

Chapter 5

Web Designing using HTML

Lists in HTML

Lists in HTML are used to display list of information. There are three types of lists in HTML, Ordered list, Unordered list and definition list.

Ordered list

An ordered list marks items by numbers or alphabets. It is created using the and tag. It is also called numbered list.

Example:

```
<HTML>

    <HEAD>

        <TITLE> Ordered list </TITLE>

    </HEAD>

    <BODY>

        <OL>

            <LI>INDIA</LI>

            <LI>SRILANKA</LI>

            <LI>NEPAL</NEPAL>

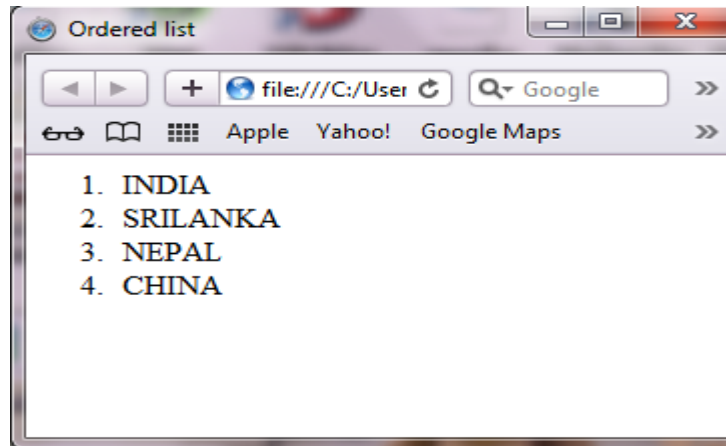
            <LI>CHINA</LI>

        </OL>

    </BODY>

</HTML>
```

Output:



Unordered List

An unordered list used bullets instead of numbers. The `<UL>` and `</UL>` tag is used to create an unordered list in HTML.

Example:

```
<HTML>
```

```
  <HEAD>
```

```
    <TITLE> Unordered list </TITLE>
```

```
  </HEAD>
```

```
<BODY>
```

```
<UL>
```

```
<LI>INDIA</LI>
```

```
<LI>SRILANKA</LI>
```

```
<LI>NEPAL</NEPAL>
```

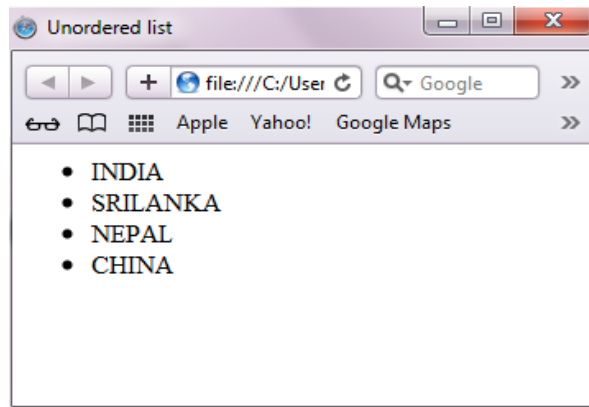
```
<LI>CHINA</LI>
```

```
</UL>
```

</BODY>

</HTML>

Output:



Definition List

Definition list consists of a list of definitions and their descriptions. The **<DL>** and **</DL>** tag is used to create a definition list in HTML. The definition term is specified by **<DT>** and description by **<DD>**.

Example:

<HTML>

<HEAD>

<TITLE> Definition list </TITLE>

</HEAD>

<BODY>

<DL>

<DT>CPU

<DD>Central Processing Unit

HSSLIVE

<DT>BMP

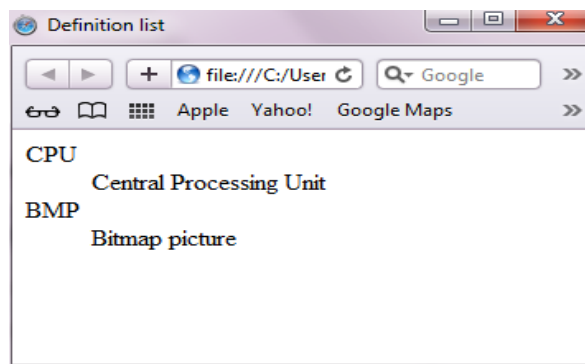
<DD>Bitmap picture

</DL>

</BODY>

</HTML>

Output:



Nested list

A list placed inside another list is called a nested list .For example we can place an ordered list inside an unordered list ,an unordered list inside an ordered list and so on.

Example 1:

<HTML>

<HEAD>

<TITLE> Ordered list </TITLE>

</HEAD>

<BODY>


```
<LI>COUNTRY</LI>
```

```
<UL>
```

```
<LI>INDIA</LI>
```

```
<LI>USA</LI>
```

```
</UL>
```

```
<LI>
```

```
<UL>
```

```
<LI>RUPEE</LI>
```

```
<LI>DOLLAR</LI>
```

```
</UL>
```

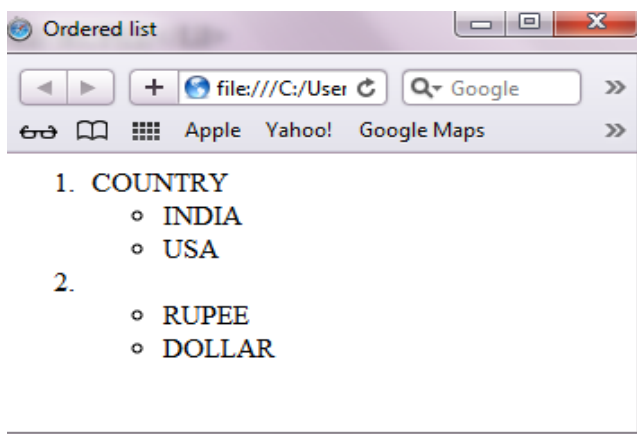
```
</OL>
```

```
</ol>
```

```
</BODY>
```

```
</HTML>
```

Output:



Example 2:

```
<HTML>
<HEAD>
  <TITLE>Components of a Computer</TITLE>
</HEAD>
<BODY>
<UL>
<LI>Hardware</LI>
  <OL>
    <LI>I/O Devices</LI>
    <LI>RAM</LI>
    <LI>Hard Disk & DVD Drive</LI>
  </OL>
<LI>Software</LI>
  <OL>
    <LI>Operating System</LI>
    <LI>Application Programs</LI>
  </OL>
</UL>
</BODY>
</HTML>
```

Output:-

- Hardware
 1. I/O Devices
 2. RAM
 3. Hard Disk & DVD Drive
- Software
 1. Operating System
 2. Application Programs

Example3:-

```
<HTML>
<HEAD>
  <TITLE>ABC Pvt. Ltd. Kerala</TITLE>
</HEAD>
<BODY>
<H1>ABC Pvt.Ltd. </H1>
<H2>Kerala</H2>
<OL>
<LI>Health Care</LI>
<LI>Baby Products</LI>
  <UL>
    <LI>Toys</LI>
  </UL>
</OL>
</BODY>
</HTML>
```

```
<LI>Dress</LI>
</UL>
<LI>LADIES WEAR</LI>
<UL>
  <LI>Kurthas</LI>
  <LI>Jeans</LI>
</UL>
</OL>
</BODY>
</HTML>
```

Output :-

ABC Pvt.Ltd.

Kerala

1. Health Care
2. Baby Products
 - Toys
 - Dress
3. LADIES WEAR
 - Kurthas
 - Jeans

Links in HTML

Linking is an important feature of HTML. Clicking a link transfers the control to another document or web page. Links in HTML are of two types, Internal link and External link. The <A> tag is used to create a link in HTML.

Internal link

An internal link is a link which points to the different section of the same document.

External link

An external link points to another document or web page.

Absolute and Relative URL

URL stands for Uniform Resource Locator. It is also known as web address. URL's are classified into two types, absolute URL and relative URL.

An absolute URL begins with a Protocol (HTTP or HTTPS). It contains all the information needed to identify files on the internet. A relative URL points to files in the same folder or on the same server. A relative URL looks like a file name.

Example:

`http://www.dhsekerala.gov.in/result.html` (Absolute URL).

`<a href="hello.php">hello</a>` (Relative URL).

Creating graphical hyperlink

A graphical link can be created by placing an image inside the `<A>` tag using `<IMG>` tag.

<EMBED> Tag

The `<EMBED>` Tag is used to embed sound and videos in web page.

Example:

`<HTML>`

`<HEAD>`

`<TITLE> Graphical Link </TITLE>`

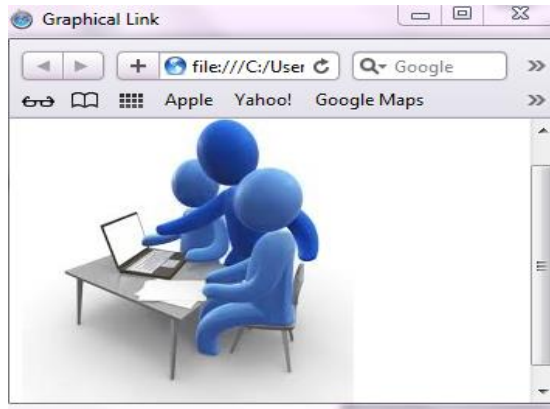
`</HEAD>`

`<BODY>`

`<a href="http://www.hsslive.in"><IMG SRC="Students.jpg"></a>`

`</BODY>`

`</HTML>`



Creating link to an e-mail

A link to an e-mail can be created using the <A Href> tag. The syntax is

 Message ub the browser

Example:

Send your Comments

Inserting music and videos

The <EMBED> tag is used to embed sound and video in a web page. The main attribute of <EMBED> tag is **Src** which specifies the file name (URL) of sound or video to be included. The Hidden attribute of <EMBED> tag is used to control visibility of embedded components. It

has two values True (Default) or False.

Creating tables in HTML

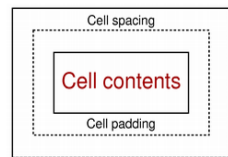
Tables are used to structure data in a web page. Table in HTML are created using the <TABLE> and </TABLE> tags.

Attributes of <TABLE> Tag

- 1)**Border**:-It specifies the thickness of border lines around the table. The value 0 denotes no border.
- 2)**Bordercolor**:-It is used to assign a colour to the border.
- 3)**Align**:-It specifies the position of table with respect to other document elements.
- 4)**Bgcolor**:-Assigns a background colour to the table.
- 5)**Background**:-It is used to specify a background for the table.

6)**Cellspacing**:-It is the space between cell border and table border.

7)**Cellpadding**:-It is the space between cell border and cell content.



8)**Frame**:-It is used to control the appearance of table border.

(Void-No border,Above-Border appears on top only,Box-Border appears on all sides(Default value))

9)**Rules**:-It is used to control what rules(borders between cells) are displayed in a table.

10)**Height** and **Width**:-These attributes are used to specify both height and width for a table.

<TR> Tag

The <TR> tag is used to create the table row.

<TD> Tag

The <TD> tag is used to specify the table data.

<TH> Tag

The <TH> tag is used to specify the table heading.

Difference between <TH> and <TD> tag

The contents created using <TH> tag appears bold and as centered where as the content created using <TD> tag does not appears as bold and centered.The <TH> tag is used to specify the table heading whereas <TD> tag is used to specify the table data.

Attributes of <TR> Tag

1)**Align**:-It specifies the horizontal alignment of the content within a cell.It can have three values

Left,right or center.

2)**Valign**:-It specifies the vertical alignment of the content in a cell.It can have values top,middle,bottom or baseline..

3)**Bgcolor**:-It specifies the background colour of a row.

Attributes of <TH> and <TD> Tags

- 1)**Align:-**It specifies the horizontal alignment of content within a cell.The default value for <TH> is center and for <TD> is left.
- 2)**Valign:-**It specifies the vertical alignment of content within a cell.It can have three values top,bottom,middle or baseline.
- 3)**Bgcolor:-**Specifies a background colour for a cell.
- 4)**Colspan:-**Indicates the number of columns a cell should occupy.
- 5)**Rowspan:-**Indicates the number of rows a cell should occupy.The default value is single .

Example 1:

span 3 rows	span 3 columns		
	H	T	span 2 rows
	M	L	
span 4 columns			

span 2 rows and 2 columns		T
		A
E	L	B

Example 2:-

```

<html>

  <head>

    <title>Tables_in_HTML </title>

  </head>

  <body>

    <table border="1" height="200" width="300">

      <tr>

        <th>1</th><th>2</th><th>3</th>

      </tr>

      <tr>

```

```
<th>4</th><th>5</th><th>6</th>
</tr>
<tr>
<th colspan="3">7</th>
</tr>
</table>
</body>
</html>
```

Output:-

1	2	3
4	5	6
7		

Example2:-

```
<HTML>
<HEAD>
<TITLE>Road Accidents in Kerala</TITLE>
</HEAD>
<BODY>
```

<TABLE HEIGHT=200 WIDTH=300 BORDER="2" CELLPADDING="2"
CELLSPACING = "2">

<TR>

<TH ROWSPAN="2">Years</TH>

<TH COLSPAN="3">Total Number of</TH>

</TR>

<TR>

<TH>Cases</TH>

<TH>Persons Killed</TH>

<TH>Persons Injured</TH>

</TR>

<TR>

<TH>2012</TH>

<TD>36174</TD>

<TD>4286</TD>

<TD>41915</TD>

</TR>

<TR>

<TH>2013</TH>

<TD>35215</TD>

<TD>4258</TD>

<TD>40346</TD>

</TR>

```

<TR>
<TH>2014</TH>
<TD>36282</TD>
<TD>4049</TD>
<TD>41096</TD>
</TR>
</TABLE>
</BODY>
</HTML>

```

Output:-

Years	Total Number of		
	Cases	Persons Killed	Persons Injured
2012	36174	4286	41915
2013	35215	4258	40346
2014	36282	4049	41096

Table caption using <CAPTION> Tag

The caption tag <CAPTION> and </CAPTION> allows to create a caption for a table. A caption is the text that appears before or after the table.

Example:-

```

<HTML>
<HEAD>

```

```
<TITLE>My_School</TITLE>

</HEAD>

<BODY>

<TABLE BORDER="2" HEIGHT="200" WIDTH="200">

<CAPTION>MY SCHOOL</CAPTION>

<TR>

<TH COLSPAN="3">

MY_SCHOOL

</TH>

</TR>

<TR>

<TH>Boys</TH>

<TH>Girls</TH>

<TH> 500</TH>

</TR>

</TABLE>

</BODY>

</HTML>
```

Output:-

MY SCHOOL		
MY_SCHOOL		
Boys	Girls	500

<FRAMESET> tag

The <FRAMESET> tag allows to view multiple web pages in a single window. Each individual sections (Pages) in a frameset is called frame. It is a container tag which begins with <FRAMESET> and </FRAMESET> tags.

Attributes of <FRAMESET> Tag

- 1) **Cols:-** It determines the dimension and number of vertical frames in the frameset.
- 2) **Rows:-** It determines the dimension and number of horizontal frames in the frameset.
- 3) **Border:-** It specifies the thickness of border.
- 4) **Bordercolor:-** It specifies border colour.

Example:-

```
<FRAMESET COLS=100,200,300>
```

```
</FRAMESET>
```

This code will create three vertical frames. The first window with size 100, second of size 200 and third of size 300 pixels.

Example:-

```
<FRAMESET ROWS=*,*>
```

```
</FRAMESET>
```

This code will create horizontal frames of equal size.

The <FRAME> Tag

The <FRAME> tag defines the frames within a frameset. It is an empty tag.

Attributes of <FRAME> tag

- 1) **Src:-** It specifies the name of file to be loaded into a frame.
- 2) **Scrolling:-** Indicates whether scroll bar is to be shown in the frame. It takes three values YES, NO, AUTO.
- 3) **Noresize:-** Disables frames resizing capability. Normally frames can be resized.
- 4) **Margin width:-** It specifies the space between sides of the frame.

5) **Margin height:**-It specifies the space between top and bottom of the frame.

6)**Name:**-It specifies a name to the frame.

<NOFRAME> Tag

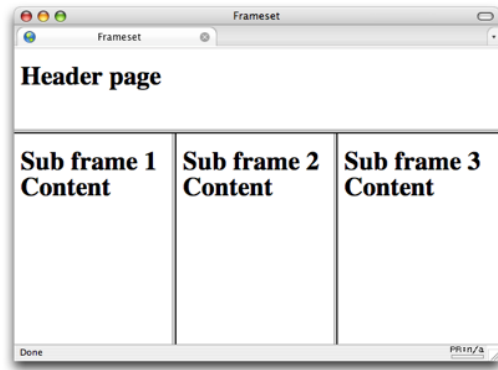
The <NOFRAME> tag specifies the content if the frames cannot be displayed by the web browser.

Nesting of Framesets

A pair of <FRAMESET> tags enclosed within another <FRAMESET> pair is called nesting of frameset.

Example:

```
<frameset rows="100,*">  
  
  <frame src="header.html"/>  
  
  <frameset cols="33%,33%,*">  
  
    <frame src="subframe1.html"/>  
  
    <frame src="subframe2.html"/>  
  
    <frame src="subframe3.html"/>  
  
  </frameset>  
</frameset>
```



Forms

Forms are used to pass information from web page to web server. A form has two elements, container and controls (text area, buttons, checkboxes etc).

<FORM> Tag

Forms in HTML are created by the <FORM> and </FORM> tag.

Attributes of <FORM> tag

- 1) **Action:** - It specifies the location (URL) of the server.
- 2) **Method:** - Indicates the method used by the web server to receive the form. The two possible values are POST and GET (Default).
- 3) **Target:** - It specifies the frame where the result is to be displayed.

<INPUT> Tag

The <INPUT> tag is used to create a number of controls such as textbox, password box, checkbox, radio button etc.

Attributes of <INPUT> Tag

- 1) **Type:** - The type attribute specifies the type of control. The main values of type attribute are,

a) **Text:** - Creates a textbox.

Example: <INPUT Type="Text">

b) **Password:** - Creates a password box.

Example: <INPUT Type="Password">

c) **Checkbox**:-Creates a checkbox.

Example:<INPUT Type="Checkbox">

d) **Radio**:-Creates a radio button.

Example: <INPUT Type="Radio">

e) **Reset**:- Creates a reset button.

Example:- <INPUT Type="Reset">

f) **Submit**:-Creates a submit button.

Example:- <INPUT Type="Submit">

2) **Name**:-It is used to give a name to the control.

3) **Value**:-It is used to provide an initial value to the control.

4) **Size**:-It is applicable to Text and Password.It limits the number of characters.

5) **Maxlength**:-It is used to control the number of characters that can be typed.

<TEXTAREA> Tag

The textarea control allows multiple line text as input.The <TEXTAREA> and </TEXTAREA> tags are used to create a textarea.

Attributes of <TEXTAREA> Tag

1) **Name**:-It is used to give a name to the control.

2) **Rows**:-It specify the height of textarea control.

3) **Cols**:-It specifies the width of textarea control.

Difference between GET and POST Methods of Form

The POST method is used to send sensitive informations such as password,creditcard number etc.The GET method appends data along with the URL.It is less secure than POST method.

<SELECT> tag

The <SELECT> tag is used to create a drop-down list.The <OPTION> tag inside the <SELECT> tag defines the available options in the list.

Example:-

<SELECT>

<OPTION>Science

<OPTION>Humanities

<OPTION>Commerce

</SELECT>

Attributes of <SELECT> Tag

- 1)Name:-It is used to give a name to the control.
- 2)Size:-It controls if select box is a drop down or list box.
- 3)Multiple:-It allows multiple selection.

Attributes of <OPTION> tag

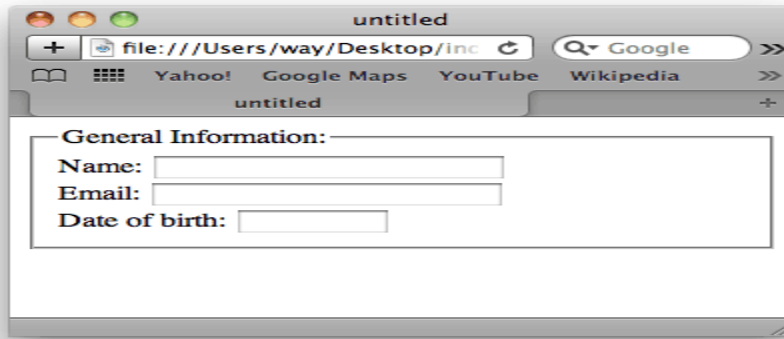
- 1)Selected:-It is used to indicate default selection.
- 2)Value:-It is used to submit a value.

<FIELDSET> Tag

The <FIELDSET> tag is used to group related elements(Controls) in a form.The <FIELDSET> tag draws a box around the related elements.

Example:

```
<form>
  <fieldset>
    General Information:
    Name: <input type="text" size="30">
    Email: <input type="text" size="30">
    Date of birth: <input type="text" size="10" >
  </fieldset>
</form>
```



HTML 5

HTML 5 enables the developers to create websites which are more faster, smarter and secure. It was jointly developed by WHATWG (Web Hypertext Application Technology Working Group) and W3C (World Wide Web Consortium).

Conclusion:

- Forms are used to input data through web pages.
- The three kinds of lists in HTML are ordered, unordered and definition lists.
- The start attribute of Tag is used to change the beginning value of an ordered list.
- The <A> tag is also called anchor tag.
- The NAME attribute of <A> tag is used to link to a particular section of the same document.
- The <NOEMBED> tag displays the content if <EMBED> tag is not supported by browser.
- The default value of border attribute of table is zero.
- The default alignment of tables in HTML is Left.
- A row in HTML is a collection of cells.

