HTML - Links

A webpage can contain various links change direction 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, hyperlinks can be created using text or images available on a webpage.
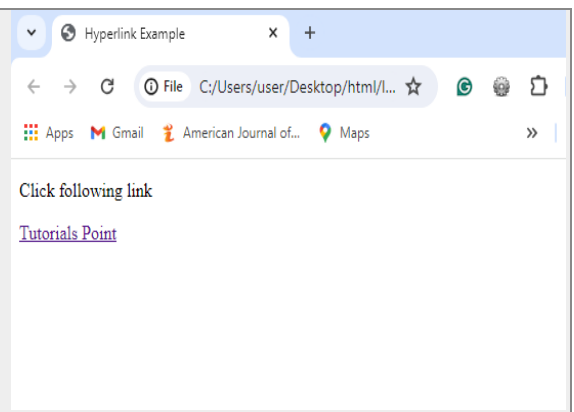
1- Text Links Linking Documents

A link is specified using HTML tag <a>. This tag is called **anchor tag** and anything between the opening <a> tag and the closing 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.tutorialspoint.com at any page.

```
<!DOCTYPE html>
<html>
  <head>
    <title>Hyperlink Example</title>
  </head>
  <body>
    <p>Click following link</p>
    <a href = https://www.tutorialspoint.com
     target = "_self">Tutorials Point</a>
  </body>
</html>
```


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	**_blank**	Opens the linked document in a new window or tab.
2	**_self**	Opens the linked document in the same frame.

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.tutorialspoint.com/">
  </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> |
 </body>
</html>
```

Use of Base Path

When link HTML documents related to the same website, it is not required to give a complete URL for every link. We can get rid of it by use **<base>** tag in HTML document header. This tag is used to give a base path for all the links. So the 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.tutorialspoint.com/">
  </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 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 <ahref = "http://www.tutorialspoint.com/html/index.htm"

2- Linking to a Page Section

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

First create a link to the place where we 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 want to reach –

```
<a href = " #top">Go to the Top</a>
```

This will produce following link, where click on it 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

Links color can be changed, 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.tutorialspoint.com/">
   </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>
```

3-   Link to file or Download Links

create text link to PDF, or DOC or ZIP files downloadable. This is done by give complete URL of the downloadable file as follows —

```
<!DOCTYPE html>
<html>
  <head>
    <title>Hyperlink Example</title>
  </head>
  <body>
    <a href = "https://www.tutorialspoint.com/page.pdf">Download PDF File</a>
  </body>
</html>
```

4-   HTML - Image Links

how to use images to create hyperlinks.

Example

It's simple to use an image as hyperlink. We just need to use an image inside hyperlink at the place of text as shown below —

```
<!DOCTYPE html>
<html>
  <head>
    <title>Image Hyperlink Example</title>
  </head>
  <body>
    <p>Click following link</p>
    <a href = "https://www.tutorialspoint.com" target = "_self">
      <img src = "/images/logo.png" alt = "Tutorials Point" border = "0"/>
    </a>
  </body></html>
```

Client-Side Image Maps

Client-side image maps are enabled by the **usemap** attribute of the <img /> tag and defined by special <map> and <area> extension tags.

The image that is going to form the map is inserted into the page using the <img /> tag as a normal image, except it carries an extra attribute called **usemap**. The value of the usemap attribute is the value which will be used in a <map> tag to link map and image tags. The <map> along with <area> tags define all the image coordinates and corresponding links.

The <area> tag inside the map tag, specifies the shape and the coordinates to define the boundaries of each clickable hotspot available on the image. Here's an example from the image map –

```
<!DOCTYPE html>
<html>
  <head>
    <title>USEMAP Hyperlink Example</title>
  </head>
  <body>
    <p>Search and click the hotspot</p>
<img src="workplace.jpg" alt="Workplace" usemap="#workmap">
<map name="workmap">
  <area shape="rect" coords="34,44,270,350" alt="Computer" href="computer.htm">
  <area shape="rect" coords="290,172,333,250" alt="Phone" href="phone.htm">
  <area shape="circle" coords="337,300,44" alt="Coffee" href="coffee.htm">
</map>
  </body>
  </html>
```

Coordinate System

The actual value of coords is totally dependent on the shape in question. Here is a summary, to be followed by detailed examples –

- **rect = x_1 , y_1 , x_2 , y_2**
  x_1 and y_1 are the coordinates of the upper left corner of the rectangle; x_2 and y_2 are the coordinates of the lower right corner.
- **circle = x_c , y_c , radius**
  x_c and y_c are the coordinates of the center of the circle, and radius is the circle's radius. A circle centered at 200,50 with a radius of 25 would have the attribute *coords = "200,50,25"*
- **poly = x_1 , y_1 , x_2 , y_2 , x_3 , y_3 , ... x_n , y_n**
  The various x-y pairs define vertices (points) of the polygon, with a "line" being drawn from one point to the next point. A diamond-shaped polygon with its top point at 20,20 and 40 pixels across at its widest points would have the attribute *coords = "20,20,40,40,20,60,0,40"*.

All coordinates are relative to the upper-left corner of the image (0,0). Each shape has a related URL. Use any image software to know the coordinates of different positions.

5- Email Links

HTML **<a>** tag provides option to specify an email address to send an email. While using <a> tag as an email tag, use **mailto: email address** along with *href* attribute.

Send Email

This code will generate the following link which can use to send email.

Send Email

　　　　Now, if a user clicks this link, it launches one Email Client (like Lotus Notes, Outlook Express etc.) installed on user's computer. There is another risk to use this option to send email because if user do not have email client installed on their computer, then it would not be possible to send email.

Here are all types of link examples explained in detail:

6- Link to a Different Website:

Visit Another Example

- **Purpose:** Navigates to a different website (https://www.anotherexample.com).

7- Link to a Video:

Watch Video

- **Purpose:** Links to and potentially plays a video file (b.mp4).

8- Phone Call Link:

Call Us

- **Purpose:** Initiates a phone call to +1234567890.

9- Link to a JavaScript Function:

Run JavaScript Function

- **Purpose:** Executes a JavaScript function (myFunction()) when clicked.

10- SMS Link:

Send SMS
Send SMS

- **Purpose:** Opens the default messaging app with a pre-filled message to +1234567890.

11- Facebook Profile/Page Link:

Visit Facebook
Visit Facebook

- **Purpose:** Navigates to the specified Facebook profile or page.

12- WhatsApp Message Link:

Send WhatsApp Message

- **Purpose:** Opens WhatsApp with a pre-filled message to +1234567890.

Feel free to use or modify these examples based on specific needs!

We can make link as button like:

<button>View Image </button>