

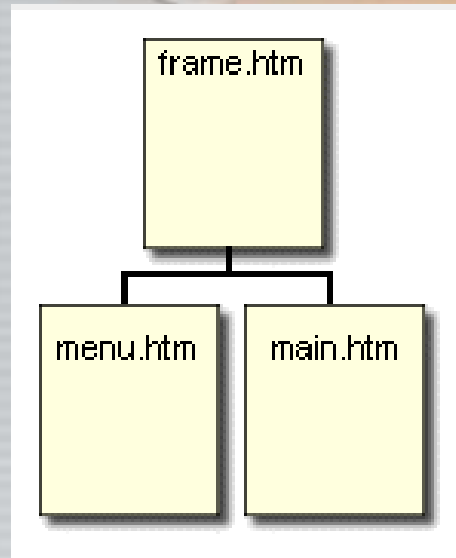
Fundamentals
of **WEB
DESIGN**

Frame Tags

XHTML

About Frames

- To use frames, you will need at least three separate HTML files. The primary file, called `frame.htm` in this example, defines the frames and specifies the files that will be displayed within them. The next file, "`menu.htm`," will be displayed in the left-side frame, and the third file, "`main.htm`," will be displayed in the right-side frame.



DOCTYPE

- Writing the source code for building frames is not as hard as it looks. The code in "frame.htm," shown below, is pretty typical of what to expect.
- To start, you define the DOCTYPE as "frameset" for the file that contains the frameset definition.
- The files menu.htm and main.htm that will display in the windows defined by the frameset will continue to use a DOCTYPE of transitional.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Frameset//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-frameset.dtd">
<html lang="en-us">
<head>
<title>frame.htm</title>
</head>

<frameset cols="100,*">
<frame src="menu.htm" name="menu" />
<frame src="main.htm" name="main" />
<noframes>
<body>
Your browser does not support frames.
</body>
</noframes>
</frameset>
</html>
```

<frameset>

- You define a set of frames using the <frameset> </frameset> tags, which are placed below the closing </head> tag of the HTML document.
- The opening <frameset> tag uses the "cols" attribute to define how many frame columns will be created and what size they will be.
- In this example, cols="100,*" defines two frame columns: the first set to 100 pixels in width, and the second set to the width remaining.

```
<frameset cols="100,*">  
<frame src="menu.htm" name="menu">  
<frame src="main.htm" name="main">  
<noframes>  
<body>  
Your browser does not support frames.  
</body>  
</noframes>  
</frameset>  
</html>
```

<frame />

- Next you specify the content for each frame using the <frame /> tag.
- The "src" attribute defines what file will be loaded into the frame, and the "name" attribute gives the frame a unique name.
- The <frame /> tag has no closing tag, thus the " /" (there is a space before the slash) is placed at the end of the tag to make it XHTML compliant.

```
<frameset cols="100,*">  
<frame src="menu.htm" name="menu" />  
<frame src="main.htm" name="main" />  
<noframes>  
<body>  
Your browser does not support frames.  
</body>  
</noframes>  
</frameset>  
</html>
```

<noframes>

- You can accommodate non-compatible browsers by placing alternative HTML code between the opening and closing <noframes> </noframes> tags.
- The alternative HTML code will be displayed for browsers that do not support frames.

```
<frameset cols="100,*">
<frame src="menu.htm" name="menu" />
<frame src="main.htm" name="main" />
<noframes>
<body>
Your browser does not support frames.
</body>
</noframes>
</frameset>
</html>
```

Rows Attribute

- Using the "rows" attribute, the <frameset> tag defines how many frame rows will be created and what size each row will be.
- In this example, rows="100,*" defines two frame rows: the first set to 100 pixels in height, and the second set to the width remaining.

```
<frameset rows="100,*">  
  <frame src="menu.htm" name="menu" />  
  <frame src="main.htm" name="main" />  
<noframes>  
  <body>  
    Your browser does not support frames.  
  </body>  
</noframes>  
</frameset>  
</html>
```

Rows Attribute

- The example below demonstrates the "rows" attribute again -- this time with a value of "* ,100" -- which sets the *second* frame row to 100 pixels in height, and the first frame row to the width remaining.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Frameset//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-frameset.dtd">
<html lang="en-us">
<head>
<title>frame3.htm</title>
</head>
<frameset rows="*,100">
<frame src="main.htm" name="main" />
<frame src="menu.htm" name="menu" />
<noframes>
<body>
Your browser does not support frames.
</body>
</noframes>
</frameset>
</html>
```

Rows/Cols Attributes

- The example below shows that the `<frameset>` `</frameset>` tags can be nested, and the rows/cols attributes can use percentages.

```
<frameset rows="100,*">  
  <frame src="menu.htm" name="menu" />  
  <frameset cols="50%,50%">  
    <frame src="main.htm" name="main" />  
    <frame src="main2.htm" name="main2" />  
  </frameset>  
</frameset>  
<noframes>  
<body>  
Your browser does not support frames.  
</body>  
</noframes>  
</frameset>  
</html>
```

Scroll Bars Attribute

- By default, frame scroll bars are added when needed. To remove the scroll bars, add the `scrolling="no"` attribute to the `<frame />` tag. In this example, scrolling has only been disabled in the left frame (menu.htm).

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Frameset//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-frameset.dtd">
<html lang="en-us">
<head>
<title>frame6.htm</title>
</head>

<frameset cols="100,*">
<frame src="menu.htm" name="menu" scrolling="no" />
<frame src="main.htm" name="main" />
<noframes>
<body>
Your browser does not support frames.
</body>
</noframes>
</frameset>
</html>
```

Noresize Attribute

- By default, the frames have a visible border between them that allows the user to resize the frames.
- To remove the border and make the frames not resizable, add the `noresize="noresize"` attribute to the `<frame />` tag.

```
<frameset cols="100,*">  
<frame src="menu.htm" name="menu" scrolling="no"  
      noresize="noresize" />  
<frame src="main.htm" name="main" />  
<noframes>  
<body>  
Your browser does not support frames.  
</body>  
</noframes>  
</frameset>  
</html>
```

Frame Borders

- By default, frame borders are displayed.
- To remove the borders between the frames, add both the `frameborder="0"` and `border="0"` attributes to the `<frameset>` tag.
- These two attributes are important for giving you control over the look of your frames, but are not valid XHTML attributes. Thus, the use of them is not allowed by the XHTML specification, but is allowed by your browsers.

```
<frameset cols="100,*" frameborder="0" border="0">  
  
<frame src="menu.htm" name="menu" scrolling="no" />  
<frame src="main.htm" name="main" />  
<noframes>  
<body>  
Your browser does not support frames.  
</body>  
</noframes>  
</frameset>  
</html>
```

Frame Target Attribute

- Our focus now turns to the file in the left frame (menu.htm).
- So far, when you clicked on a link in a frame window, the resulting file was loaded into that window. This is because with no "target" attribute defined, the default location is the window you are in.
- Use the "target" attribute to control what frame receives the file.
- In the example below, the "target" attribute is set to "main," so the frame defined with "name="main"" will receive the result.
- Now when you click on a link in the left frame, the resulting file will load in the right frame.

```
<a href="images/felix.gif" target="main">felix</a><br />  
<a href="images/bugjar.gif" target="main">bugjar</a><br />  
<a href="images/checkerflg.gif" target="main">flag</a><br />  
<br />  
</body>  
</html>
```

Frame Target Attribute

- Alternatively, you can use the "target" attribute to escape a framed environment altogether.
- In the example below, the "target" attribute is set to "_top", telling the browser to load the result in the current browser window and eliminate all frames.
- Now when you click on a link in the left frame, the result will replace the entire browser window, instead of placing the result in a frame.

```
<center>This is<br />menu2.htm<br /></center>
<a href="images/felix.gif" target="_top">felix</a><br />
<a href="images/bugjar.gif" target="_top">bugjar</a><br />
<a href="images/checkerflg.gif" target="_top">flag</a><br />
<br />
</body>
</html>
```

Frame Target Attribute

- You can also preserve your current framed environment and send the link result to a new browser window.
- In the example below, the "target" attribute is set to "_blank", telling the browser to load the result in a new unnamed browser window.
- Now each time you click on a link in the left frame, the result will display in a new browser window (which you must close).

```
... />  
<center>This is<br />menu2.htm<br /></center>  
<a href="images/felix.gif" target="_blank">felix</a><br />  
<a href="images/bugjar.gif" target="_blank">bugjar</a><br />  
<a href="images/checkerflg.gif" target="_blank">flag</a><br />  
<br />  
</body>  
</html>
```

Frame Target Attribute

- Finally, you can also preserve the current framed environment and send the link result to a named browser window.
- In the example below, the "target" attribute is set to "top," telling the browser to load the result in a new browser window and name it "top."
- You can use any target name, excluding the special names previously discussed.
- The "target" attribute also works outside of a framed environment, but every request for a target that doesn't exist will generate a new browser window.

```
<center>This is<br />menu2.htm<br /></center>  
<a href="images/felix.gif" target="top">felix</a><br />  
<a href="images/bugjar.gif" target="top">bugjar</a><br />  
<a href="images/checkerflg.gif" target="top">flag</a><br />  
<br />  
</body>
```

When to use frames?

- Frames seem to be very appealing, particularly to new Webmasters, and are often used whether there's a good reason or not. It is important to note that, because of the drawbacks listed below, most experienced Web designers rarely, if ever, use frames.
 1. Frames can take up a lot of screen real estate.
 2. Frames are not compatible with all browsers.
 3. Navigation may be inaccessible at lower screen resolutions.
 4. Framed Web sites entered from a page other than the main frame definition page can be impossible to navigate.

Menu Bar Design

- The most popular frame design is the "menu bar design," where there is a clickable button bar in the left frame and the main Web site in the larger right frame.
- For good menu bar design, the following measures should be taken:
 1. Make sure the button bar menu does not extend lower than can be viewed at 640x480 screen resolution.
 2. Include navigation links on the page in the right frame to insure that the site can be navigated in the menu bar's absence.
 3. Use `<noframes>` `</noframes>` tags to insure compatibility with all browsers.
 4. Make sure your menu bar doesn't use too much screen real estate.

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- The best advice for new Webmasters is to find a well-functioning set of frames defined by someone else and adapt the source code.