

# HTML - Frames

# What are Frames?

- Frames allow **independent** navigation and content to two (or more) locations on a single browser screen
- Frames allow multiple "windows" in a single browser page

# Advantages / Disadvantages of Frames

- Advantages
  - Allow multiple content on a single page
  - Allow linked content (such as a table of contents)
  - Allow separate scrollable regions on a page
- Disadvantages
  - Breaks down the traditional 1 file equals 1 web-page linkage
  - Adds considerable complexity to the coding process
  - Implementation is fairly browser specific
  - Errors can be extremely difficult to identify

# Basics of Frame Design - content of frame1.htm file

```
<HTML>
```

```
<HEAD><TITLE>Frame example</TITLE></HEAD>
```

```
<FRAMESET ROWS="100, *">
```

```
  <FRAME NAME="top_row" SRC="frame1top.htm">
```

```
  <FRAME NAME="bottom_row" SRC="frameintro.htm">
```

```
</FRAMESET>
```

```
</HTML>
```

# Basics of Frame Design - content of frame1.htm file

```
<HTML>
<HEAD><TITLE>Frame example</TITLE></HEAD>
<FRAMESET ROWS="100, *">
  <FRAME NAME="top_row" SRC="frametop.htm">
  <FRAME NAME="bottom_row" SRC="frameintro.htm">
</FRAMESET>
</HTML>
```

Notice - there is NOT a `<BODY> ... </BODY>` tag set in the frame definition. This is NOT a mistake in the example code.

# Basics of Frame Design - Defining the frameset

```
<HTML>
<HEAD><TITLE>Frame example</TITLE></HEAD>

<FRAMESET ROWS="100,*">
  <FRAME NAME="top_row" SRC="frame1top.htm">
  <FRAME NAME="bottom_row" SRC="frameintro.htm">
</FRAMESET>

</HTML>
```

**The Frameset tags define that this frame will have two rows. The top row will be 100 pixels tall, the second row will receive whatever space remains.**

# Basics of Frame Design

## Defining the top row

```
<HTML>
<HEAD><TITLE>Frame example</TITLE></HEAD>

<FRAMESET ROWS="100, *">
  <FRAME NAME="top_row" SRC="frame1top.htm">
  <FRAME NAME="bottom_row" SRC="frameintro.htm">
</FRAMESET>

</HTML>
```

**The FRAME tags define the two rows of the frame.**  
**The name entry is technically optional, but highly recommended. The SRC tag defines the content of the frame when the frameset is initially loaded.**

# Content of frame1top.htm file

[illegible]



# Basics of Frame Design

## Defining the bottom row

```
<HTML>
<HEAD><TITLE>Frame example</TITLE></HEAD>
<FRAMESET ROWS="100,*">
  <FRAME NAME="top_row" SRC="frame1top.htm">
    <FRAME NAME="bottom_row" SRC="frameintro.htm">
</FRAMESET>
</HTML>
```

**This Frame tag defines the bottom of the browser window, which will be the "large size" window on the screen.**

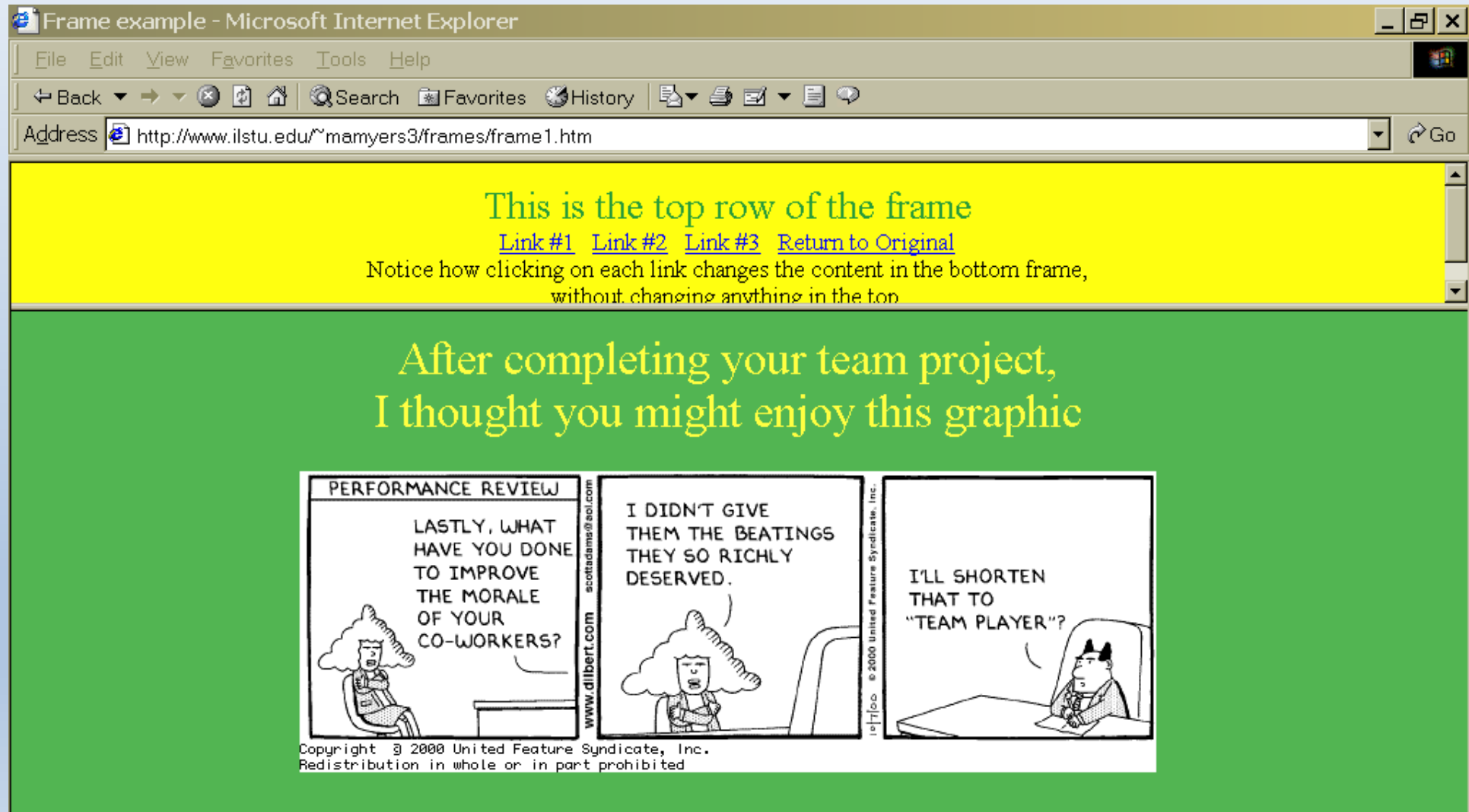
**The name entry (bottom\_row) shows up in links in the frame1top.htm file.**

**The initial content of the is defined in the SRC tag entry.**

# Content of frameintro.htm file

```
<HTML>
<HEAD><TITLE>This is the introduction content
</TITLE></HEAD>
<BODY bgcolor="#52B552">
<CENTER>
<P><FONT SIZE="+3" color="#FFFF42">
After completing your team project, <BR>
I thought you might enjoy this graphic<P>
<IMG SRC="images/dilbert_team_player.gif"
      ALT="A Dilbert Cartoon on Teams"><BR>
</P>
</BODY>
</HTML>
```

# Opening of frame page



# How the links in `frame1top.htm` function

{content removed for space purposes}

**This is the top row of the frame**

```
<A HREF="framecontent1.htm" TARGET="bottom row">
```

**Link #1**

```
<A HREF="framecontent2.htm" TARGET="bottom row">
```

**Link #2**

```
<A HREF="framecontent3.htm" TARGET="bottom row">
```

**Link #3**

```
<A HREF="frameintro.htm" TARGET="bottom row">
```

**Return to Original**

{content removed for space purposes}

The link has the HREF="..." entry we have used earlier this semester.

The new item is the TARGET="bottom\_row" entry.

The TARGET name references the FRAME name defined in the original frameset definition.

# Basics of Frame Design - content of frame1.htm file

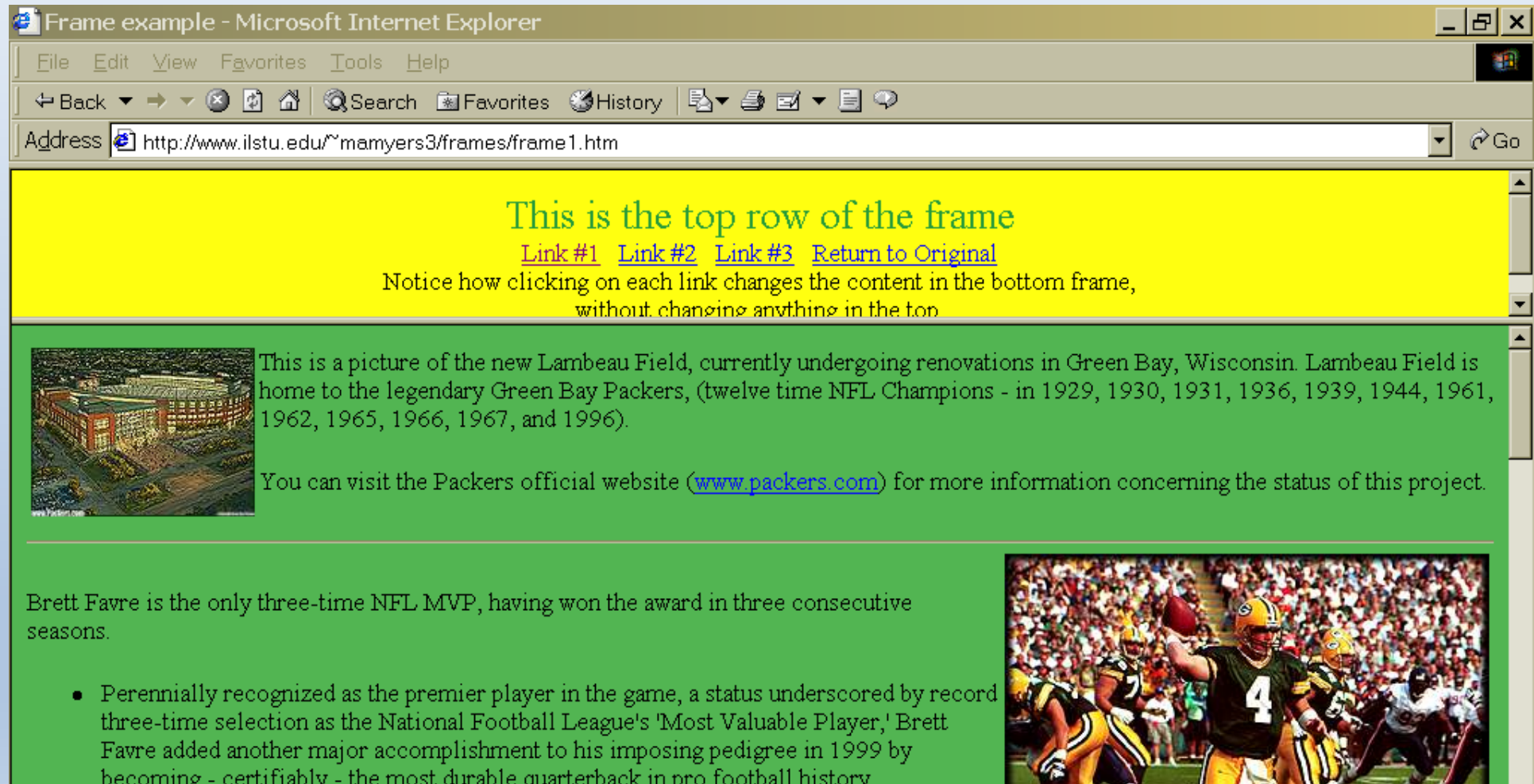
```
<HTML>
<HEAD><TITLE>Frame example</TITLE></HEAD>

<FRAMESET ROWS="100, *">
  <FRAME NAME="top_row" SRC="frame1top.htm">
  <FRAME NAME="bottom_row" SRC="frameintro.htm">
</FRAMESET>

</HTML>
```

↑  
This name is referenced in the links defined in  
The frame1top.htm file.

# Visiting Link #1



# Defining a frameset with columns instead of rows.

```
<HTML>
<HEAD><TITLE>Frame example - Columns</TITLE></HEAD>

<FRAMESET COLS="200, *">
    <FRAME NAME="left_side" SRC="frame2menu.htm"
        SCROLLING="yes">
    <FRAME NAME="right_side" SRC="frameintro.htm"
        SCROLLING="yes">
</FRAMESET>

</HTML>
```

# The substantive changes are highlighted.

```
<HTML>
<HEAD><TITLE>Frame example - Columns</TITLE></HEAD>

<FRAMESET COLS="200,*">
  <FRAME NAME="left_side" SRC="frame2menu.htm"
        SCROLLING="yes">
  <FRAME NAME="right_side" SRC="frameintro.htm"
        SCROLLING="yes">
</FRAMESET>

</HTML>
```



# Left-side menu content of frame2menu.htm file

```
<HTML>
<HEAD>
<TITLE>This is the left side content</TITLE>
</HEAD>
<BODY bgcolor="#FFFF10">
<CENTER>
<P><FONT size="+1" color="#299C39">
This is the table of contents listings for
the left side frame<BR></FONT>
</CENTER>
```

***{MORE CONTENT ON THE NEXT PAGE}***

# Left-side content (continued)

```
<UL>
<LI><A HREF="framecontent1.htm" TARGET="right_side">
Link #1</A><BR>Packer graphics page.</LI>
<LI><A HREF="framecontent2.htm" TARGET="right_side">
Link #2</A><BR>Packer schedule page.</LI>
<LI><A HREF="framecontent3.htm" TARGET="right_side">
Link #3</A><BR>Myerscough Websume Page.</LI>
<LI><A HREF="frameintro.htm" TARGET="right_side">
Return to Original</A><BR>Being a team member</LI>
</UL>
<P>
Notice how clicking on each link changes the content
in the right side frame,<BR>
without changing anything in the left side.</P>
</BODY>
</HTML>
```

# Defining table of contents as a list

```
<UL>
```

```
<LI><A HREF="framecontent1.htm" TARGET="right_side">  
Link #1</A><BR>Packer graphics page.</LI>
```

```
<LI><A HREF="framecontent2.htm" TARGET="right_side">  
Link #2</A><BR>Packer schedule page.</LI>
```

```
<LI><A HREF="framecontent3.htm" TARGET="right_side">  
Link #3</A><BR>Myerscough Websume Page.</LI>
```

```
<LI><A HREF="frameintro.htm" TARGET="right_side">  
Return to Original</A><BR>Being a team member</LI>
```

```
</UL>
```

```
<P>
```

```
Notice how clicking on each link changes the content  
in the right side frame,<BR>  
without changing anything in the left side.</P>
```

```
</BODY>
```

```
</HTML>
```

# Defining each of the hyperlinks (Note the target names in each)

```
<UL>
```

```
<LI><A HREF="framecontent1.htm" TARGET="right_side">
```

```
Link #1</A><BR>Packer graphics page.</LI>
```

```
<LI><A HREF="framecontent2.htm" TARGET="right_side">
```

```
Link #2</A><BR>Packer schedule page.</LI>
```

```
<LI><A HREF="framecontent3.htm" TARGET="right_side">
```

```
Link #3</A><BR>Myerscough Websume Page.</LI>
```

```
<LI><A HREF="frameintro.htm" TARGET="right_side">
```

```
Return to Original</A><BR>Being a team member</LI>
```

```
</UL>
```

```
<P>
```

```
Notice how clicking on each link changes the content  
in the right side frame,<BR>
```

```
without changing anything in the left side.</P>
```

```
</BODY>
```

```
</HTML>
```

# Column-format displayed

Frame example - Columns - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites History

Address <http://www.ilstu.edu/~mamyers3/frames/frame2.htm> Go

This is the table of contents listings for the left side frame

- [Link #1](#)  
Packer graphics page.
- [Link #2](#)  
Packer schedule page.
- [Link #3](#)  
Myerscough Websume Page.
- [Return to Original](#)  
Being a team member

Notice how clicking on each link changes the content in the right side frame,

After completing your team project,  
I thought you might enjoy this graphic

# Options in defining the framesets

**<FRAMESET ROWS="100,\*">**

Defines a two row frameset, the top row will be 100 pixels tall, the second row receives the remaining space on the screen.

**<FRAMESET ROWS="1\*,4\*">**

Defines a two row frameset, where the bottom row will always be 4 times larger than the top row, regardless of browser window.

<http://www.ilstu.edu/~mamyers3/frames/frame3.htm> demonstrates this setting.

# More options in defining the framesets

**<FRAMESET ROWS="100,\* ,75">**

Defines a three row frameset.

The top row will be 100 pixels tall, the bottom row will be 75 pixels tall. The middle row will receive whatever space remains.

**<FRAMESET ROWS="200,100">**

**NOT A RECOMMENDED APPROACH.**

This setting does not provide for a "rest of the browser window" setting. The net effect is that the top row will always be twice as large as the bottom row - since 200 is twice as large as 100.

**ALWAYS** allow for a wildcard (\*) setting for the rest of the browser window.

# Defining column settings

- Follows the same principles as row definitions
- Columns are defined in left to right order
- Same issue on wildcard settings - always allows for one



# A row and column example

