HTML Part-3

Frames

- The HTML frame is a powerful feature that enables a web page to be broken into different unique sections that, although related, operate independently of each other.

- The HTML tag that divide a browser screen into two or more HTML recognizable unique regions is the **<frameset> </frameset> tags**.

- Each unique region is called a **frame**.

- Each frame can be loaded with a different document and hence, allow multiple HTML documents to be seen concurrently.

Advantages to Using Frames

- Frames can give more flexibility in designing your Web presentation
- You can place information in different Web pages, removing redundancy
- Frames can make your site easier to manage
- Frames allows you to update only a few files rather than the whole
- Web designers create both framed and non-framed versions for a Web site and giving users the option of which one to use

Disadvantages to Using Frames

- The browser has to load multiple HTML files
  - increasing wait time
- Some older browsers cannot display frames.
- Some users do not like using frames.
- Some web authors feel that frames are too constricting.
- Frames can use up valuable screen space.
- The source code is hidden.

\<frameset> Tag

- The \<frameset> tag does not include \<body> tag.
  - the reason for this is that this HTML file displays the contents of other Web pages; technically, it is not a Web page.
- A frameset is a set or collection of frames in the browser window.
- \<frameset> tag helps to divide the browser window into frames by specifying the number of rows and columns and their height and width.

<frameset> Tag Attributes

1. **rows attribute**

Description: This attribute is used to specify the number of rows and their height in a frameset.

Values:

- in pixels
- as a percentage of the screen resolution
- by an asterisk (*) which indicates the remaining space.

Example

1. In pixels

<frameset rows="20,70,10">

Here the numbers are in pixels. The above statement means that we have three horizontal frames: the first one is 20 pixels, second being 70 pixels and third one being 10 pixels in height.

2. In percentage

<frameset rows="20%,70%,10%">

Here we have created three horizontal frames with first frame being 20% in height, second being 70% and third being 10% in height.

Note:

<frameset rows="20%,*,10%">

A star sign means that the particular row will occupy the remaining of the space

<frameset> Tag Attributes

2. cols attribute

Description: This attribute is used to specify the number of columns and their width in a frameset.

Values:

- in pixels
- as a percentage of the screen resolution
- by an asterisk (*) which indicates the remaining space.

Example

1. In pixels

<frameset cols="20,70,10">

Here the numbers are in pixels. The above statement means that we have three vertical frames: the first one is 20 pixels, second being 70 pixels and third one being 10 pixels wide.

2. In percentage

<frameset cols="20%,70%,10%">

Here we have created three vertical frames with first frame being 20% wide, second being 70% and third being 10% wide.

Note:

<frameset cols="20%,*,10%">

A star sign means that the particular column will occupy the remaining of the space

<frame> tag

- Frame tag is used to specify information about one particular frame like its frame name, source, margin width etc.
- Frame tag attributes:
  - src
  - name
  - scrolling
  - noresize
  - frameborder
  - border
  - marginheight
  - marginwidth
  - longdesc

src attribute

- This attribute is used to specify the path of the page to be opened in the frame.

- syntax: **<frame src="URL">**

- The URL is the filename and location of the page that you want to load.

Example

```
<html>
 <head> <title> Frame Example </title></head>
 <frameset rows="50%,50%">
    <frameset cols="50%,50%">
       <frame src="birds.jpg" />
       <frame src="frame2.html" />
    </frameset>
    <frame src="frame3.html" />
 </frameset>
</html>
```

name attribute

- This attribute is used to assign name to a frame.
- Named frames are mostly used with target attribute of anchor tag when we want to open the linked document in a particular frame.
- The *target attribute* can also take one of the following values :

1. **_self:** Loads the page into the current frame.

2. **_blank:** Loads a page into a new browser window. Opening a new window.

3. **_parent:** Loads the page into the parent window, which in the case of a single frameset is the main browser window.

4. **_top:** Loads the page into the browser window, replacing any current frames.

5. **targetframe:** Loads the page into a named targetframe.

Example

```
<!DOCTYPE html>
 <html>
   <head> <title>HTML Target Frames</title> </head>
    <frameset cols = "200, *">
       <frame src = "menu.htm" name = "menu_page" />
       <frame src = "main.htm" name = "main_page" />
    </frameset>
 </html>
```

menu.htm

```
<!DOCTYPE html>
<html>

  <body bgcolor = "pink">
    <a href = "http://www.google.com" target = "main_page">Google</a>
    <br />
    <br />

    <a href = "http://www.microsoft.com" target = "main_page">Microsoft</a>
    <br />
    <br />

    <a href = "http://news.bbc.co.uk" target = "main_page">BBC News</a>
  </body>

</html>
```

main.htm

```
<!DOCTYPE html>
<html>

  <body bgcolor = "grey">
    <h3>This is main page.</h3>
    <p>So now click any link and see the result.</p>
  </body>

</html>
```

scrolling and resize attributes

- **scrolling attribute:** This attribute controls the appearance of the scrollbars that appear on the frame. This takes values either "yes", "no" or "auto". For example scrolling = "no" means it should not have scroll bars.

- **resize attribute:** By default, you can resize any frame by clicking and dragging on the borders of a frame. The noresize attribute prevents a user from being able to resize the frame.

  For example noresize = "noresize".

frameborder and border attribute

- This attribute specifies whether the border around the frames should be used or not.

- frameborder="0" means frame border should **NOT** be used.

- frameborder="1" means frame border should be used.

- Border attribute specifies the width of the border of each frame in pixels. For example, border = "5". A value of zero means no border.

Example

```
<html>
 <head> <title> Frame Example </title></head>
 <frameset rows="20%,60%,20%">
        <frame src="frame1.htm " frameborder="0" border="5"/>
        <frame src="frame2.htm" frameborder="0"/>
        <frame src="frame3.htm" frameborder="1"/>
 </frameset>
</html>
```
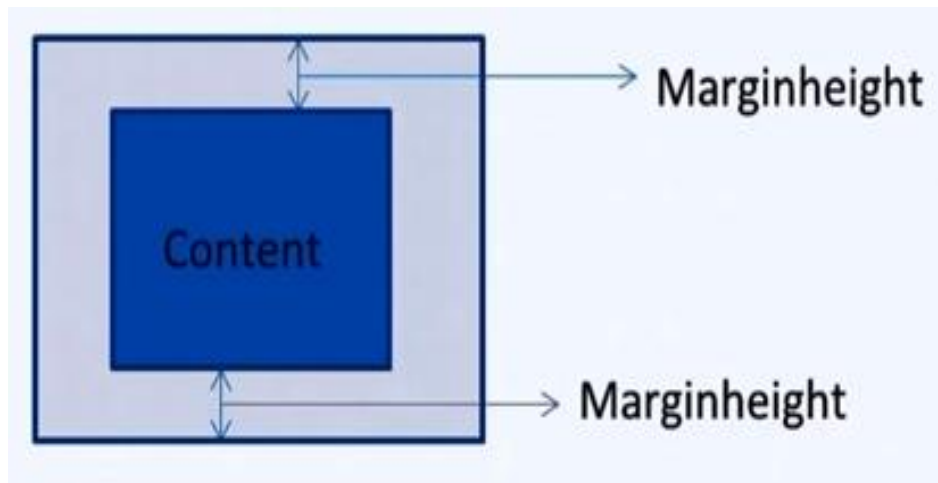
longdesc attribute

- This attribute specifies the path of the page that contains the long description of the content of the frame.

- **Example:**

<frame src="frame1.htm" longdesc="info.html" />

marginheight attribute

- This attribute specifies the margin between the content & the top and the bottom of the frame.
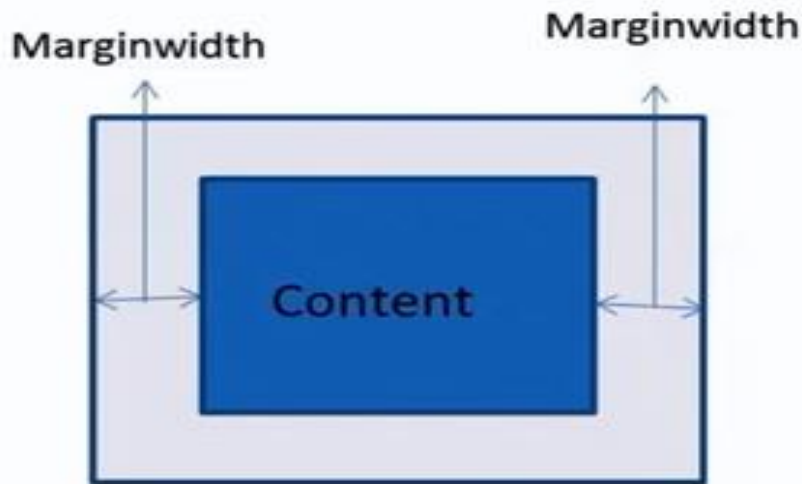

- Margin height for the top and bottom of the frame will have same values.

- The value for this attribute is specified in pixels.

Example

```
<html>
  <head> <title> Margin Height </title> </head>
  <frameset rows="50%,50%">
    <frame src="frame1.html" marginheight="50">
    <frame src="frame1.html" marginheight="10">
  </frameset>
</html>
```

marginwidth attribute

- This attribute specifies the margin between the content & the left and the right sides of the frame.

- Margin width for the left and the right of the frame will have same values.
- The value for this attribute is specified in pixels.

Example

<html>
  <head> <title> Margin Height </title> </head>
  <frameset rows="50%,50%">
    <frame src="frame1.html" marginwidth="60">
    <frame src="frame1.html" marginwidth="20">
  </frameset>
</html>

Browser Support for Frames

- If a user is using any old browser or any browser, which does not support frames then <noframes> element should be displayed to the user.

- So you must place a <body> element inside the <noframes> element because the <frameset> element is supposed to replace the <body> element, but if a browser does not understand <frameset> element then it should understand what is inside the <body> element which is contained in a <noframes> element.

- You can put some nice message for your user having old browsers. For example, *Sorry!! your browser does not support frames.* as shown in the below example.

Example

```
<html>
 <head> <title> Frame Example </title></head>
 <frameset rows="50%,50%">
    <frameset cols="50%,50%">
       <frame src="birds.jpg" />
       <frame src="frame2.html" />
    </frameset>
    <frame src="frame3.html" />
    </frameset>
 <noframes>
     <body>Your browser does not support frames.</body>
 </noframes>
</html>
```

Iframe

- The **<iframe>** tag can be used to create an inline frame or subwindow within a web page.

- This allows a web page to be displayed inside of the current web page.

- If the browser does not support iframes then the content between the opening and closing **<iframe>** tags is displayed.

- Attributes of **<iframe>** tag behave exactly like the corresponding attributes for the <frame> tag.

Example

```
<!DOCTYPE HTML >
<html>
  <head>
      <title>iframe example</title>
  </head>
  <body>
   <p>Below is an iframe.</p>
   <iframe src="frame1.htm" width="400"height="150">
        iframes are not supported by your browser.
   </iframe>
  </body>
</html>
```