## Lecture Notes ENGR 0011

**HTML Basics** 

Section 3.12: Frames

### Frames in HTML

- Divides browser window into sections
- Each section displays a separate HTML file
- Allows you to display more than one html file or page on the screen
- Can "freeze" some material while scrolling other material



- Frames are established by a primary HTML file (can be the index.html file)
- In the primary file, a framed document is declared with the <FRAMESET> </FRAMESET> tag
- The <FRAMESET> tag is <u>in place of</u> the <BODY> tag
- The <FRAMESET> tag will be ignored if any text or body tags are included before it
- The primary frame file will be very short, only containing the information necessary to setup the frames and specify what HTML files will be shown within them

### **COLS** and **ROWS** Attributes

- Used within <FRAMESET> tag to specify structure of frameset
- <FRAMESET cols=3 rows=2> will generate a grid of 6 frames in 2 rows each with three columns
- Number and width of columns is specified by setting COL equal to a list of width specifications, with the number of specifications corresponding to the number of columns
- Example: COLS="100, 60%, \*"
  - This command establishes that there will be three columns of frames with the first being 100 pixels, the second being 60% of window, and the third being the remainder
- The number of rows and their heights is specified in same way.
- Caution should be used with the use of number of pixels only use when pixel dimensions are required
- Probably best to do something like: COLS="20%, 40%, 40%"
- or something like: COLS="20%, 50%, \* "

### <FRAME> Tag

- Used within <FRAMESET> </FRAMESET> tags to specify contents of a given frame
- There must be the same number of <FRAME> tags as are specified by COLS and ROWS attributes
- Within the <FRAME> tag, the SRC attribute is used to specify the location and name of HTML file which is to be displayed within that frame (so the source of the information to be displayed there)
- Example: <FRAME SRC="header.html">
- Location of the file can have a path if not located in the same directory as the main file
- <FRAME> tag does NOT require an end tag
- Be wary of using more than 3 frames on a screen at one time

## Example of Basic Frameset File

```
<html>
<head>
<title>Basic Example of Framesets</title>
</head>
<frameset cols="20%,50%,*">
      <frame src="left.html">
      <frame src="middle.html">
      <frame src="right.html">
</frameset>
</html>
```

Notice
there is NO
<body> tag!!

Let's look at this: Example1

## Things That Can Cause Problems

- Tags or text before first frameset tag
- Not closing quotes
- Misspelling frameset
- Not having correct number of frames
- There may still be some browsers (particularly on PDAs and cell phones) that do not support frames You may choose to provide content for this within the <noframes> and </noframes> tags. It can be a simple statement directing the users to use a browser that supports frames or it can be a link to a webpage with similar content that does not contain frames.
- See the engr 11 web page source code

#### **Nested Framesets**

To have a row with different number of columns than the row above requires nested framesets

```
<html>
<head>
<title>Example of Framesets</title>
</head>
<frameset rows="50%,*">
       <frame src="top.html">
       <frameset cols="*,*,*"> ←
               <frame src="left.html">
               <frame src="middle.html">
               <frame src="right.html">
       </frameset>←
</frameset>
</html>
```

**Browser Window** 

Top.html

left. middle. right. html html

Note that nested 
<frameset> </frameset> 
functions as a single 
<frame> tag

Lets look at this: Example2

#### STYLE ATTRIBUTES

- FRAMEBORDER = "NO" or "YES", 0 or 1
  - Can be used with both FRAMESET and FRAME to specify if frames will have 3D borders
- BORDER = "pixels"
  - Can be used with both FRAMESET and FRAME to specify width of border in pixels (border=0 eliminates frame borders)
- FRAMESPACING="pixels"
  - Used with FRAMESET tag to set space between frames (same as BORDER)
- BORDERCOLOR="#000000"
  - Can be used with both FRAMESET and FRAME to specify color of frame borders
- MARGINWIDTH & MARGINHEIGHT
  - Used with FRAME tag to specify margins in pixels within frames
- NORESIZE
  - Used with FRAME attribute to fix the size of a frame

## Notes on Framespacing & Border

- To control how much space is between the frames (that is, how big are the borders) use FRAMESPACING or BORDER. These are actually the same attribute but not all browsers understand both. You can use both to be safe.
- The most common use of **FRAMEBORDER**, **FRAMESPACING**, and **BORDER** is to create a page with no space between the borders. To do this, set...

FRAMEBORDER = NO FRAMESPACING = 0 BORDER = 0

# Displaying a link from one frame in another frame – FRAME NAMES & TARGETS...

- To have the file of a link in one frame open in another frame
  - The frame in which the file is to be opened must be named with NAME attribute
    - <frame src="right2.html" name="right">
  - The link must specify the target window in which to open linked file, so in the file "right2.html", I might have:
    - <a href="http://www.pitt.edu" target="right">Click here to go to Pitt's website</a>

### **Target Names**

- Target = "\_self"
  - Opens target file over just the frame in which link is located
- Target = "\_parent"
  - Opens target file over frameset in which frame containing link is located; if this frameset is nested within another, only the nested frameset will be covered
- Target = "\_top"
  - Opens target file in full window, overriding all frames
- Target = "\_blank"
  - Opens target file in a new browser window