

## HTML Images and Text Links

Images are very important to beautify as well as to depict many complex concepts in simple way on your web page. This tutorial will take you through simple steps to use images in your web pages.

### Insert Image

You can insert any image in your web page by using **<img>** tag. Following is the simple syntax to use this tag.

```
<img src = "Image URL" ... attributes-list/>
```

The **<img>** tag is an empty tag, which means that, it can contain only list of attributes and it has no closing tag.

### Example

To try following example, let's keep our HTML file test.htm and image file test.png in the same directory –

```
<!DOCTYPE html>
<html>

  <head>
    <title>Using Image in Webpage</title>
  </head>

  <body>
    <p>Simple Image Insert</p>
    <img src = "/html/images/test.png" alt = "Test Image" />
  </body>

</html>
```

This will produce the following result –

You can use PNG, JPEG or GIF image file based on your comfort but make sure you specify correct image file name in **src** attribute. Image name is always case sensitive.

The **alt** attribute is a mandatory attribute which specifies an alternate text for an image, if the image cannot be displayed.

### Set Image Location

Usually we keep all the images in a separate directory. So let's keep HTML file test.htm in our home directory and create a subdirectory **images** inside the home directory where we will keep our image test.png.

## Example

Assuming our image location is "image/test.png", try the following example –

```
<!DOCTYPE html>
<html>

  <head>
    <title>Using Image in Webpage</title>
  </head>

  <body>
    <p>Simple Image Insert</p>
    <img src = "/html/images/test.png" alt = "Test Image" />
  </body>

</html>
```

## Set Image Width/Height

You can set image width and height based on your requirement using **width** and **height** attributes. You can specify width and height of the image in terms of either pixels or percentage of its actual size.

## Example

```
<!DOCTYPE html>
<html>

  <head>
    <title>Set Image Width and Height</title>
  </head>

  <body>
    <p>Setting image width and height</p>
    <img src = "/html/images/test.png" alt = "Test Image" width =
"150" height = "100"/>
  </body>

</html>
```

## Set Image Border

By default, image will have a border around it, you can specify border thickness in terms of pixels using border attribute. A thickness of 0 means, no border around the picture.

### Example

```
<!DOCTYPE html>
<html>

  <head>
    <title>Set Image Border</title>
  </head>

  <body>
    <p>Setting image Border</p>
    <img src = "/html/images/test.png" alt = "Test Image" border
= "3"/>
  </body>

</html>
```

## Set Image Alignment

By default, image will align at the left side of the page, but you can use **align** attribute to set it in the center or right.

### Example

```
<!DOCTYPE html>
<html>

  <head>
    <title>Set Image Alignment</title>
  </head>

  <body>
    <p>Setting image Alignment</p>
    <img src = "/html/images/test.png" alt = "Test Image" border
= "3" align = "right"/>
  </body>

</html>
```

A **webpage** can contain various links that take you directly to other pages and even specific parts of a given page. These links are known as hyperlinks.

Hyperlinks allow visitors to navigate between Web sites by clicking on words, phrases, and images. Thus you can create hyperlinks using text or images available on a webpage.

## Linking Documents

A link is specified using HTML tag `<a>`. This tag is called **anchor tag** and anything between the opening `<a>` tag and the closing `</a>` tag becomes part of the link and a user can click that part to reach to the linked document. Following is the simple syntax to use `<a>` tag.

```
<a href = "Document URL" ... attributes-list>Link Text</a>
```

### Example

Let's try following example which links <http://www.onebytelabs.in> at your page –

```
<!DOCTYPE html>
<html>

  <head>
    <title>Hyperlink Example</title>
  </head>

  <body>
    <p>Click following link</p>
    <a href = "https://www.onebytelabs.in" target =
"_self">Tutorials Point</a>
  </body>

</html>
```

This will produce the following result, where you can click on the link generated to reach to the home page of Tutorials Point (in this example).

## The target Attribute

We have used **target** attribute in our previous example. This attribute is used to specify the location where linked document is opened. Following are the possible options –

Sr.No	Option & Description
1	<b>_blank</b> Opens the linked document in a new window or tab.
2	<b>_self</b> Opens the linked document in the same frame.
3	<b>_parent</b> Opens the linked document in the parent frame.
4	<b>_top</b> Opens the linked document in the full body of the window.
5	<b>targetframe</b> Opens the linked document in a named <i>targetframe</i> .

## Example

Try following example to understand basic difference in few options given for target attribute.

```

<!DOCTYPE html>
<html>

  <head>
    <title>Hyperlink Example</title>
    <base href = "https://www.onebytelabs.in/">
  </head>

  <body>
    <p>Click any of the following links</p>
    <a href = "/html/index.htm" target = "_blank">Opens in
New</a> |
    <a href = "/html/index.htm" target = "_self">Opens in
Self</a> |
    <a href = "/html/index.htm" target = "_parent">Opens in
Parent</a> |

```

```
        <a href = "/html/index.htm" target = "_top">Opens in Body</a>
    </body>

</html>
```

This will produce the following result, where you can click on different links to understand the difference between various options given for target attribute.

## Use of Base Path

When you link HTML documents related to the same website, it is not required to give a complete URL for every link. You can get rid of it if you use **<base>** tag in your HTML document header. This tag is used to give a base path for all the links. So your browser will concatenate given relative path to this base path and will make a complete URL.

### Example

Following example makes use of **<base>** tag to specify base URL and later we can use relative path to all the links instead of giving complete URL for every link.

```
<!DOCTYPE html>
<html>

    <head>
        <title>Hyperlink Example</title>
        <base href = "https://www.onebytelabs.in/">
    </head>

    <body>
        <p>Click following link</p>
        <a href = "/html/index.htm" target = "_blank">HTML
Tutorial</a>
    </body>

</html>
```

This will produce the following result, where you can click on the link generated **HTML Tutorial** to reach to the HTML tutorial.

Now given URL `<a href = "/html/index.htm"` is being considered as `<a href = "http://www.onebytelabs.in/html/index.htm"`

## Linking to a Page Section

You can create a link to a particular section of a given webpage by using **name** attribute. This is a two-step process.

**Note** – The *name* attribute deprecated in HTML5. Do not use this attribute. Use *id* and *title* attribute instead.

First create a link to the place where you want to reach with-in a webpage and name it using `<a...>` tag as follows –

```
<h1>HTML Text Links <a name = "top"></a></h1>
```

Second step is to create a hyperlink to link the document and place where you want to reach –

```
<a href = "/html/html_text_links.htm#top">Go to the Top</a>
```

This will produce following link, where you can click on the link generated **Go to the Top** to reach to the top of the HTML Text Link tutorial.

[Go to the Top](#)

## Setting Link Colors

You can set colors of your links, active links and visited links using **link**, **alink** and **vlink** attributes of `<body>` tag.

### Example

Save the following in `test.htm` and open it in any web browser to see how **link**, **alink** and **vlink** attributes work.

```
<!DOCTYPE html>
<html>

  <head>
    <title>Hyperlink Example</title>
    <base href = "https://www.onebytelabs.in/">
  </head>

  <body alink = "#54A250" link = "#040404" vlink = "#F40633">
    <p>Click following link</p>
    <a href = "/html/index.htm" target = "_blank" >HTML
Tutorial</a>
  </body>

</html>
```

This will produce the following result. Just check color of the link before clicking on it, next check its color when you activate it and when the link has been visited.

## Download Links

You can create text link to make your PDF, or DOC or ZIP files downloadable. This is very simple; you just need to give complete URL of the downloadable file as follows –

```
<!DOCTYPE html>
<html>

  <head>
    <title>Hyperlink Example</title>
  </head>

  <body>
    <a href = "https://www.onebytelabs.in/page.pdf">Download PDF
File</a>
  </body>

</html>
```

This will produce following link and will be used to download a file.

## File Download Dialog Box

Sometimes it is desired that you want to give an option where a user will click a link and it will pop up a "File Download" box to the user instead of displaying actual content. This is very easy and can be achieved using an HTTP header in your HTTP response.

For example, if you want make a **Filename** file downloadable from a given link then its syntax will be as follows.

```
#!/usr/bin/perl

# Additional HTTP Header
print "Content-Type:application/octet-stream; name =
\"FileName\"\\r\\n";
print "Content-Disposition:attachment; filename =
\"FileName\"\\r\\n\\n";

# Open the target file and list down its content as follows
open( FILE, "<FileName" );

while(read(FILE, $buffer, 100)){
  print("$buffer");
}
```