



University of Kelaniya, Sri Lanka



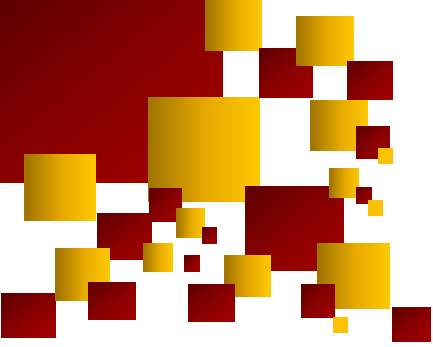
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CTEC 31052

Web Programming - I

Chapter 5

More on HTML

Reference: <https://www.w3schools.com/>



HTML Links



HTML Links

- HTML uses a hyperlink to link to another document on the web.
- HTML uses the `<a>` (anchor) tag to create a link to another document.
 - An anchor can point to any resource on the web:
 - An HTML page
 - An Image
 - A sound File
 - A Movie etc.

- Syntax

```
<a href = "url"> Text to be displayed </a>
```

- The `<a>` tag is used to create an anchor to *link* from
- The href attribute is used to address the document to *link*

Ex: Anchor defines a link to google ->

```
<a href="https://www.google.com/"> Visit Google! </a>
```



- The Target attribute is used to define where the linked document will be opened.

The below link will open the document in a new browser window or tab :

```
<a href="https://www.google.com/" target="_blank"> Visit Google! </a>
```

Target attribute value	Definition
_blank	Opens the linked document in a new window or tab
_self	Opens the linked document in the same window/tab as it was clicked (this is default)
_parent	Opens the linked document in the parent frame
_top	Opens the linked document in the full body of the window
framename	Opens the linked document in a named frame



The anchor Tag and the Name attribute

- Used to create a named anchor
 - When using named anchors we can create links that can jump directly into a specific section on a page, instead of letting the user scroll around to find what he/she is looking for.

- Syntax to 'Named Anchor'

```
<a name="label"> Text to be display! </a>
```

- Syntax to link an Name Anchor

```
<a href="#label"> Text to be display! </a>
```



<h3>Link to google</h3>

<p>
Visit
Google!
</p>

<h3>Image as Link to UoK official web site</h3>

<p>

</p>

<h3>Link to another page</h3>

<p>
Visit My HTML
Page!
</p>

<h3>Link to Specific Section in another page</h3>

<p>
Visit
CTEC 31052!
</p>

Link to google

[Visit Google!](https://www.google.com/)

Image as Link to UoK official web site



Link to another page

[Visit My HTML Page!](#)

Link to Specific Section in another page

[Visit CTEC 31052!](#)



This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

CTEC 31052

Name of the
anchor is
CTEC 31052

```
<a name="CTEC31052">  
<h2>CTEC 31052</h2>  
</a>
```

```
<p> This is a sample paragraph need to be jump!</p>  
<p> This is a sample paragraph need to be jump!</p>
```

This is a sample paragraph need to be jump!

This is a sample paragraph need to be jump!



Link to Specific Section in same page

[Visit CTEC 31052!](#)

This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

This is a sample paragraph!

Link to the section in the same page which have "CTEC31052" as the Name of the anchor

```
<h3>Link to Specific Section in same page</h3>
<p>
<a href="#CTEC31052">Visit CTEC 31052!</a>
</p>
```

Check the URL: file:///D:/HTML/L5/0_linktemp.html#CTEC31052

fragment



Mailto link

- mailto link is used to link to a mail message (it will only work if you have installed mail).

<p>

This is an email link:

Send Mail

</p>

<p> This is another mailto link:

<a

href="mailto:example123@gmail.com?cc=someoneelse@example.com&bcc=andsomeoneelse@example.com&subject=Course%20Advices&body=Study%20hard%20to%20get%20good%20results!">

Send mail!

</p>

<p>

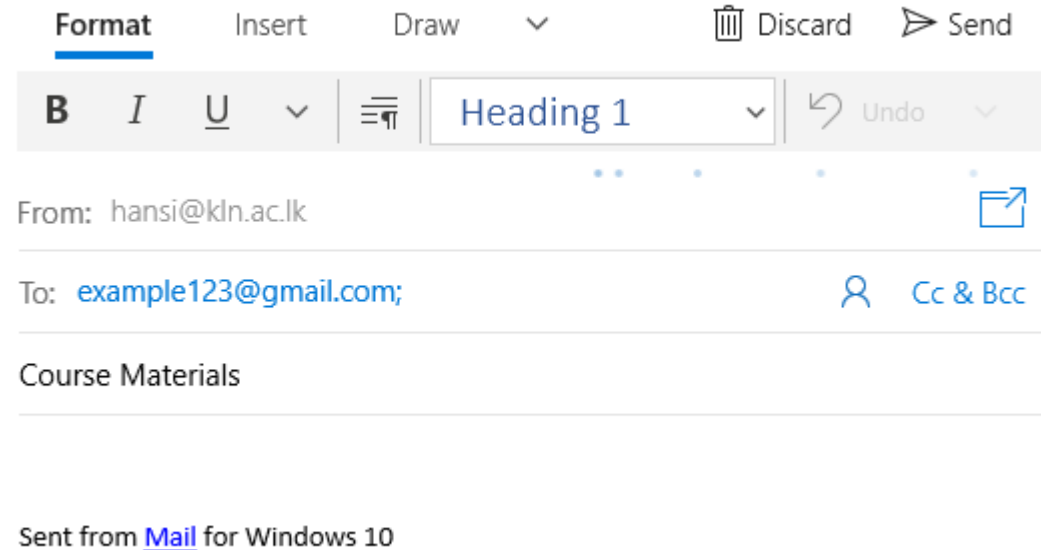
Note: Spaces between words should be replaced by %20 to ensure that the browser will display the text properly.

</p>

Introduction to XHTML



```
<a  
href="mailto:example123@gmail.com?  
Subject=Course%20Materials" >  
    Send Mail  
</a>
```



This is an email link: [Send Mail](mailto:example123@gmail.com?Subject=Course%20Materials)

This is another mailto link: [Send mail!](mailto:example123@gmail.com?Subject=Course%20Materials)

Note: Spaces between words should be replaced by %20 to ensure that the browser will display the text properly.



Advance 'mailto' Link

```
<a  
href="mailto:example123@gmail.com?cc=someoneelse@example.com&bcc=andsomeoneelse@example.com&subject=Course%20Advices&body=Study%20hard%20to%20get%20good%20results!">  
    Send mail!  
</a>
```

From: hansikln.ac.lk



To: example123@gmail.com;



Cc: someoneelse@example.com;



Bcc: andsomeoneelse@example.com;



Course Advices

Study hard to get good results!

Sent from [Mail](#) for Windows 10



HTML iframe



Inline Frame <iframe>

- A Frame inside a HTML page known as Inline Frame 'iframe'.

```
<iframe src="URL"></iframe>
```

- Example:

```
<h3>Display a HTML page</h3>  
<iframe src="0_linktemp.html"></iframe>
```

Display a HTML page

Link to Specific Section in same page

[Visit CTEC 31052!](#)

This is a sample paragraph!

This is a sample paragraph!



```
<h3>Display a image</h3>
```

```
<iframe name="commonFrame" style="width:400;height:400;"  
src="Earth.gif"></iframe>
```

```
<a href="Kelaniya.png" target="commonFrame">Load Kelaniya Logo !</a>
```

```
<a href="Earth.gif" target="commonFrame">Load Earth back !</a>
```

Display a image



[Load Kelaniya Logo !](#) ----- [Load Earth back !](#)



Jump to a specified section withing iframe

```
<h3>Jump to a specified section withing  
iframe</h3>  
<iframe src="0_linktemp.html#CTEC31052">  
</iframe>
```

CTEC 31052

This is a sample paragraph need to be jump!

This is a sample paragraph need to be jump!



HTML Image



HTML Images

- Images are defined with the standalone tag.
- Src (Source) attribute defines the URL of the image
- Syntax of defining an image;

```

```

- You can use only the name of the image if html doc and image are in same directory path.

```
<p>An image: Kelaniya.png<br>
  
</p>
```

Normal Image

Moving Image

```
<p>An Moving image: Earth.gif<br>
  
  <!-- need to be in same path if you give
image name only-->
</p>
```



HTML Paths

- A file path defines the location of a file in a web site's folder structure.
- File paths are used to link different files. They are:
 - Web pages
 - Images
 - Style sheets
 - JavaScripts

Path	Description
<code></code>	Kelaniya.jpg is located in the same folder as the current page.
<code></code>	firework.gif is located in the images folder in the current folder.
<code></code>	picture.jpg is located in the images folder at the root of the current web
<code></code>	picture.jpg is located in the folder one level up from the current folder



Insert an image in different location

```
<p>An image from another folder: firework.gif  
<br>  
      
</p>
```

An image from another folder: firework.gif



An image from W3School: ie.gif



```
<p>An image from W3School: ie.gif <br>  
  
</p>
```

Adjust images to different sizes

- Use “height” & “width” attributes to adjust the image width and height
- Can be used percentages and pixel values to set the image size. (10% - > screen width/height * 0.1)

```

```

```

```

```

```

Automatically adjust the height by keeping same proportion of the image. (avoid vertical or horizontal Stretch)



The “alt” Attribute

- Tells the reader what he or she is missing on a page if the browser can't load images
- Then browser will display the alternate text instead of the image

```

```



Aligning Images

Defining the text alignment within the text. Use the *vertical-align* property inside style tag.

vertical-align: baseline | *length* | sub | super | top | text-top | middle | bottom | text-bottom | initial | inherit;

<p> An image in the text.(Default Alignment)</p>

<p> An image in the text.</p>

<p> An image in the text.</p>

<p> An image in the text.</p>

<p> An image in the text.</p>



Floating Images

float: left | right | none | inherit;

`<p>`

A paragraph with an image. The align attribute of the image is set to "left".The image will float to the left of this text. A paragraph


`</p>`

`<p>`

A paragraph with an image. The align attribute of the image is set to "right".The image will float to the right of this text. A paragraph with an image.....

`</p>`

Floating image

 A paragraph with an image. The align attribute of the image is set to "left".The image will float to the left of this text. A paragraph with an image. The align attribute of the image is set to "left".The image will float to the left of this text. A paragraph with an image. The align attribute of the image is set to "left".The image will float to the left of this text.

A paragraph with an image. The align attribute of the image is set to "right".The image will float to the right of this text. A paragraph with an image. The align attribute of the image is set to "right".The image will float to the right of this text. A paragraph with an image. The align attribute of the image is set to "right".The image will float to the right of this text.

Introduction to XHTML



Make a hyperlink of an image

- Use image as a hyperlink

```
<a href="http://www.kln.ac.lk">  
<imgsrc="KelaniLogo.png" alt="UokLogo">  
</a>
```



Turn an image into an image map

<p>

Move the mouse over the image, and look at the status bar to see how the coordinates change.

</p>

<p>

</p>

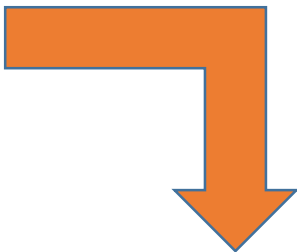


Turn an image to a map

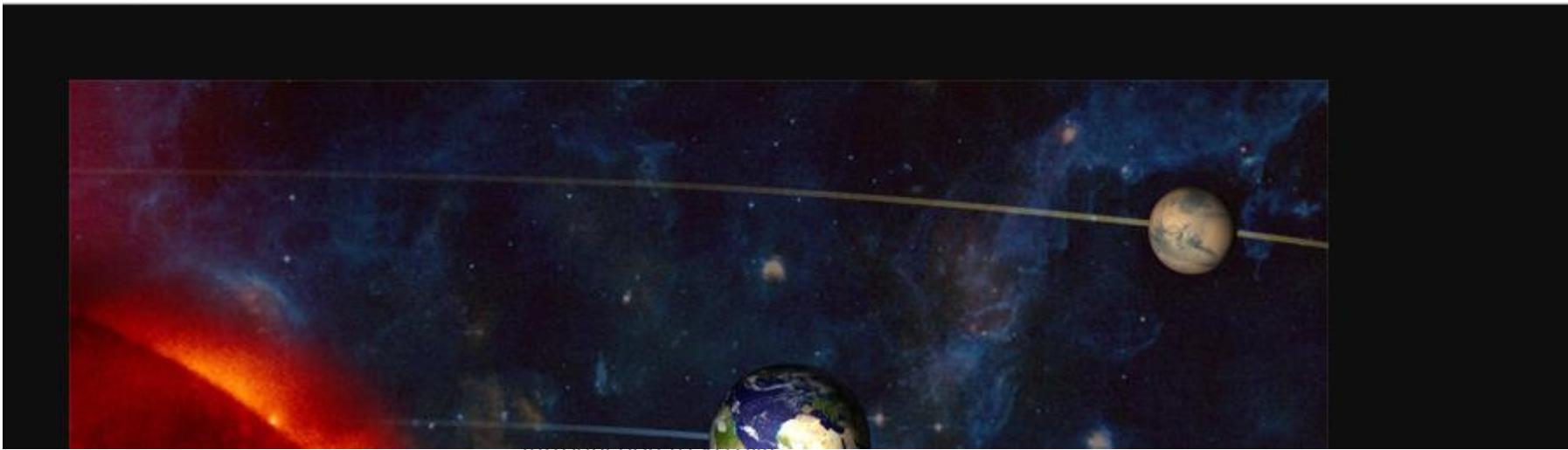
Move the mouse over the image, and look at the status bar to see how the coordinates change.



Click on image



Display the coordinates of the image that user clicked in URL



Create an Image Map

```

```

```
<map name="planetmap">
```

```
  <area shape="rect" coords="0,134,300,540" alt="Sun" href="images/sun.jpg">
```

```
  <area shape="circle" coords="410,208,45" alt="Earth" href="images/earth1.jpg">
```

```
  <area shape="circle" coords="640,88,23" alt="Venus" href="images/moon.jpg">
```

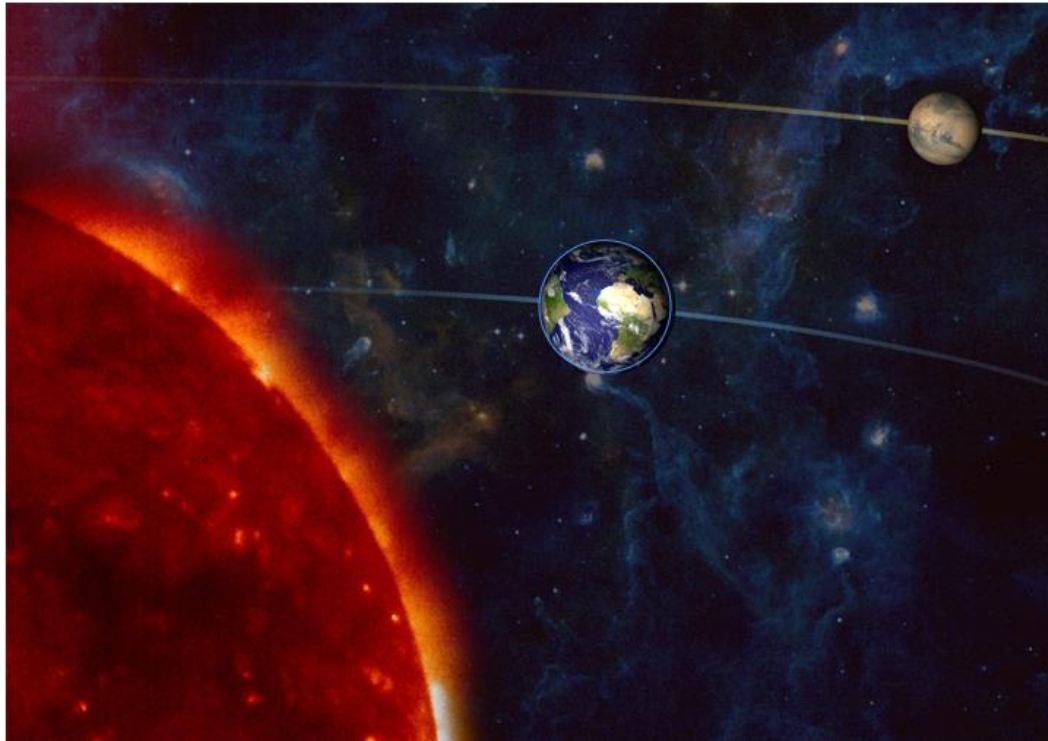
```
  <!--area shape="poly" coords="x1,y1,x2,y2,...,xn,yn" alt="Image1" href="images/star.jpg"-->
```

```
</map>
```



Image Map

Click on the one of the planets to watch it closer:



Click on specified
area in image open
given source



HTML Table



HTML Table

- Use the HTML **<table>** element to define a table
- Use the HTML **<tr>** element to define a table row
- Use the HTML **<td>** element to define a table data
- Use the HTML **<th>** element to define a table heading
- Use the HTML **<caption>** element to define a table caption
- Use the CSS **border** property to define a border
- Use the CSS **border-collapse** property to collapse cell borders



HTML Table (contd)..

- Use the CSS **padding**property to add padding to cells
- Use the CSS **text-align**property to align cell text
- Use the CSS **border-spacing**property to set the spacing between cells
- Use the **colspan**attribute to make a cell span many columns
- Use the **rowspan**attribute to make a cell span many rows
- Use the **id**attribute to uniquely define one table



Table with one cell

A cell

```
<h3>Table with one cell</h3>
<table>
  <tr>
    <td> A cell</td>
  </tr>
</table>
```

Table with 3 column and 1 rows

(1,1)	(1,2)	(1,3)
-------	-------	-------

```
<h3>Table with 3 column and 1
rows</h3>
<table>
  <tr>
    <td> (1,1)</td>
    <td> (1,2)</td>
    <td> (1,3)</td>
  </tr>
</table>
```

Table with 3 row and 1 columns

(1,1)
(2,1)
(3,1)

```
<h3>Table with 3 row and 1
columns</h3>
<table>
  <tr>
    <td> (1,1)</td>
  </tr>
  <tr>
    <td> (2,1)</td>
  </tr>
  <tr>
    <td> (3,1)</td>
  </tr>
</table>
```

Table with 3 row and 2 columns

(1,1)	(1,2)
(2,1)	(2,2)
(3,1)	(3,2)

```
<h3>Table with 3 row and 2
columns</h3>
<table>
  <tr>
    <td> (1,1)</td>
    <td> (1,2)</td>
  </tr>
  <tr>
    <td> (2,1)</td>
    <td> (2,2)</td>
  </tr>
  <tr>
    <td> (3,1)</td>
    <td> (3,2)</td>
  </tr>
</table>
```



Table Borders

Note: The border attribute is not supported in HTML5. Use CSS instead as in previous slide.

Table with no borders...

(1,1) (1,2)
(2,1) (2,2)
(3,1) (3,2)

Table with normal borders...

(1,1)	(1,2)
(2,1)	(2,2)
(3,1)	(3,2)

Table with thick borders...

(1,1)	(1,2)
(2,1)	(2,2)
(3,1)	(3,2)

```
<h3>Table with normal borders...</h3>
<table border="10">
  <tr>
    <td> (1,1)</td>
    <td> (1,2)</td>
  </tr>
  <tr>
    <td> (2,1)</td>
    <td> (2,2)</td>
  </tr>
  <tr>
    <td> (3,1)</td>
    <td> (3,2)</td>
  </tr>
</table>
```



Headings in a Table

<h3>Adding Table Headings</h3>

```
<table border="1">
```

```
<tr>
```

```
<th>Heading 1</th>
```

```
<th>Heading 2</th>
```

```
</tr>
```

```
<tr>
```

```
<td>Data Element 1</td>
```

```
<td>Data Element 2</td>
```

```
</tr>
```

```
</table>
```

Adding Table Headings

Heading 1	Heading 2
Data Element 1	Data Element 2



Empty cells in Table

<h3>Empty Cell in Table</h3>

```
<table border="1">
```

```
<tr>
```

```
<th>Heading 1</th>
```

```
<th>Heading 2</th>
```

```
</tr>
```

```
<tr>
```

```
<td>&nbsp;</td> <!--EmptyCell-->
```

```
<td>Data Element 2</td>
```

```
</tr>
```

```
</table>
```

Empty Cell in Table

Heading 1	Heading 2
	Data Element 2



Table with a caption

```
<h3>Table with a caption</h3>
```

```
<table border="1">
```

```
<caption>CAPTION OF THE TABLE</caption>
```

```
<tr>
```

```
<th>Heading 1</th>
```

```
<th>Heading 2</th>
```

```
</tr>
```

```
<tr>
```

```
<td>Data Element 1</td>
```

```
<td>Data Element 2</td>
```

```
</tr>
```

```
</table>
```

Table with a caption

CAPTION OF THE TABLE

Heading 1	Heading 2
Data Element 1	Data Element 2



Add 'border-spacing' & 'padding'

<h3>Table with cellpadding and cellspacing</h3>

```
<table border="1" style="border-spacing:12px">
```

```
<tr>
```

```
<th style="padding:25px">Heading 1</th>
```

```
<th>Heading 2</th>
```

```
</tr>
```

```
<tr>
```

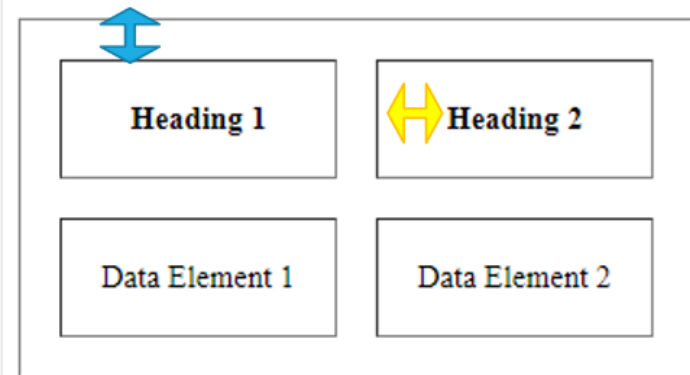
```
<td>Data Element 1</td>
```

```
<td>Data Element 2</td>
```

```
</tr>
```

```
</table>
```

Table with cellpadding and cellspacing



Heading 1	Heading 2
Data Element 1	Data Element 2

Table with cellpadding and cellspacing

Heading 1	Heading 2
Data Element 1	Data Element 2

Cells span more than one row/column

<h3>Table cells that span more than one row/column

</h3>

```
<table border="1">
```

```
<tr>
```

```
<td colspan="2">Data Element 1</td>
```

```
</tr>
```

```
<tr>
```

```
<td rowspan="2">Data 2</td>
```

```
<td>Data 3</td>
```

```
</tr>
```

```
<tr>
```

```
<td>Data 5</td>
```

```
</tr>
```

```
</table>
```

Table cells that span more than one row/column

Data Element 1	
Data 2	Data 3
	Data 5



Tags inside the table

<h3>Tags inside the table</h3>

```
<table border="1">
```

```
<tr>
```

```
<th>Heading 1</th>
```

```
<th>Heading 2</th>
```

```
</tr>
```

```
<tr>
```

```
<td>
```

```
<p>This is a paragraph inside the cell</p>
```

```
</td>
```

```
<td>
```

```

```

```
</td>
```

```
</tr>
```

```
<tr>
```

```
<td>
```

```
<p>Right cell contains another table</p>
```

```
</td>
```

```
<td>
```

```
<table border="1">
```

```
<tr>
```

```
<th>Heading 1</th>
```

```
<th>Heading 2</th>
```

```
</tr>
```

```
<tr>
```

```
<td>Data Element 1</td>
```

```
<td>Data Element 2</td>
```

```
</tr>
```

```
</table>
```


```
</td>
```

```
</tr>
```

```
</table>
```



Tags inside the table

Heading 1	Heading 2				
This is a paragraph inside the cell					
Right cell contains another table	<table><tr><th>Heading 1</th><th>Heading 2</th></tr><tr><td>Data Element 1</td><td>Data Element 2</td></tr></table>	Heading 1	Heading 2	Data Element 1	Data Element 2
Heading 1	Heading 2				
Data Element 1	Data Element 2				

Content Alignment

```
<h3>Content Alignment</h3>
```

```
<table border="1">
```

```
<tr>
```

```
<th style="text-align:left">Money spent on...</th>
```

```
<th style="text-align:left">January (Jan)</th>
```

```
<th style="text-align:left">February</th>
```

```
</tr>
```

```
<tr>
```

```
<td style="text-align:center">Clothes</td>
```

```
<td style="text-align:right">Rs.20,000/=</td>
```

```
<td style="text-align:right">Rs.10,000/=</td>
```

```
</tr>
```

```
</table>
```

Content Alignment

Money spent on...	January (Jan)	February
Clothes	Rs.20,000/=	Rs.10,000/=



Set Background Colors

<h3>Set Background color for cells</h3>

```
<table border="1">
  <tr>
    <th style="background-color:yellow" >Money spent
on...</th>
    <th style="background-color:red">January (Jan)</th>
    <th style="background-color:green">February</th>
  </tr>
  <tr>
    <td>Clothes</td>
    <td>Rs.20,000/=</td>
    <td>Rs.10,000/=</td>
  </tr>
</table>
```

```
<table border="1" style="background-color:red">
```

Set Background color for entire table

Money spent on...	January (Jan)	February
Clothes	Rs.20,000/=	Rs.10,000/=

Set Background color for cells

Money spent on...	January (Jan)	February
Clothes	Rs.20,000/=	Rs.10,000/=



<colgroup>

- The <colgroup> tag specifies a group of one or more columns in a table for formatting.
- The <colgroup> tag is useful for applying styles to entire columns, instead of repeating the styles for each cell, for each row.

```
<table border="1">  
  <colgroup>  
    <col span="2" bgcolor="green">  
    <col bgcolor="magenta">  
  </colgroup>  
  <tr>  
    <th>Money spent on...</th>  
    <th>January (Jan)</th>  
    <th>February</th>  
  </tr>  
  ...  
</table>
```

Define groups of table columns <colgroup >

Money spent on...	January (Jan)	February
Clothes	Rs.20,000/=	Rs.10,000/=
Foods	Rs.8,000/=	Rs.19,000/=



tfoot, thead, tbody

- The <tfoot> tag is used to group footer content in an HTML table.
- The <tfoot> element is used in conjunction with the <thead> and <tbody> elements to specify each part of a table (footer, header, body).



HTML Table Tags

Tag	Description
<table>	Defines a table
<th>	Defines a header cell in a table
<tr>	Defines a row in a table
<td>	Defines a cell in a table
<caption>	Defines a table caption
<colgroup>	Specifies a group of one or more columns in a table for formatting
<col>	Specifies column properties for each column within a <colgroup> element
<thead>	Groups the header content in a table
<tbody>	Groups the body content in a table
<tfoot>	Groups the footer content in a table



HTML Lists



HTML Lists

- Use `` tag to add an ordered List
- Use `` tag to add an unordered List
- Use `<dl>` tag to add a definition List
- Use `<dt>` tag to define data element in a Definition List
- Use `<dd>` tag to define data definition in Definition List



An Unordered List

```
<h3>An Unordered List</h3>
```

```
<ul>
```

```
  <li>Coffee</li>
```

```
  <li>Tea</li>
```

```
  <li>Milk</li>
```

```
</ul>
```

An Unordered List

- Coffee
- Tea
- Milk



An Ordered List

```
<h3>An Ordered List</h3>
```

```
<ol>
```

```
  <li>Coffee</li>
```

```
  <li>Tea</li>
```

```
  <li>Milk</li>
```

```
</ol>
```

An Ordered List

1. Coffee
2. Tea
3. Milk



A Definition List

<h3>A Definition List</h3>

```
<dl>
  <dt>Coffee</dt>
    <dd>Black hot drink</dd>
  <dt>Tea</dt>
    <dd>Black hot drink</dd>
  <dt>Milk</dt>
    <dd>White cold drink</dd>
</dl>
```

A Definition List

Coffee	Black hot drink
Tea	Black hot drink
Milk	White cold drink



Different types of ordered lists

```
<h4>Numbered List</h4>
```

```
<ol style="list-style-type:1">
```

```
<li>Coffee</li>
```

```
<li>Milk</li>
```

```
</ol>
```

```
<h4>Uppercase letters List</h4>
```

```
<ol style="list-style-type:A">
```

```
<li>Coffee</li>
```

```
<li>Milk</li>
```

```
</ol>
```

```
<h4>Lowercase letters List</h4>
```

```
<ol style="list-style-type:a">
```

```
<li>Coffee</li>
```

```
<li>Milk</li>
```

```
</ol>
```

Numbered List

1. Coffee

2. Milk

Uppercase letters List

A. Coffee

B. Milk

Lowercase letters List

a. Coffee

b. Milk

Roman numbers List

I. Coffee

II. Milk

Lowercase Roman numbers List

i. Coffee

ii. Milk

```
<h4>Roman numbers List</h4>
```

```
<ol style="list-style-type:I">
```

```
<li>Coffee</li>
```

```
<li>Milk</li>
```

```
</ol>
```

```
<h4>Lowercase Roman numbers List</h4>
```

```
<ol style="list-style-type:i">
```

```
<li>Coffee</li>
```

```
<li>Milk</li>
```

```
</ol>
```



Different types of unordered lists

<h4>Disc bullets List</h4>

```
<ul style="list-style-type:disc">
  <li>Coffee</li>
  <li>Milk</li>
</ul>
```

<h4>Circle bullets List</h4>

```
<ul style="list-style-type:circle">
  <li>Coffee</li>
  <li>Milk</li>
</ul>
```

<h4>Square bullets List</h4>

```
<ul style="list-style-type:square">
  <li>Coffee</li>
  <li>Milk</li>
</ul>
```

Disc bullets List

- Coffee
- Milk

Circle bullets List

- Coffee
- Milk

Square bullets List

- Coffee
- Milk

List with no bullets or numbers

Coffee
Milk

Image List

- ✓ Coffee
- ✓ Milk

<h4>List with no bullets or numbers</h4>

```
<ul style="list-style-type:none">
  <li>Coffee</li>
  <li>Milk</li>
</ul>
```

<h4>Image List</h4>

```
<ul style="list-style-image: url('chec.png')">
  <li>Coffee</li>
  <li>Milk</li>
</ul>
```



Nested Lists

<h3>Nested Lists</h3>

Coffee

Tea

Black Tea

Green Tea

Milk

Nested Lists

- Coffee
- Tea
 - 1. Black Tea
 - 2. Green Tea
- Milk



'start' Attribute in Ordered List

<h3>Lists which start at different position</h3>

```
<ol start="14">
```

```
<li>Coffee</li>
```

```
<li>Tea</li>
```

```
<ol start="5" style="list-style-type: I">
```

```
<li>Black Tea</li>
```

```
<li>Green Tea</li>
```

```
</ol>
```

```
<li>Milk</li>
```

```
</ol>
```

Lists which start at different position

14. Coffee

15. Tea

5. Black Tea

6. Green Tea

16. Milk



HTML Head



HTML <head>

- The <head> element is a container for metadata (data about data) and is placed between the <html> tag and the <body> tag.
- HTML metadata is data about the HTML document. Metadata is not displayed.
- Metadata typically define the document title, character set, styles, links, scripts, and other meta information.
- The following tags describe metadata:
 - <title>
 - <style>
 - <meta>
 - <link>
 - <script>
 - <base>



Meta data

Tag	Definition
<title>	defines the title of the document, and is required in all HTML/XHTML documents.
<style>	define style information for a single HTML page.
<link>	used to link to external style sheets.
<meta>	used to specify which character set is used, page description, keywords, author, and other metadata.
<script>	used to define client-side JavaScripts.
<base>	specifies the base URL and base target for all relative URLs in a page.



Meta data

- The <meta> element is used to specify which character set is used, page description, keywords, author, and other metadata.
- Metadata is used by browsers (how to display content), by search engines (keywords), and other web services.



Meta Data

Tag	Definition
<code>charset="UTF-8"</code>	Define the character set used
<code>name="description"</code> <code>content=""</code>	Define a description of your web page
<code>name="keywords"</code> <code>content=""</code>	Define keywords for search engines
<code>name="author"</code> <code>content=""</code>	Define the author of a page
<code>http-equiv="refresh"</code> <code>content="#"</code>	Refresh document every # seconds
<code>name="viewport"</code> <code>content="width=device-width, initial-scale=1.0"</code>	Gives the browser instructions on how to control the page's dimensions and scaling.



HTML Forms



HTML Forms

General Form

General Form

Text:

Number (maxLength:3, min:100, max:980):

range:

Color:

File: No file chosen

Date:

Date and Time:

Email:

Search:

URL:

Week:

- An HTML form contains **form elements**.
- Form elements are different types of input elements, like text fields, checkboxes, radio buttons, submit buttons, and more.



Adding Text Fields

```
<h3>Adding Text Fields</h3>
```

```
<form action="">
```

```
  First Name : <input type="text" name="firstname"> <br> <br>
```

```
  Last Name : <input type="text" name="lastname"> <br>
```

```
</form>
```

HTML Forms

Adding Text Fields

First Name :

Last Name :



Adding Password Fields

```
<h3>Adding Password Fields</h3>
```

```
<form action="">
```

```
User Name : <input type="text" name="username"> <br> <br>
```

```
Password : <input type="password" name="pass"> <br>
```

```
</form>
```

Adding Password Fields

User Name :

Password :



Adding Text Area

```
<form action="">
```

```
User Name : <input type="text" name="username"> <br> <br>
```

```
Password : <input type="password" name="pass"> <br> <br>
```

```
Address : <textarea name="address" cols="20" rows="5">
```

```
Address
```

```
</textarea><br>
```

```
</form>
```

Adding Textarea

User Name :

Password :

Address

Address :

Introduction to XHTML



Adding Radio Buttons

```
<form action="">
```

```
User Name : <input type="text" name="username"> <br> <br>
```

```
Password : <input type="password" name="pass"> <br> <br>
```

```
Gender : <input type="radio" name="sex" value="male"> Male
```

```
<input type="radio" name="sex" value="female"> Female<br> <br>
```

```
</form>
```

Adding Radio Buttons

User Name :

Password :

Gender : ☐ Male ☐ Female

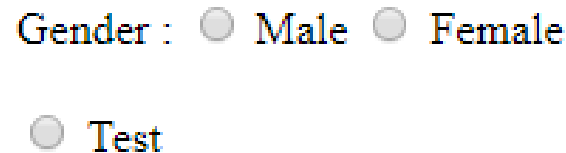


Grouping the radio buttons

```
<input type="radio" name="sex" value="male"> Male
```

```
<input type="radio" name="sex" value="female"> Female<br>  
<br>
```

```
<input type="radio" name="sex1" value="female"> Test<br>  
<br>
```



Gender : ☐ Male ☐ Female
☐ Test



Adding Checkboxes

```
<input type="checkbox" name="privacy" value="nic"> National Identity Card (NIC)<br> <br>  
    <input type="checkbox" name="privacy" value="strecrd"> Student Record  
Book<br> <br>  
    <input type="checkbox" name="privacy" value="stdc"> Student Identity Card<br>  
<br>  
    <input type="checkbox" name="privacy" value="birth"> Birth Certificate<br> <br>
```

Tick on type of documents to identify you :

☐ National Identity Card (NIC)

☐ Student Record Book

☐ Student Identity Card

☐ Birth Certificate



Checked Attribute

```
<input type="checkbox" name="privacy" value="nic"  
checked="checked"> National Identity Card (NIC)<br> <br>
```

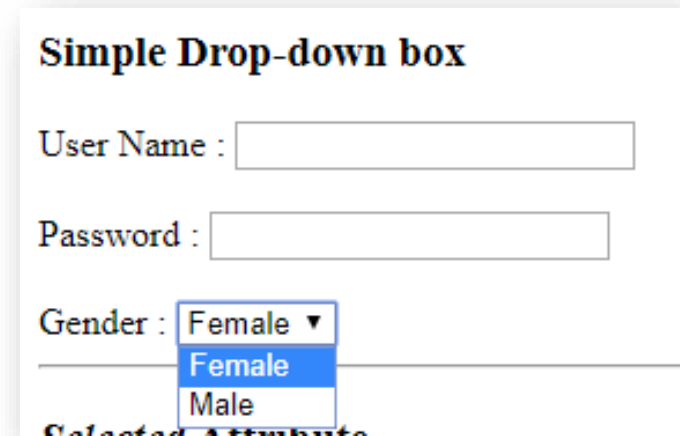
Tick on type of documents to identify you :

☒ National Identity Card (NIC)



Simple Drop-down Box

```
<select name="gender">  
  <option name="female">Female</option>  
  <option name="male">Male</option>  
</select>
```



The screenshot shows a web form titled "Simple Drop-down box". It contains three input fields: "User Name :", "Password :", and "Gender :". The "Gender :" field has a dropdown menu open, showing two options: "Female" and "Male". The "Female" option is currently selected and highlighted in blue. Below the dropdown menu, the text "Selected Attribute" is partially visible.



selected Attribute

```
<select name="gender">  
  <option name="female">Female</option>  
  <option name="male" selected="selected">Male</option>  
</select>
```



A screenshot of a web form. It features a password field labeled "Password :" and a gender dropdown menu labeled "Gender :". The dropdown menu is open, showing "Male" as the selected option, with a small downward arrow next to it. The form is displayed on a white background with a subtle shadow.



HTML Buttons

```
<h3>HTML Buttons</h3>
```

```
<form action="">
```

```
User Name : <input type="text" name="username"> <br> <br>
```

```
Password : <input type="password" name="pass"> <br> <br>
```

```
<input type="button" onclick="history.go(-1);" value="Back">
```

```
</form>
```

HTML Buttons

User Name :

Password :

Back



Adding submit & reset Buttons

<h3>Adding Submit/Reset Buttons</h3>

<form action="12_Forms.html" method="get">

First Name : <input type="text" name="firstname">

Last Name : <input type="text" name="lastname">

<input type="submit" value="Go to HTML Form 1">

<input type="reset" value="Clear">

</form>

Adding Submit/Reset Buttons

First Name :

Last Name :

Go to HTML Form 1

Clear



POST & GET methods

- GET-Requests data from a specified resource <form action="8_1_Forms.html" method="get"> check the URL
- POST-Submits data to be processed to a specified resource



Send email from the form

```
<form action="MAILTO:someone@gmail.com" method="post" enctype="multipart/form-data">
```

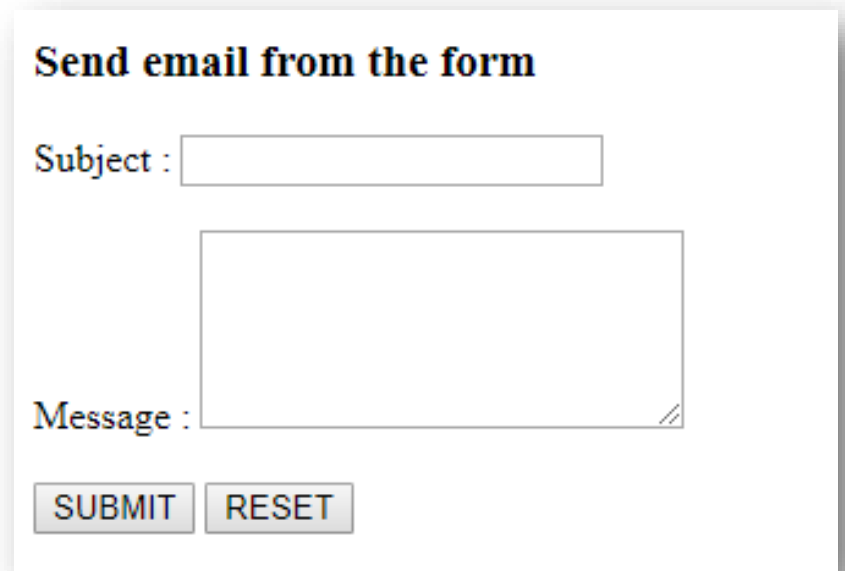
```
Subject : <input name="subject" type="text"> <br> <br>
```

```
Message : <textarea name="textmsg" cols="25" rows="5"></textarea> <br> <br>
```

```
<input type="submit" value="SUBMIT">
```

```
<input type="reset" value="RESET">
```

```
</form>
```



The screenshot shows a web form with the title "Send email from the form". Below the title, there is a label "Subject :" followed by a single-line text input field. Below that is a label "Message :" followed by a multi-line text area. At the bottom of the form, there are two buttons: "SUBMIT" and "RESET".



HTML Form elements

```
<fieldset>
  <legend>
    General Form
  </legend>
  <form>
    Text:<input maxlength="3" type="text" required><br> <br>
    Number (maxLength:3, min:100, max:980):<input type="number" size="3" min=100 max="980">
<br> <br>
    range:<input type="range" min=100 max="980"><br> <br>
    Color:<input type="color"><br> <br>
    File:<input type="file"><br> <br>
    Date:<input type="date"><br> <br>
    Date and Time:<input type="datetime"><br> <br>
    Email:<input type="email"><br> <br>

    Search:<input type="search"><br> <br>
    URL:<input type="url"><br> <br>
    Week:<input type="week"><br> <br>
    <input type="submit"><br> <br>
  </form>
</fieldset>
```



HTML Input Types

Here are the different input types you can use in HTML:

```
<input type="button">  
<input type="checkbox">  
<input type="color">  
<input type="date">  
<input type="datetime-local">  
<input type="email">  
<input type="file">  
<input type="hidden">  
<input type="image">  
<input type="month">  
<input type="password">
```

```
<input type="radio">  
<input type="range">  
<input type="reset">  
<input type="search">  
<input type="submit">  
<input type="tel">  
<input type="text">  
<input type="time">  
<input type="url">  
<input type="week">
```



HTML Form Elements

Tag	Description
<form>	Defines an HTML form for user input
<input>	Defines an input control
<textarea>	Defines a multiline input control (text area)
<label>	Defines a label for an <input> element
<fieldset>	Groups related elements in a form
<legend>	Defines a caption for a <fieldset> element
<select>	Defines a drop-down list
<optgroup>	Defines a group of related options in a drop-down list
<option>	Defines an option in a drop-down list
<button>	Defines a clickable button
<datalist>	Specifies a list of pre-defined options for input controls
<output>	Defines the result of a calculation



HTML5 Attributes

HTML5 added the following attributes for `<input>`:

- autocomplete
- autofocus
- form
- formation
- formenctype
- formmethod
- formnovalidate
- formtarget
- height and width
- List
- min and max
- multiple
- pattern (regexp)
- placeholder
- required
- step

and the following attributes for `<form>`:

- Autocomplete - specifies whether a form or input field should have autocomplete on or off. When autocomplete is on, the browser automatically completes the input values based on values that the user has entered before.
- Novalidate - the form data should not be validated when submitted



autocomplete

- specifies whether a form or input field should have autocomplete on or off.
- When autocomplete is on, the browser automatically completes the input values based on values that the user has entered before.

Ex:

https://www.w3schools.com/html/tryit.asp?filename=tryhtml5_input_autocomplete



autofocus

- The autofocus attribute specifies that the input field should automatically get focus when the page loads.

Ex:

https://www.w3schools.com/html/tryit.asp?filename=tryhtml5_input_autofocus



The form Attribute

- The form attribute specifies one or more forms an `<input>` element belongs to.



formation

- Specifies the URL of a file that will process the input control when the form is submitted.
- The formation attribute overrides the action attribute of the <form> element.
- The formation attribute is used with type="submit" and type="image".

Ex:

https://www.w3schools.com/html/tryit.asp?filename=tryhtml5_input_formation



formenctype

- The enctype attribute specifies how the form data should be encoded when submitted (only for forms with method="post").
- The enctype attribute overrides the enctype attribute of the <form> element.
- The enctype attribute is used with type="submit" and type="image".



formmethod

- The formmethod attribute defines the HTTP method for sending form-data to the action URL.
- The formmethod attribute overrides the method attribute of the <form> element.
- The formmethod attribute can be used with type="submit" and type="image".

Ex:

https://www.w3schools.com/html/tryit.asp?filename=tryhtml5_input_formmethod



formnovalidate

- The formnovalidate attribute overrides the novalidate attribute of the <form> element.
- The formnovalidate attribute can be used with type="submit".

Ex:

https://www.w3schools.com/html/tryit.asp?filename=tryhtml5_input_formnovalidate



formtarget

- The formtarget attribute specifies a name or a keyword that indicates where to display the response that is received after submitting the form.
- The formtarget attribute overrides the target attribute of the <form> element.
- The formtarget attribute can be used with type="submit" and type="image".

Ex: https://www.w3schools.com/html/tryit.asp?filename=tryhtml5_input_formtarget



The list Attribute

- The list attribute refers to a <datalist> element that contains pre-defined options for an <input> element.

```
<input list="browsers">
```

```
<datalist id="browsers">  
  <option value="Internet Explorer">  
  <option value="Firefox">  
  <option value="Chrome">  
  <option value="Opera">  
  <option value="Safari">  
</datalist>
```



multiple

- The multiple attribute specifies that the user is allowed to enter more than one value in the <input> element.
- The multiple attribute works with the following input types: email, and file.

Ex:

https://www.w3schools.com/html/tryit.asp?filename=tryhtml5_input_multiple



pattern

- The pattern attribute specifies a regular expression that the <input> element's value is checked against.
- The pattern attribute works with the following input types: text, search, url, tel, email, and password.

```
pattern="[A-Za-z]{3}"
```

```
//should contains 3 alphabetic character in upper or lowercase
```

Ex:

https://www.w3schools.com/html/tryit.asp?filename=tryhtml5_input_pattern



placeholder

- The placeholder attribute specifies a hint that describes the expected value of an input field (a sample value or a short description of the format).
- The hint is displayed in the input field before the user enters a value.
- The placeholder attribute works with the following input types: text, search, url, tel, email, and password.

Ex:

https://www.w3schools.com/html/tryit.asp?filename=tryhtml5_input_placeholder



required

- The required attribute specifies that an input field must be filled out before submitting the form.
- The required attribute works with the following input types: text, search, url, tel, email, password, date pickers, number, checkbox, radio, and file.

Ex:

https://www.w3schools.com/html/tryit.asp?filename=tryhtml5_input_required



step

- The step attribute specifies the legal number intervals for an `<input>` element.
- Example: if `step="3"`, legal numbers could be -3, 0, 3, 6, etc.

Ex:

https://www.w3schools.com/html/tryit.asp?filename=tryhtml5_input_step





<https://padlet.com/hansi3/CTEC31052>



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