Chapter 5
Web Designing using HTML

Different types of Lists in HTML

There are three kinds of lists in HTML - unordered lists, ordered lists and definition lists.

Unordered list displays a bullet in front of each item in the list. Ordered list presents the items in some numerical or alphabetical order. A definition list is a list of terms and the corresponding definitions.

Tags	Use	Attributes	Values and Purpose
<UL>	To create bulleted list	**Type**	To specify the type of bullet. **"Disc"**, **"Circle"** and **"Square"** are the values for ●, ○ and ■
<OL>	To create numbered list	**Type**	To specify the type of numeral. The values are **"1"**, **"I"**, **"i"**, **"a"** and **"A"**.
		Start	To specify the starting number. The value should be an integer.
<LI>	To specify an item in the unordered or ordered list. Used inside the pairs **<UL>**…**</UL>** and **<OL>** … **</OL>**		
<DL>	To create a definition list		
<DT>	Used inside **<DL>**… **</DL>** to specify each data item (or term) in the list		
<DD>	Used after each **<DT>** to describe the term		

Nested List: A list inside another list is called nested list. Usually unordered and ordered lists are nested.

Links in HTML

A hyperlink (or simply link) is a text or an image in a web page that we can click on, and move to another document or another section of the same document. The **<A>** tag, called anchor tag is used to give hyperlinks. Anything given between the tag pair **<A>** and **</A>** will be a link. **Href** is the main attribute of **<A>** tag. The URL (address of the web page/site) is given as its value.

There are two types of linking – internal linking and external linking.

A link to a particular section of the same document is known as internal linking. The attribute **Name** of **<A>** tag is used to specify the *name* of a section of the web page. This *name* should be prefixed with **#** symbol to create the link using **Href** attribute.

The link from one web page to another web page is known as external linking. The URL (address of the web page/site) is given as the value for **Href** attribute.

The following is an example for e-mail linking:

<A Href= mailto: "scertkerala@gmail.com"> SCERT</A>

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Inserting Music and Video in Web pages

To add music or video to the web page, **<EMBED>** tag is used. There is another tag **<NOEMBED>** which can be used to display a text if the **<EMBED>** tag is not supported by the browser. The main attribute of the **<EMBED>** tag is **Src**, which specifies the URL of the music or video files to be included. The other attributes are **Height**, **Width**, **Align**, etc.

There is another tag **<BGSOUND>** with which music can be played in the background while the page is viewed.

Creating Table in Web page

Tags	Use	Attributes	Values and Purpose
<TABLE>	To create table	**Border**	To specify the thickness of the border line around the table.
		Bordercolor	To set the colour to the border
		Align	To specify the position of the table inside the browser window.
		Bgcolor	To set the background colour of the table.
		Background	To set an image as the background of the table.
		Cellspacing	To specify the space to be left between cells.
		Cellpadding	To specify the space in between the cell border and cell content.
<TR>	To specify a row in a table	**Align**	To specify the horizontal alignment of the text in a cell in that particular row.
		Valign	To specify the vertical alignment of the content in a cell of a row. **Top**, **Middle**, **Bottom** or **Baseline** are the values.
		Bgcolor	To give background colour to a particular row.
<TH>	To specify the heading cell. Data will be bold and central aligned.	**Align** **Valign** **Bgcolor**	Same as in the case of <TR>, but applicable only in a particular cell.
		Colspan	To span a cell over 2 or more columns in a row. It is a kind of merging 2 or more columns in a row.
<TD>	To specify the data in a cell within a row.	**Rowspan**	To span a cell over 2 or more rows in a column. It is a kind of merging 2 or more rows in a column.
<CAPTION>	To add descriptive text to a table as its caption.		

Dividing the Browser window

The browser window can be divided into two or more panes to accommodate different pages simultaneously. HTML provides a tag **<FRAMESET>** to partition the browser window into different sections. Each individual section is called a frame. Such a frame can contain a web page.

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Tags	Use	Attributes	Values and Purpose
<FRAMESET>	To partition the browser window into different frame sections.	**Cols**	To specify the number of vertical frames in the frameset.
		Rows	To specify the number of horizontal frames.
		Border	To specify the thickness of border for the frames
<FRAME>	To define the frame for including the web page	**Src**	To specify the html file to be loaded in the frame.
		Name	To give a name to target the frame
<NOFRAME>	Used to display some text content in the window if the browser is unable to support frames.		

Nesting of Frameset

When we want to divide a horizontal frame into 2 or more vertical frame or vice versa nesting of frameset is used.

Forms in Web pages

HTML Forms are used to collect data from the webpage viewer for processing. A Form consists of two elements: a **<FORM>** container tag and Form controls like text boxes, textarea fields, drop-down menus, radio buttons, checkboxes, etc.

Tags	Use	Attributes	Values and Purpose
<FORM>	To provide a container for Form controls.	**Action**	To specify the URL of the Form handler to process the data collected.
		Method	To specify the method to upload the data. **Get** and **Post** are the values.
<INPUT>	To make different types of controls such as Text Box, Radio Button, Submit Button etc.	**Type**	To specify the control type. The values: **Text** creates textbox, **Password** creates textbox in which typed characters are displayed as asterisks (*), **Radio** creates radio buttons for selection, **Submit** creates submit button to upload data, **Reset** clears the entries in the Form.
		Name	To give a name to an input control.
		Value	To give an initial value to a control.
		Size	To specify the size of the text box and password box.
		Maxlength	To specify the maximum length of characters in text box and password box.

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<TEXTAREA>	To provide space to give text in more than one line.	**Name**	To give a name to the control
		Rows	To specify the number of rows in the area.
		Cols	To specify the number of characters in a row.
<SELECT>	To create drop down list box	**Name**	To identify the control
		Size	To specify whether it is a list box or combo box.
		Multiple	To allow selection of multiple items.
<OPTION>	To specify the items in the SELECT list	**Selected**	To indicate the item for default selection.
<FIELDSET>	To group related controls in the Form.		
<LEGEND>	To set a caption for FIELDSET group		

Overview of HTML 5

HTML5 was developed jointly by World Wide Web Consortium (W3C) and the Web Hypertext Application Technology Working Group (WHATWG). The new standard incorporates features like video playback, drag-and-drop etc. Mobile web browsers that are pre-installed in iPhones, iPads, Android phones, etc. support HTML5.

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Questions from Previous Years' Question Papers (Computer Science)

1. The <DD> tag gives _____.   (1) (March 2016)
2. Create a table with 5 types of fruit names, use headings as serial number, name and cost.   (5) (March 2016)
3. Create an ordered list of five fruits using small Roman numerals.   (5) (March 2016)
4. Write an HTML code to display a list of hardware and software of a company in the following format:

    I.   Hardware
    1. Cables
        (i)   UTP
        (ii)   Coaxial
        (iii)   Fiberoptic
    2. Storage Devices
        (i)   USB
        (ii)   HardDisk
        (iii)   Tape
    II.   Software
    1. Application Software
        (i)   MS Office
        (ii)   Inventory Management System
    2. System Software
        (i)   Compilers
        (ii)   Assemblers   (5) (SAY 2016)

5. Write an HTML code to display a user registration form as shown below:

    User Registration Form

    Please complete the following form to register with our site

    User name [   ]   Password [   ]

    Gender: Male: ◯   Female: ◯

    How did hear about us: [Select Answer ▽]

    Please check this box if you wish to be added in our mailing list [ ]

    We will not pass your details to any third party

    [Register Now]

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    (5) (SAY 2016)

6. A link to a particular section of the same document is called _____.   (1) (March 2017)
7. Create a web page using frames for Tourism department showing list of tourist places in Kerala. When a place is selected a detailed description should be available in a separate window.   (5) (March 2017)
8. Create a form that accepts information regarding a student. Fields necessary are name, age, class, sex, roll number, hobbies and date of birth. Use appropriate form controls.
                                                                                        (5) (March 2017)

9. Which HTML tag is used to create ordered list?   (1) (SAY 2017)
10. Write an HTML code for a web page to show the following details in blue background:

   Components of a Computer
   - Hardware
     1. RAM
     2. ROM
     3. Hard Disk
   - Software
     1. System Program
     2. Application Program   (3) (SAY 2017)

11. <FORM> tag contains some other tags to facilitate interaction between user and web page. Write any two control tags and explain their mode of interaction. (2) (SAY 2017)

Questions from Previous Years' Question Papers (Computer Applications)

1. Consider the following list created using HTML.
   - D. Laptop
   - E. Desktop
   - F. Printer

   What will be the value of START and TYPE attribute of <OL> tag?
   (a) START = "D" TYPE = "A"
   (b) START = "4" TYPE = "A"
   (c) START = "4" TYPE = "I"
   (d) START = "D" TYPE = "I"   (1) (March 2016)

2. Explain the HTML tag <table> and its attributes.   (3) (March 2016)

3. ____ attribute of <frame> tag is used to prevent users from resizing the border of a specific frame by dragging it.   (1) (SAY 2016)

4. Explain <OL> tag with suitable example.   (3) (SAY 2016)

5. Write the complete HTML tag that links the text "PSC" to the website www.keralapsc.org.   (1) (March 2017)

6. Explain nesting of frameset with an example.   (3) (March 2017)

7. Write the HTML code to create the following table:

No. of Students	
Science	55
Commerce	60
Humanities	58

                                                                               (2) (March 2017)

8. _____ tag in HTML is used to create drop-down list.
   (a) SELECT   (b) OPTION   (c) INPUT   (d) LIST   (1) (SAY 2017)

9. Write an HTML code to create the following table:

PAY ROLL		
EMPNO	NAME	SALARY
101	ABIN	15,000
102	SINI	25,000
103	ANU	20,000

                                                                               (3) (SAY 2017)

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