

Web Page Designing

1. Define HTML.

HTML stands for Hyper Text Mark Up Language. It is a basic web designing language developed by Tim Berners Lee in 1990 at CERN (Conseil Europeenne pour la Recherche Nucleaire), the European Particle Physics Laboratory in Geneva, Switzerland.

There are different versions of HTML like HTML, HTML+, HTML 1.0, HTML 2.0, etc.

2. What are the tags of HTML?

The commands of HTML are called the HTML tags. There are many HTML tags, which define the format or design of the web pages. They are written inside the opening and closing angular brackets < >. Similarly they are of two types.

They are:

- i) Single or Empty Tag
The tags, which do not have the closing tags are called Empty tags. Eg.
, <HR>, etc.
- ii) Pair Tags or Container Tags
The tags, which have the opening and closing tags are called Pair Tags or Container Tags. They are known as container because they contain the text, pictures, etc. in between the opening and closing tags. Eg. Hello , I am a student, etc.

3. What are the Attributes of tags?

Attributes are the further describing elements of the tags. It means, it defines the size, color, appearance, styles, etc. of the tags elements. And they should be written inside the opening tag, just after the tag name and should be closed with the angular bracket.

Eg. Hello

Note: In the above example, COLOR and SIZE are the attributes and "RED" and 10 are the attribute values. By the above attribute, it defines that the text "Hello" should be of Red color and size of 10.

4. Write short notes of the following:

a) Web Page

The pages of any web site are known as web page. They contain the web materials like text, audio, video, sound, picture, etc. A web page is also known as HTML document.

b) Web site

A web site is a collection of many related web pages. It contains the information of a particular topic. It is identified by a certain URL (Uniform Resource Locator) or web address. Eg. www.nepalnews.com, www.hotmail.com, etc are the example of web sites.

c) Web Server

Web Server is a web hosting computer, which contains the main control of the web site. All the web pages of the site remain in this computer. Web browsers (client software) send the request to open any page and web server responds them sending the web contents.

d) Web Browsers

The special software to open or explore the web pages in the Internet is known as web browser. It is a client software, which sends the request of the users to the server and gets response from the server for the users. There are many web-browsing software. Internet Explorer, Mozilla Firefox, Netscape Navigator, Opera Mini, Google Chrome, etc. are some common examples of web browsers.

e) www

It stands for World Wide Web, which is a service of Internet. It is a collection of web pages or web sites. It is a part of URL (Uniform Resource Locator) to navigate any web site.

f) Home Page

The first page of any web site is known as the Home Page. It contains the introduction and the main topic with link to other pages.

STRUCTURE OF A WEB PAGE DOCUMENT

```
<HTML>
<HEAD><TITLE>My First Page</TITLE>
</HEAD>
<BODY>
Hello!.....
</BODY>
</HTML>
```

Note: Write this content in any text editor program like Notepad, WordPad, etc. and save with the extension .htm or .html. And open the file in any web browser.

Some HTML Tags

1. <html>.....</html>

It is a container tag because it has opening and closing tag. In the beginning and end of the HTML document, it is written.

2. <head>.....</head>

It is also a container tag and it contains the heading part of the document like title and meta command.

3. <title>.....</title>

The text written inside <title>....</title> tag, comes at the title bar of browser.

4. <body>.....</body>

All the contents of a web page should be written inside of it. It is also a container tag. It has many attributes.

They are:

i. BGCOLOR = "color name"

It defines the background color of the web page.

ii. BACKGROUND= "Picture name"

It is used to keep picture as a background of the page.

Eg. BACKGROUND="Sunset.jpg"

iii. TEXT="COLOR NAME"

It defines the text color for whole page as default.

iv. LEFTMARGIN="value"

It defines the space at the left side of web page.

v. TOPMARGIN="value"

It defines the space at the top of web page.

5. <center>.....</center> tag

It is used to keep the text or picture at the center of the page.

6. <p>.....</p>

It is used to write the paragraph. It also has a attribute called align.

i. Align="center"/>"left"/>"right"/>"justified"

7. <i>.....</i>

It makes italic or slanting the text.

Eg. <i>Hello</i>

8. <u>.....</u>

It is used for giving underline.

Eg. <u> Hello </u>

Output: Hello

9. <Hn>.....</Hn>

Here, H means Heading and n means any number from 1 to 6. Here, 1 means the largest heading or first heading and 6 is the smallest in size.

Eg. <h1 align=center>My Nepal </h1>

<h2 align=right>Hello, I am Nepali</h2>

10. ^{.....}

It is used to raise the letter from the normal line.

Eg. A²+B²

Output: A²+B²

11. _{.....}

It is used to lower the letter from the normal line.

Eg. H₂O

Output: H₂O

12. <table>.....</table>

It is used to insert the table in our web page. It also has some other sub tags. Before starting them, let's see some attributes of table tag itself.

i. BGCOLOR = "color name"

It gives the background color of the table.

ii. WIDTH="number/percent"

It defines the width of the table.

iii. HEIGHT="number/percent"

It defines the height of the table in percentage or pixel.

iv. ALIGN="left/center/right"

It defines the alignment of the table.

Eg. <table bgcolor="blue" width=400 height=500 align=center>

Some Sub tags of TABLE tag

i. <TR>.....</TR>

Here TR means Table Rows. It creates the rows of the table. For the creation of table, first row should be inserted, then after column.

Inside <tr> also bgcolor can be given.

ii. <TH>.....</TH>

Here, TH means Table Heading. It is optional to close the tag.

iii. <TD>....</TD>

Here, TD means Table Data. It is also optional to close.

Note:

<TH> and <TD> can use ROWSPAN and COLSPAN attributes. ROWSPAN is used for merging (combining) rows and COLSPAN is used for COLUMNS. Similarly, <table> tag also can use CELLPADDING and CELLSPACING attributes.

Q. Write a html document to create a web page with a table.

<html>

<head><title>My Page</title></head>

<body>

<h1>Table Example</h1>

<table align=center width=500 height=600 bgcolor="blue">

<tr>

<th>Sn

<th>Name

<th>Phone

</tr>

<tr>

```

<td>1.
<td>Ram
<td>565656
</tr>
</table>
</body>
</html>

```

```

</tr>
</table>
</body>
</html>

```

Example2 for Creating Table

```

<html>
<head><title>My Table</title></head>
<body>
<table border=4 cellspacing=20
cellpadding=20>
<tr>
<th>Sn
<th>Item
<th>Price
</tr>
<tr>
<td>1
<td>Mango
<td>400
</tr>
</table>
</body>
</html>

```

13. Bullets and Numbering in HTML Document

Bullets and Numbering are known as the list items in the web page. Bullets are called unordered list (UL) and Numbering are known as ordered list (OL).

Syntax of Ordered List:

```

<OL type="1" / "i" / "I" / "A" / "a" start=number>
Heading or list
<li> list items
<li> list items
.....
</OL>

```

Example:

```

<OL type="1" start = 5><b><u>Fruits</u></b>
<li> Mango
<li> Apple
<li> Orange
</ol>

```

Output:

- Fruits**
5. Mango
6. Apple
7. Orange

Note: Type the above example inside of your any existing web page, which you have already created, then save and you will see this output.

Example 3: HTML document to create the following table:

ROUTINE			
DAY S	1	2	3
	Apple	Mango	Banana
	Cake	Tea	Fruits

```

<html>
<head><title>Routine Table</title></head>
<body bgcolor="cyan">
<table border=4 width=250 height=200>
<tr>
<th colspan=4> ROUTINE
</tr>
<tr>
<th rowspan=3>DAYS
<td>1
<td>2
<td>3
</tr>
<tr>
<td>Apple
<td>Mango
<td>Banana
</tr>
<tr>
<td>Cake
<td>Tea
<td>Fruits

```

Syntax of Bullets

<UL type="square"/"disc" / "circle"> Bullet heading

```

<li> items
<li> items
.....
</ul>

```

Eg. <ul type = "square"> Points to remember

- Always bring your book and copy.
- Come in time
- Do your work sincerely.

Hyperlink

Here, Hyper means online and link means process of connecting each-other. So, the term Hyperlink is used for the connection of text, picture, symbol, graphics, pages or one site to

another site, which are kept online. Or this is the online connection or link. There are two types of link. They are Internal and External.

Internal Link

The link within the same page is called Internal link. The Internal link is little more complex in nature in comparison of External Link. For the Internal link, some terms like HREF (Hyperlink Reference) and NAME are used. HREF with # sign is used to create a link and NAME is used to create the name for the destination link address.

Eg.

```
<html>
<head><title> Internal Link </title></head>
<body bgcolor="cyan">
<h3><u> Places to Visit in Pokhara
</u></h3><br>
<a href="#fewa"><h4>Fewa Lake</h4></a>
<br>
<a href="#Begnass"><h4>BegnassLake</h4></a>
<hr color="red">
<a name="fewa"><b><u>Fewa
Lake</u></b></a>
Fewa Lake is a beautiful lake of Nepal.
.....lfkjsljsdf
slksd lksdfjsdsd.fsdlkjsd slkfjs
fs.sf.s.....
.....
<hr>
<a name="Begnass"><b><u>Begnass
Lake</u></b></a>
Begnass is a beautiful lake of Pokhara.
Begnass is a beautiful lake of Pokhara.
Begnass is a beautiful lake of Pokhara.
Begnass is a beautiful lake of Pokhara.
</body>
</html>
```

External Link

The link outside of the page is called External Link. It is easier to write than Internal Link because we can write just the href inside <a> tag and write the address name.

Eg. Click Pokhara

Q. Write a HTML document to create an external link from a web page 'mypage.html'.

```
<html>
<head><title>External Link</title></head>
<body>
  Pokhara is a beautiful city of Nepal.
<br>
<a href="Table.html">Click to go Table page</a>
```

```
</body>
</html>
```

FORM in HTML document

Forms are the interactive way of HTML documents or any other web pages. As we fill the paper forms to collect information and keep them in ledger book, in the web pages, we can make forms to collect the information related to the users and store them in the database.

How to create form?

To create a form, <form>.....</form> tag is used. In this tag method attribute is used. And there are two types of methods: post or get. Similarly, it uses some other sub tags like <input>, <select>, etc.

i. <input>

This sub tag is used for inputting (entering) data from the forms. It has some attributes as follow:

a) Type

It defines the type of data we enter like text, password, submit, reset, etc.

b) size

It defines the size of the text box to be displayed.

c) maxlength

It defines the maximum length of your entry or how many characters to enter. Eg. <input type="text" size=20 maxlength=40>

ii. <select>.....</select>

It is a pair tag. It also has <option> sub tag. It is used for creating the dropdown list items.

Eg. <select>

<option>Mango

<option>Apple

</select>

Example:

Q. Create a HTML document to illustrate a form.

```
<html>
<head><title>Form Example</title></head>
<body bgcolor="cyan">
<h2><u>FILL THE FORM</u></h2>
<form method="post">
Name : <input type="text" size=20
maxlength=30> <br><br>
Address : <input type="text" size=30
maxlength=40>
<br><br>
```

```
Phone : <input type="text" size=10
maxlength=15>
Password : <input type="Password">
<hr size=10 color="red" NOSHADE>
<input type="submit" value="submit">
<input type="Reset">
</form>
</body>
</html>
```

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Q.2. Write HTML document to create a form.

```
<html>
<head><title>Advanced Form
Example</title></head>
<body>
<form method="post">
<font size=10 color="blue"><u><b>Fill The
Form</font>
<br>
Name : <input type="text"><br>
Address : <input type="text"><br>
Gender : <input type="radio"
name="radiobutton">Male
      <input type="radio"
name="radiobutton">Female
<hr>
<h3>Select the Subjects</h3>
English<input type="checkbox"><br>
Nepali<input type="checkbox"><br>
Maths<input type="checkbox"><br>
<hr>
<h3>Select the day you like</h3>
<select>
      <option>Sun
      <option>Mon
      <option>Tue
      <option>Wed
      <option>Thur
      <option>Fri
      <option>Sat
</select>
<h3>Thank You!</h3>
<hr size=10 color="red" NOSHADE>
<input type="submit" value="submit">
<input type="Reset">
</form>
</body>
</html>
```

Exercise

What is the list of HTML?

This is similar to the list of other documentation to make the items in the list. It helps to sort the items in the list. and are used for this purpose in HTML.