



UNIT III

Basic Interactivity



Overview of Frame:

It is a concept to open or browse more than one web page in a single browser window. A framed document divides a browser window into small window frames; each frame may contain a different web page document.

➤ **Definition of frame:**

"Frame is the independent scrolling region or window of the webpage."

➤ **Overview of Frame:**

- Using the frame, you can divide the browser screen into multiple scrollable sections.
- You can give different name and URL to each frame.
- Each frame in a window may be separated from others by border.
- The user can resize the frame depending upon their screen resolution.
- Each frame may provide a scrollbar or other controls to manipulate the size of frame.
- Individual frames are named so that they may be referenced through links or scripting.
- The benefit of this approach is that user can view information in one frame while keeping another frames open for reference, instead of moving back to pages.

➤ <Frameset> tag:-

A file that specifies how the screen is divided into frames is called frameset.

Frameset tag is a collection set of frame tag. Where multiple frames are placed inside a frameset tag. The tag having its starting tag <Frameset> and ending tag </Frameset> are used to define framesets. <Body> element is not necessary to use with <frameset> tag.



Attributes of <Frameset>:-

1) Rows:-

The rows attribute divides the screen into horizontal frames with specified values.

It divides the browser window depending upon the width defined. the width value of each frame is separated by comma.

These attributes have three kinds of values

Rows="Value%, value%" :- specifies relative size as a percent

Ex <frameset Rows="30%,70%">

Rows="Value%,*" :- specifies relative size.

Ex <frameset Rows="60%,*"

Note: * Indicates remaining rest of the portion of webpage.

To demonstrate frames divided in rows:

```
<html>
<head>
    <title>HTML Frames</title>
</head>
<frameset rows="10% 80% 10%">
    <frame name="top" src="c:/top_frame.html" />
    <frame name="main" src="c:/main_frame.html" />
    <frame name="bottom" src="c:/bottom_frame.html" />
</frameset>
<body>
    Your browser does not support frames.
</body>
</html>
```

This will produce following result:

Top Frame

Main Frame

Bottom Frame

2) Cols:-

The cols attribute divides the screen into vertical frames with specified values.

It divides the browser window depending upon the width defined



To
<
<
<
<

</
</
Th

Th
use
Bo
bo

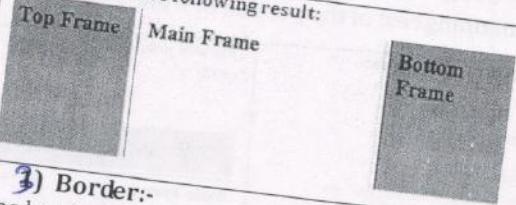
Ex-

Ex-

To demonstrate frames divided in columns:

```
<html>
<head>
<title>HTML Frames</title>
</head>
<frameset cols="25%,50%,25%">
<frame name="left" src="c:/top_frame.html" />
<frame name="center" src="c:/main_frame.html" />
<frame name="right" src="c:/bottom_frame.html" />
<noframes>
<body>
Your browser does not support frames.
</body>
</noframes>
</frameset>
</html>
```

This will produce following result:



3) Border:-

The border attribute displays border around the frame. Borders are used to display different frames. The value '0' creates borderless frame. Border value 0 indicates none border and more than 1 indicate bigger border.

Ex- <frameset cols="50%, 50%" border="25">

4) Bordercolor :-

- This attribute is used to specify the color to given border.

Ex- <frameset cols="50%,50%" bordercolor="blue">

➤ <Frame> Tag:-

- <Frame> tag is included to define individual frame.
- Frameset defines set of frames whereas frame tag defines its contents, source.
- It defines single frame in a frameset.



Attributes of frame tag:-

1) SRC attribute:-

SRC attribute specifies the URL of the document to be displayed in the frame.

Ex- <Frameset cols="30%,70%">
 <Frame SRC="c:/frame1.html">
 <Frame SRC="c:/frame2.html">
 </Frameset>

2) Name:-

- Name attribute represents name of frame.
- It allows us to assign a name to the frame mainly for targeting purpose.

Ex- <frame SRC="file.html" NAME="XYZ">

3) Marginwidth:-

- This attribute sets the left and right frame margins in pixels.

Ex- <frame SRC="file.html" NAME="XYZ" marginwidth="50">

4) Marginheight:-

- This attribute sets the top and bottom frame margins in pixels.

Ex- <Frame SRC="page1.html" marginheight="50">

5) NORESIZE:-

- This attribute prevents the user from resizing the frames.
- By default, the user can resize frames by dragging frame to new position.
- Noresize attribute work for both tags :

1. **<frameset Noresize >**: if it applying it work for all frames

2. **<frame Noresize >**: if it applying it work for selected frame

Ex- <frame SRC="file.html" NAME="XYZ" NORESIZE>

➤ <NOFRAME> Tag:

There is a probability of some internet user using a browser that does not support frames. Such users will get to view only a blank page instead of your frame.

A special tag <NOFRAME> allows you to include additional HTML code as a part of frameset document. This tag enables you to include body text as part of the document.

The content of the <NOFRAME> element should be correct HTML, potentially including the <BODY> element, which can be used as an alternative form for browsers that don't support frames.

Ex-

```
<HTML>
<HEAD>
```

```
    <TITLE>Noframe Example </TITLE>
```

```
</HEAD>
<frameset Rows="50%,50%">
    <frame SRC="page1.html">
    <frame SRC="page2.html">
```

```
<NOFRAME>
```

```
    <BODY>
```

```
        <p> here you can include any text,  
        hyperlinks, Warning Message. </p>
```

```
    </BODY>
```

```
</NOFRAME>
```

```
</frameset>
```

```
</HTML>
```

❖ Forms in HTML:

➤ Introduction to <form>:

- Forms are used to collect all the input information from the user.
- For providing such input, the forms are created with textboxes, click button, multiple choice buttons, boxes, etc.
- There may be more than one form in the document.
- We can create the form in HTML using <form> tag.
- The <form> tag is paired tag that is it is having the closing tag </



form>.

There are various forms with which we can interact.

Ex- online admission form, registration form, feedback form, application form, etc.

➤ **FORM element & it's attributes:-**

- 1) Name
- 2) Action
- 3) Method

1) **NAME Attribute:-**

The name attribute is used to give the name to form.

This name of form can be further referenced.

Ex- <form name="Myform">

2) **ACTION Attribute:-**

This attribute specifies the URL and language filename the form is submitted to, such as .php .asp .jsp these all are extensions used for language file. It allows reading or changing the ACTION attribute of HTML form tag.

Ex- <form ACTION="URL of language file where these form data will send">

The following string uses the action attribute to post a form to a specified URL.

Ex: <form action="http://example.com/sample.asp" method ="post">

A webpage form is coded so that it mails the data that the form would normally send across the webpage.

3) Method :-

The method attribute is a read or write string. Two commonly used methods for a request-response between a client and server are: GET and POST.

- 1) Get:** Requests data from a specified resource such as program or webpage.
- 2) Post:** Submits data to be processed to a specified resource

Ex- <FORM METHOD="GET or POST" ACTION="LanguageFile.asp">
.....</FORM>

1) GET method:-

- GET is Non-secure request.
 - GET requests can be saved because it appears in url.
 - GET requests should never be used when dealing with sensitive data.
 - GET requests allows limited number of character length in url.
 - GET data carrying inside url of the page is starting from '?' sign and each variable carrying data and dividing after '&' sing.
 - Variable name = value
- Ex: ? Name= rakesh
If it can have more than one variable pairs in such case the pairs in the url are separated by '&' mark.
Ex: ? Name=Rakesh & Class=Bsc(cs).

2) Post method:-

- POST requests is a secure than GET because the parameters are not showed in url.
- POST requests do not remain in the browser history and also cannot be saved.
- POST requests have no restrictions on data length.
- When the post method is used, the data is submitted in the name/value pair but instead of showing in the URL, the variable data is hidden.
- If private information entered by user like password, the post method is suitable.

❖ Form Controls:**> <INPUT> tag:-**

Input tag is primary tag used in HTML forms. Input tag allows us to input data to your web server.

Following are various types of controls used by form tag.

1. Text Input Controls:	2. Password Input Controls:
3. Multi-line Text Input Controls :	4. Checkbox Controls :
5. Radio Button Controls :	6. Select Box Controls :
7. File-Upload Box :	8. Button Controls : 6. Pull down menus



1) Text Input Controls:

This control is used for items that require only one line of user input, such as search boxes or names. They are created using HTML <input> tag.

```
<form>
First name:
<input type="text" name="first_name" />
<br>
Last name:
<input type="text" name="last_name" />
</form>
```

Output:

First name: _____
Last name: _____

2) Password Input Controls:

This is also a single-line text input but it masks the character as soon as a user enters it. They are also created using HTML <input> tag but type attribute is set to password.

Here is a basic example of a single-line password input used to take user password:

```
<form>
Password:
<input type="password" name="password"/>
</form>
```

Output:

Password *****

3) Multi-line Text Input Controls:

- Multi-line input controls are created using HTML <textarea> tag.
- This is used when the user is required to give details that may be longer than a single sentence.

Here is a basic example of a multi-line text input used to take item description:

```
<form>
Description : <br />
<textarea rows="5" cols="50" Name="description">
Enter description here...
</textarea>
</form>
```

Output:

Description :
Enter description here...

4) Checkbox Controls:

Checkboxes are used when more than one option is required to be selected. They are also created using HTML <input> tag but type attribute is set to checkbox.

the user select multiple items by using shift-, control- or command - click combination of keyboards.

R
m
cr
<
M
Pi
</

A s
con
for
opti

<fo
</fo
This

+ 7
If yo
you
box.
attrib

<form
<input
/>
</form
IF
that
the
Pull
the
attri
one +

```
<form>
<input type="checkbox" name="maths" value="on">
Maths
<input type="checkbox" name="physics" value="on">
Physics
</form>
```

Output:

 Maths Physics
5) Radio Button Controls :

Radio buttons are single option selection control, it used when out of many options; just one option is required to be selected. They are also created using HTML `<input>` tag but type attribute is set to radio.

```
<form>
<input type="radio" name="subject" value="maths">
Maths
<input type="radio" name="subject" value="physics">
Physics
</form>
```

Output:

 Maths Physics
6) Select Box Controls: Pull down menus

A select box, also called drop down box, dropdown list and list control, which provides option to list down various options in the form of drop down list, from where a user can select one or more options.

```
<form>
<select name="dropdown">
<option value="Maths" selected>Maths</option>
<option value="Physics">Physics</option>
</select>
</form>
```

Output:

Maths ▾

This above dropdown box contains math and physics as a value.

7) File-Upload Box: Scrolled list control

If you want to allow a user to upload a file to your web-site, you will need to use a file upload box, also known as a file select box. This is also created using the `<input>` element but type attribute is set to file.

```
<form>
<input type="file" name="fileupload" accept="image/*"
/>
</form>
```

Output:

Choose file No file chosen

If user wants to select multiple options from a list that list is created using scrolled list control. the code for this control is much similar to pull down menu control, with the addition of the SIZE and MULTIPLE attributes. the SIZE attribute controls how many items are shown at one time to display window or scrolled list.

**8) Button Controls :**

There are various ways in HTML to create clickable buttons. You can also create a clickable button using <input> tag by setting its type attribute to button.

```
<form>
<input type="submit" name="submit" value="Submit"
/>
<input type="reset" name="reset" value="Reset" />
</form>
```

Output:

Submit	Reset
--------	-------

Ex Program for Form tag:-

```
<HTML>
<HEAD>
<TITLE>Form Example </TITLE>
</HEAD>
<BODY>
<center><h1>Application Form</h1></center>
<form name="Form1" action="languagefile.asp" method="get">
First name:
<input type="text" name="first_name" />
<br><br>
Last name :
<input type="text" name="last_name" />
<br> <br>

Password :
<input type="password" name="password"/>

<br> <br>
Address :
```

.....<input type="text" name="Address">



Skill

```
<input type="checkbox" name="physics" value="on"> DBMS  
<input type="checkbox" name="physics" value="on"> Web Technology  
<br><br>
```

GENDER :

```
<input type="radio" name="Gender" value="male"> Male  
<input type="radio" name="Gender" value="female"> Female  
<br><br><br><br><br>
```

Select City:

```
<select name="dropdown">  
    <option value="Nanded">Nanded</option>  
    <option value="Latur" selected>Latur</option>  
    <option value="Parbhani">Parbhani</option>  
    <option value="Hingoli">Hingoli</option>  
</select>  
<br><br>
```

```
<input type="file" name="fileupload" accept="image/*" />  
<br><br><br>
```

```
<input type="submit" name="submit" value="Submit" />  
<input type="reset" name="reset" value="Reset" />  
</form>  
</BODY>  
</HTML>
```

Select colors :


```
<select name = "mycolor" SIZE = "4" MULTIPLE>  
<option> Red  
<option selected> Blue  
<option> Pink  
<option> Black  
<option> Yellow  
</select>
```

O/P

Select colors :

Red	
Blue	
Pink	
Black	
Yellow	

**Output of form tag with all attributes and controls:**

File:///C:/Documents%20and%20Settings/cocpit/Desktop/DEMO.html

Application Form

First name: abc

Last name : xyz

Password :

Enter Address here...

Address :

SUBJECT: Basics of Computer Communication Skill DBMS Web Technology

GENDER: Male Female

Select City: Latur
Nanded
Latur
Parbhani
Hingoli

Choose File: No file chosen

Submit Reset



❖ I

It is a co
web sit
scriptir
(Cascad
Object
DHTML

DHT

1. HT
2. Ja
3. Ca
- a
4. Do
- d

T
with
We put
order i
eleme
tables,
or the I

DHTML
we can
of the
browse
and oth
best pc
of the

-----THE END-----