# Lab 5

# Frames

## Objective

**After studying this lab student should be able to:**

1- Constructing frames
2- Constructing nested frames

## 1. FRAMES 1 ROWS

<**frameset**>, **rows** <**frame**>, **src** Display multiple files in separate subwindows.

**Try This Code**

```
<html>
<head>
<title>Frames 1 - Rows</title>
</head>

<frameset rows="30%,*,30%">
  <frame src="fr1.html">
  <frame src="fr2.html">
  <frame src="fr3.html">
</frameset>

</html>
```

To get this sample to work you have to set up four files! One frameset file (the one above) and three regular Web pages. The frameset file controls the layout of the Web page.

**Notes**

- The **<frameset>** tag in the sample uses the **rows** attribute to create three frames. Three frames are created because three values are assigned to **rows**, `"30%,*,30%"`. The first and third frames each take up `30%` of the height of the whole window. The `*` means that the second frame gets whatever is left over, in this case `40%`.
- The **<frame>** tags use the **src** attribute show which HTML files to load into each frame.

**Details**

- Don't use a **<body>** tag. See the sample above.
- The **rows** attribute creates frames that run from left to right, that is, as rows.
- You count the frames from top to bottom.
- The order of the frame tags matters. The first frame tag goes with the top frame, the second frame tag goes with the second tag, and so on.

- There is no closing tag for the frame tag.
- The values in the **rows** attribute should add up to 100%.
- It's a good idea to use at least one `*`. When you use two or more, the remaining space is divided equally between them.

## *2. FRAMES 2 COLS*

**<frameset>**, **cols** Display multiple files in separate subwindows.

**Try This Code**

```
<html>
<head>
<title>Frames 2 - cols</title>
</head>

<frameset cols="30%,*,30%">

  <frame src="fr1.html">
  <frame src="fr2.html">
  <frame src="fr3.html">

</frameset>
</html>
```

The only difference between this and the previous sample is the **cols** attribute.

**Notes**

This sample works the same as the last, except that the frames form columns instead of rows.

**Details**

- Don't use a **<body>** tag. See the sample above.
- The **cols** attribute creates frames that run from top to bottom, that is, as columns.
- You count the frames from left to right.
- The order of the frame tags matters. The first frame tag goes with the leftmost frame, the second frame tag goes with the second tag, and so on.
- There is no closing tag for the frame tag.
- The values in the **rows** attribute should add up to 100%.
- It's a good idea to use at least one *. When you use two or more, the remaining space is divided equally between them.

**Try This**

Change the width of the window and watch how the frames change.

## *3. FRAMES 3*

**<frameset>**, **rows**, **cols** Adding columns to a row.

**Try This Code**

```
<html>
<head>
<title>Frames - 3</title>
</head>
<frameset rows="25%,*">

  <frame src="fr1.html">
  <frameset cols="50%,50%">
    <frame src="fr2.html">
    <frame src="fr3.html">
  </frameset>

</frameset>
</html>
```

This sample displays a window with two rows. The second row is divided into two columns.

**Notes**

The first **<frameset>** uses a **rows** attribute with two values but has only one **<frame>** tag. **The second <frame> tag is replaced with a <frameset> tag.** This **<frameset>** tag divides the second row into two columns because its **cols** attribute has two values. The **<frame>** tags within this nested **<frameset>** tag display a file in each of the two frames.

**Details**

- When a **<frameset>** tag replaces a **<frame>** tag, the new frames are created inside that frame.
- When you're finished, there should still be one **<frame>** tag for each frame.
- The **<frameset>** tag creates frames; the **<frame>** tag fills them.

## *4. FRAMES 4*

**<frameset>**, **rows**, **cols** Adding rows to a column.

**Try This Code**

```
<html>
<head>
<title>Frames - 4</title>
</head>
<frameset cols="25%,*">

  <frame src="fr1.html">
  <frameset rows="50%,50%">
    <frame src="fr2.html">
    <frame src="fr3.html">
  </frameset>

</frameset>
</html>
```

This sample presents a window with two columns. The second column is divided into two rows. The only difference between this and the previous sample is that the **rows** and **cols** attributes are reversed.

**Notes**

- The first <**frameset**> tag uses a **cols** attribute with two values but has only one <**frame**> tag. **The second <frame> tag is replaced with a <frameset> tag.** This <**frameset**> tag divides the second column into two rows because its **rows** attribute has two values. The <**frame**> tags within this nested <**frameset**> tag display a file in each of the two frames.

**Details**

- When a <**frameset**> tag replaces a <**frame**> tag, the new frames are created inside that frame.
- When you're finished, there should still be one <**frame**> tag for each frame.
- The <**frameset**> tag creates frames; the <**frame**> tag fills them.

## *5. FRAMES 5*

**<noframes>**, **scrolling**, **noresize** A more complicated frame example.

**Try This Code**

```
<html>
<head>
<title>Frames - 5</title>
</head>

<frameset rows="60,2*,*">

 <frameset cols="200,*">
  <frame scrolling="no" noresize src="htmltitl.html">
  <frame noresize  src="htmltitl.html">
 </frameset>

 <frame src="i_ht0101.html">

 <frameset cols="50%,50%">
  <frame src="i_ht0101.html">
  <frame scrolling="no" src="i_ht0101.html">
 </frameset>

 <noframes>
<!-- For browsers without frames. -->
 </noframes>

</frameset>
</html>
```

This sample presents a window with three rows. The first and third rows are divided into two columns.

**Notes**

- The first <frameset> tag creates three rows. The first row is exactly 60 pixels tall. The second is twice as tall as the third (because of the 2*) and combined they fill up the remainder of the window.
- The second <frameset> tag breaks the first row into two columns, the first of which is exactly 200 pixels wide. The second column fills the remaining width.
- The second row is a plain <frame>.
- In the third row the final <frameset> tag creates two equal size columns.

- When a plain number is used with rows or cols, it means an exact number of pixels.
- There are five <frame> tags on the left and five <frames> on the right.
- The noresize attribute prevents the user from changing the size of a frame.
- Setting scrolling to "no" removes any scroll bars. Now the user cannot scroll the contents of the frame. The default value for scrolling is "yes"
- Compare the use of noresize and scrolling in the frame tags with the appearance of the frames.

## *6. FRAMES 6*

**<frame>**, **name** **<a>**, **target** Changing the contents of a frame from another frame.

**Try This Code**

```
<html>
<head>
<title>Frames - 6</title>
</head>
<frameset rows="75,*">
 <frame src="title.html">
 <frameset cols="25%,*">
  <frame src="menu.html">
  <frame name="rframe" src="right1.html">
 </frameset>
</frameset>

</html>
```

The sample has three frames. The title spans the top. The frame labeled **Menu** holds links that change the contents of the right frame. The frame on the lower right changes as you click the links from the left frame.

Click each of the menu choices. The only frame that changes is the lower right one.

**Notes**

- The lower right frame is named **rframe** using **name="rframe"** in the third **<frame>** tag. The right frame can now be *targeted* from other frames.
- In menu.html the important lines are

<a href="right1.html" **target="rframe"**>One</a>

<a href="right2.html" **target="rframe"**>Two</a>

<a href="right3.html" **target="rframe"**>Three</a>

Usually, when you click a link in a frame the new file loads into that frame. If you use a target attribute in the link, the file loads into the frame pointed to by the target attribute.

You can use any html files fr menu, title, right1,….

## *7. FRAMES 7 NESTED FRAMES*

**<frame>**, **name <a>**, **target** Changing the contents of two frames using nested frames.

**Try This Code**

```
<html>
<head>
<title>Frames - 7</title>
</head>
<frameset rows="75,*">

<frame src="title.html">
<frame name="fr" src="firstframe.html">

</frameset>
</html>
```

In the sample above there are only two **<frame>** tags, but in the output on the right there are **three**frames! This Web page looks like the one in **Frames 6**, but it's put together a different way. Click each of the *next* and *previous* choices. Notice that **both** the left and right frames change.

**Notes**

The frameset document above sets up a window with **two** frames. The second **<frame>** tag names the lower frame **fr** and loads into it **another frameset document**, **firstframe.html** (instead of a regular HTML document). This splits the lower frame into two frames. This technique is called *nesting* frames.

In **firstframe.html** HTML files are loaded into the left and right frames:

```
<frameset cols="35%,*">

  <frame src="left1.html">

  <frame src="right1.html">

</frameset>
```

To change **both** frames at the same time, we use a link to another frameset document, **secondframe.html**, targeted to **fr** as we did in **firstframe.html**:

<a href="secondframe.html" **target="fr"**> For each set of of frames you want to update at the same time you need another frameset document.