up of two parts: a **name** and a **value**:

The **name** is the property you want to set. For example, the paragraph `<p>` element in the example carries an attribute whose name is **align**, which you can use to indicate the alignment of paragraph on the page.

The **value** is what you want the value of the property to be set and always put within quotations. The below example shows three possible values of align attribute: **left**, **center** and **right**.

Names of attributes and their values are not case-sensitive.

For example, BODY Tag, `<body>` carries many attributes such as bgcolor, background that you can implement for indicating the back color of your webpage, or give a specific image or background texture to your page, respectively.

Single or Double Quotes?

- Double quotes around attribute values are the most common in HTML, but single quotes can also be used.
- In some situations, when the attribute value itself contains double quotes, it is necessary to use single quotes:

Example

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h2>Single or Double Quotes?</h2>
```

```
<p title='John "ShotGun" Nelson'>John with double  
  quotes</p>
```

```
<p title="John 'ShotGun' Nelson">John with single  
  quotes</p>
```

```
</body>
```

```
</html>
```

Example 1

```
<!DOCTYPE html>  
<html>  
<body bgcolor="#E6E6FA">  
</body>  
</html>
```

Example 2

```
<!DOCTYPE html>
<html>
<head>
<title>Align Attribute Example</title>
</head>
<body>
<p align="left">This is left aligned</p>
<p align="center">This is center aligned</p>
<p align="right">This is right aligned</p>
</body>
</html>
```

Text Direction

The **<bdo>...</bdo>** element stands for Bi-Directional Override and it is used to override the current text direction.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Text Direction Example</title>
</head>
<body>
<p>This text will go left to right.</p>
<p><bdo dir="rtl">This text will go right to left.</bdo></p>
</body>
</html>
```

Hyper link

- The `<a>` tag defines a hyperlink. which is used to link from one page to another.
- The href attribute specifies the URL of the page the link goes to:
- Syntax: `link text`
- Example

`click here`

href Example

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h1>The a element</h1>
```

```
<a href="https://lpu.in/">Visit lpu</a>
```

```
</body>
```

```
</html>
```


Link to an Email Address

- Use mailto: inside the href attribute to create a link that opens the user's email program (to let them send a new email):
- Example
- `Send email`

Email Example

```
<!DOCTYPE html>
<html>
<body>
<p>To know any information:</p>
<p><a
  href="mailto:deepali.27326@lpu.co.in">Send
  email</a></p>
</body>
</html>
```

The target Attribute

- By default, the linked page will be displayed in the current browser window. To change this, you must specify another target for the link.
- The target attribute specifies where to open the linked document.
- `_self` - Default. Opens the document in the same window/tab as it was clicked
- `_blank` - Opens the document in a new window or tab

target Example

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h1>The a target attribute</h1>
```

```
<p>Open link in a new window or tab: <a  
  href="https://lpu.in/" target="_blank">Visit lpu</a></p>
```

```
</body>
```

```
</html>
```

img tag and src Attribute

- The tag is used to embed an image in an HTML page.
- The src attribute specifies the path to the image to be displayed.
- The tag should also contain the width and height attributes, which specify the width and height of the image (in pixels)

Example

- `<!DOCTYPE html>`
- `<html>`
- `<body>`
- `<h2>The src Attribute</h2>`
- `<p>HTML images are defined with the img tag, and the filename of the image source is specified in the src attribute:</p>`
- ``
- `</body>`
- `</html>`

The alt Attribute

- The required alt attribute for the `` tag specifies an alternate text for an image, if the image for some reason cannot be displayed. This can be due to a slow connection, or an error in the src attribute, or if the user uses a screen reader.

Example

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h2>The alt Attribute</h2>
```

```
<p>The alt attribute should reflect the image content, so users who  
cannot see the image get an understanding of what the image  
contains:</p>
```

```

```

```
</body>
```

```
</html>
```


Use an Image as a Link

- To use an image as a link, just put the `` tag inside the `<a>` tag:

Example:-

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h2>Image as a Link</h2>
```

```
<p>The image below is a link. Try to click on it.</p>
```

```
<a href="default.asp"></a>
```

```
</body>
```

```
</html>
```

- By default, a link will appear like this (in all browsers):
- An unvisited link is underlined and blue
- A visited link is underlined and purple
- An active link is underlined and red
- You can change the link state colors, by using CSS.



```
<!DOCTYPE html>
<html>
<head>
<style>
a:link {
    color: green;
    background-color: transparent;
    text-decoration: none;
}
a:visited {
    color: pink;
    background-color: transparent;
    text-decoration: none;
}
a:hover {
    color: red;
    background-color: transparent;
    text-decoration: underline;
}
a:active {
    color: yellow;
    background-color: transparent;
    text-decoration: underline;
}
</style>
</head>
<body>

<h2>Link Colors</h2>

<p>You can change the default colors of links</p>

<a href="html_images.asp" target="_blank">HTML Images</a>

</body>
</html>
```

The lang Attribute

- You should always include the lang attribute inside the `<html>` tag, to declare the language of the Web page.
- This is meant to assist search engines and browsers.

Example:-

```
<!DOCTYPE html>
<html lang="en">
<body>
...
</body>
</html>
```

lang attribute continue...

- Country codes can also be added to the language code in the lang attribute. So, the first two characters define the language of the HTML page, and the last two characters define the country.

Example:-

```
<!DOCTYPE html>  
  <html lang="en-US">  
    <body>  
      ...  
    </body>  
  </html>
```

Core Attributes

The four core attributes that can be used on the majority of HTML elements are:

id

title

class

style

1. The id Attribute

The id Attribute

The id attribute specifies a unique id for an HTML element. The value of the id attribute must be unique within the HTML document.

The id attribute is used to point to a specific style declaration in a style sheet. It is also used by JavaScript to access and manipulate the element with the specific id.

The syntax for id is: write a hash character (#), followed by an id name. Then, define the CSS properties within curly braces {}.

Example

```
<!DOCTYPE html>
<html>
<head>
<style>
#myHeader {
  background-color: lightblue;
  color: black;
  padding: 40px;
  text-align: center;
}
</style>
</head>
<body>

<h1 id="myHeader">My Header</h1>

</body>
</html>
```

2. The title Attribute

- The title attribute specifies extra information about an element.
- The information is most often shown as a tooltip text when the mouse moves over the element.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>The title Attribute Example</title>
</head>
<body>
<h3 title="Hello HTML!">This is information is important</h3>
</body>
</html>
```


3. The class Attribute

Difference Between Class and ID

A class name can be used by multiple HTML elements, while an id name must only be used by one HTML element within the page:



Example

```
<style>
/* Style the element with the id "myHeader" */
#myHeader {
  background-color: lightblue;
  color: black;
  padding: 40px;
  text-align: center;
}

/* Style all elements with the class name "city" */
.city {
  background-color: tomato;
  color: white;
  padding: 10px;
}
</style>

<!-- An element with a unique id -->
<h1 id="myHeader">My Cities</h1>

<!-- Multiple elements with same class -->
<h2 class="city">London</h2>
<p>London is the capital of England.</p>

<h2 class="city">Paris</h2>
<p>Paris is the capital of France.</p>

<h2 class="city">Tokyo</h2>
<p>Tokyo is the capital of Japan.</p>
```

4. The style Attribute

CSS can be added to HTML documents in 3 ways:

- **Inline** - by using the style attribute inside HTML elements
- **Internal**
- **External**

```
<!DOCTYPE html>
<html>
<head>
<title>The style Attribute</title>
</head>
<body><p style="font-family:arial; color:#FF0000;">Some
text...</p>
</body>
</html>
```

The HTML <meta> Element

- The <meta> element is typically used to specify the character set, page description, keywords, author of the document, and viewport settings.
- The metadata will not be displayed on the page, but is used by browsers (how to display content or reload page), by search engines (keywords), and other web services.

Examples

- **Define the character set used:**
 - `<meta charset="UTF-8">`
- **Define keywords for search engines:**
 - `<meta name="keywords" content="HTML, CSS, JavaScript">`
- **Define a description of your web page:**
 - `<meta name="description" content="Free Web tutorials">`
- **Define the author of a page:**
 - `<meta name="author" content="John Doe">`
- **Refresh document every 30 seconds:**
 - `<meta http-equiv="refresh" content="30">`
- **Setting the viewport to make your website look good on all devices:**
 - `<meta name="viewport" content="width=device-width, initial-scale=1.0">`

Setting the viewport to make your website look good on all devices:

- `<meta name="viewport" content="width=device-width, initial-scale=1.0">`
- This gives the browser instructions on how to control the page's dimensions and scaling.
- The `width=device-width` part sets the width of the page to follow the screen-width of the device (which will vary depending on the device).
- The `initial-scale=1.0` part sets the initial zoom level when the page is first loaded by the browser.