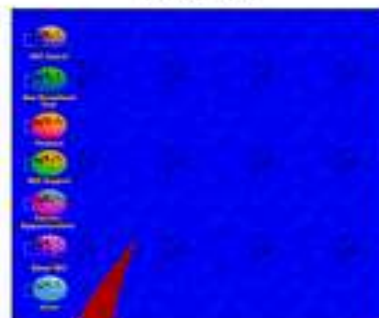


# Frames

- Frames allow **more than one Web page** at a time to be **displayed within the browser window**
- When frames are used, the **page opened** in the browser **contains instructions** about
  - **how the browser window is to be divided** into **separate regions**
  - **which page** should **be initially displayed** into each region.

Toolbar.html



Products.html



Both files are joined into a single page using frames

# Good things about frames

- **Elements that the user should always see**, such as control bars, copyright notices, and title graphics can be **placed in a static frame**. As the user navigates the site in "live" frames, the static frame's contents remain fixed
- **Table of contents** are more functional
- Frames side-by-side design allows **queries to be posed and answered on the same page**, with one frame holding the query form, and the other presenting the results.

# Bad things about frames

- Not all browsers support frames
- Search engines don't deal well with frames
- Printing become more difficult
- Creating browser bookmarks may not work
- Saving pages may be more complicated

Many of these problems are technology issues. Once a solution (and a standard) is found, frames may become more attractive.

# Examples

## **Sites that use frames:**

- [BMW](#)
- [Microsoft Library](#)
- [DePaul University calendar](#)

## **Some sites that moved to a frame-free design:**

- [Amazon.com](#)
- [CTI](#)
- [Gap.com](#)

## 7. FRAMES

### INTRODUCTION TO FRAMES

Until now each web page when opened takes over the entire browser screen. The browser screen could not be split into separate (unique) sections, showing different but related information.

The HTML tags 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.

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 `<FRAMESET>` Tag

The splitting of a browser screen into frames is accomplished with the `<FRAMESET>` and `</FRAMESET>` tags embedded into the HTML document. The `<FRAMESET>` ... `</FRAMESET>` tags require one of the following two attributes depending on whether the screen has to be divided into rows or columns.

<b>Rows</b>	This attribute is used to divide the screen into multiple rows. It can be set equal to a list of values. Depending on the required size of each row. The values can be: <ul style="list-style-type: none"><li><input type="checkbox"/> A number of pixels</li><li><input type="checkbox"/> Expressed as a percentage of the screen resolution</li><li><input type="checkbox"/> The symbol *, which indicates <i>the remaining space</i>.</li></ul>
<b>Cols</b>	This attribute is used to divide the screen into multiple columns. It can be set equal to a list of values. Depending on the required size of each column. The values can be: <ul style="list-style-type: none"><li><input type="checkbox"/> A number of pixels</li><li><input type="checkbox"/> Expressed as a percentage of the screen resolution</li><li><input type="checkbox"/> The symbol *, which indicates <i>the remaining space</i>.</li></ul>

Table 7.1

#### Example:

<code>&lt;FRAMESET Rows="33%,33%,33%"&gt;</code>	-- Divides the browser screen into 3 equal <u>Horizontal</u> sections.
<code>&lt;FRAMESET Cols="50%,50%"&gt;</code>	-- Splits the 1 <sup>st</sup> Horizontal Section into 2 equal <u>Vertical</u> sections.
<code>&lt;/FRAMESET&gt;</code>	
<code>&lt;FRAMESET Cols="50%,50%"&gt;</code>	-- Splits the 2 <sup>nd</sup> Horizontal section into 2 equal <u>Vertical</u> sections
<code>&lt;/FRAMESET&gt;</code>	
<code>&lt;/FRAMESET&gt;</code>	

#### The `<FRAME>` Tag

Once the browser screen is divided into rows (Horizontal Sections) and columns (Vertical Sections), each unique section defined can be loaded with different HTML documents. This is achieved by using the `<FRAME>` tag, which takes in the following attributes:



<b>SRC="url"</b>	Indicates the URL of the document to be loaded into the frame.
<b>MarginHeight="n"</b>	Specifies the amount of white space to be left at the top and bottom of the frame.
<b>MarginWidth="n"</b>	Specifies the amount of white space to be left along the sides of the frame.
<b>Name="name"</b>	Gives the frame a unique name so it can be targeted by other documents. The name given must begin with an Alphanumeric character.
<b>Noresize</b>	Disables the frames resizing capability.
<b>Scrolling</b>	Controls the appearance of horizontal and vertical scrollbars in a frame. This takes the values YES / NO / AUTO.

Table 7.2

#### Example 1:

<HTML>

<FRAMESET Rows = "30%, \*">

<FRAMESET Cols = "50%, 50%">

<FRAME Src="File1.html">

<FRAME Src="File2.html">

</FRAMESET>

<FRAMESET Cols="50%, 50%">

<FRAME Src="File3.html">

<FRAME Src="File4.html">

</FRAMESET>

</FRAMESET>

</HTML>

- Divides the screen into 2 rows, one occupying 30% of the screen, and the other occupying the remaining space, i.e. 70% of the screen.
- Divides the 1st row into 2 equal columns, each 50% of the screen.
- Loads the 1st frame with **file1.html**.
- Loads the 2nd frame with **file2.html**.
- Divides the 2nd row into 2 equal columns, 50% of the screen.
- Loads the 1st frame with **file3.html**.
- Loads the 2nd frame with **file4.html**.

#### Output For Example 1:

#### Targeting Named Frames

Whenever a hyperlink, which loads a document in a frame is created, the file referenced in the hyperlink will be opened and will replace the current document that is in the frame.

In a situation where the new document needs to be opened in a different frame while keeping the document from which the new document was navigated open in a different frame, a simple HTML coding technique must be used.

Since the hyperlink must open an HTML file in another frame, the frame in which the HTML file is to be opened needs to be named. This is done by using the NAME attribute of the <FRAME> ... </FRAME> tags. The NAME takes one parameter, which is its frame name.

The hyperlink tag will have to be supplied with the following information

1. The *filename.htm* file that has to be opened (*navigated to*).
2. The name of the frame where the *filename.htm* file has to be opened.

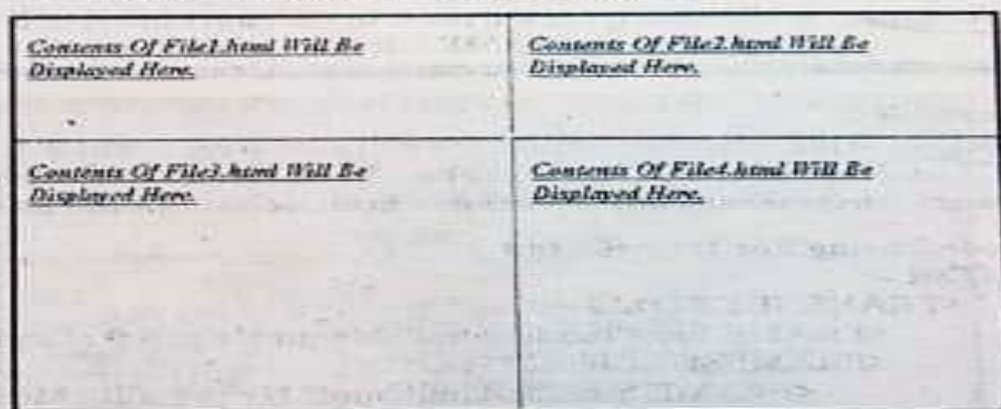


Diagram 7.1

# HTML Frames

- When frames are used, the HTML document has a different structure. There is no <BODY> tag, since a frame display the content of other pages.

<HTML>

<HEAD><TITLE></TITLE><HEAD>

<FRAMESET> (How many frames you will use)

<FRAME SRC="URL"> (The page to be displayed in the first frame)

<FRAME SRC="URL">

</FRAMSET>

</HTML>

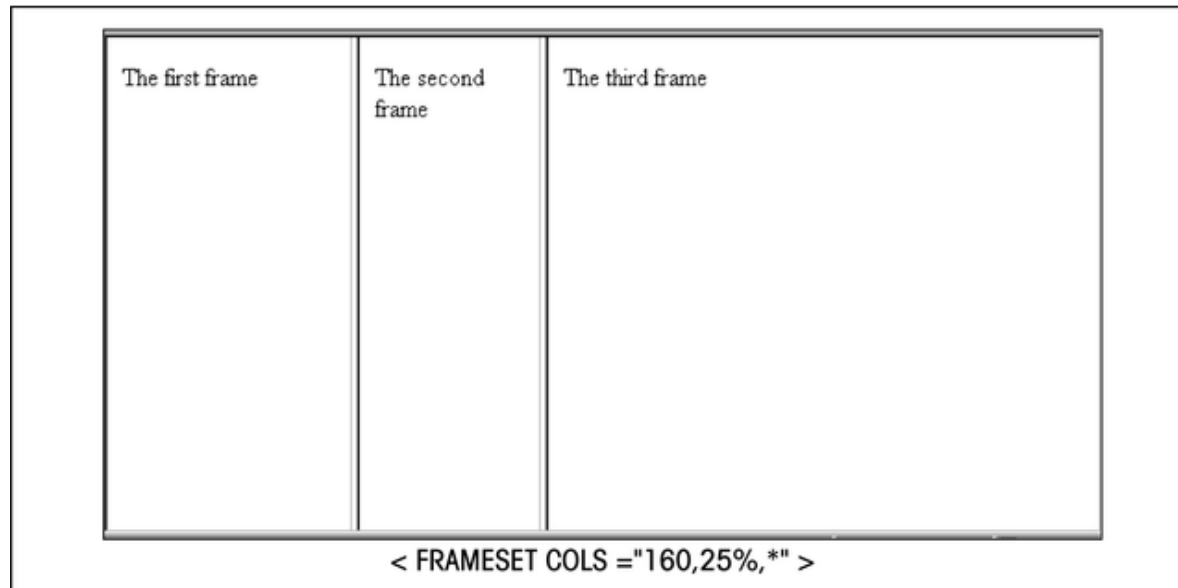


# <FRAMESET> Attributes

- **COLS**=“160,25%,\*”> a 3 columns frameset.
  - The 1<sup>st</sup> is 160pixels wide
  - The 2<sup>nd</sup> is 25% of the width of the display area
  - The 3<sup>rd</sup> covers the remaining space
- **ROW**=“row height 1, row height 2 ..”>

# The <FRAME> tag

- `<FRAME SRC="URL">` URL is the name of the page to be displayed in this frame. If you have a 3 columns frameset you need 3 `<FRAME SRC>`



# <FRAME> Attributes

- **FRAMEBORDER = 1 | 0>**
  - 1: draws a separator between this frame and every adjoining frame, default value
  - 0: no separator between this frame and every adjoining frame
- **SCROLLING = auto | yes | no>**
  - Set to "**no**" to prevent scroll bars
- **NORESIZE >**
  - prevents user from resizing the frames

# More <FRAME> Attributes

- **NAME** = frame\_name>
    - Identifies each frame in the frameset
    - Is used to identify that frame when we want to display a page within that frame.
- <A **HREF**=“URL” **TARGET**= frame\_name>
- **Frame\_name** can be any single word except the following

# Reserved TARGET names

- **TARGET = "\_blank"** loads page in a new blank browser window (no frame)
- **TARGET = "\_self"** loads page in the same frame as anchor element. The default.
- **TARGET = "\_parent"** loads page in the parent FRAMESET
- **TARGET = "\_top"** loads page in the full browser window. This should be the choice for external links



The attribute, via which the frame name is specified is the Target attribute, which is a part of the <A>...</A> tag. This information is given as:

```
Target = "<Frame_Name>"
```

The attribute, via which the HTML file name is specified is the HRef attribute which is a part of the <A>...</A> tag. This information is given as:

```
<A HRef="index.html" Target="Main">Visit us</A>
```

**Example:****Frame Identification:**

```
<FRAMESET Cols = 30%, 70%>
  <FRAME Name="Part">
  <FRAME Name="Main">
</FRAMESET>
```

The above command will divide the browser screen into two vertical frames the first frame called **Part** that will occupy 30% of the browser area and the second frame called **Main** will occupy 70% of the browser area.

**Hyperlink Specification:**

```
<A HRef="Index.html" Target="Main">Visit us</A>
```

Here, an HTML file called **Index.html** is loaded into the frame named **Main** when the hyperlink Visit us is clicked.

**Note**

While specifying the name of the target frame in the TARGET attribute, the case must be same as specified in the NAME attribute of the <A> </A> tag.

**Example 2:**

The following example divides the browser screen into 3 frames. The need is to give information about SCT staff. The startup file is **frames.html**, which loads three different documents in the three different frames. These documents are **header.html**, **setfamil.html** and **desc.html**.

**Code Listing For frames.html**

```
<HTML>
  <FRAMESET ROWS = "70, *">
    <FRAME Src="header.html" MarginHeight=0 MarginWidth=0 Name="FRAME1">
    <FRAMESET Cols="35%, *">
      <FRAME Src="setfamil.html" Name="FRAME2">
      <FRAME Src="desc.html" Name="FRAME3">
    </FRAMESET>
  </FRAMESET>
</HTML>
```

**Note**

When <FRAMESET> is being coded within an HTML document, the <BODY> </BODY> tags are not used.

### Code Listing For header.html

```
<HTML>
<BODY Background = "../images/texture1.gif">
  <FONT Face = "Comic Sans MS"><BR>
  <CENTER><H2>The SCT Family</H2></CENTER>
</BODY>
</HTML>
```

### Code Listing for sctfamil.html

```
<HTML>
<BODY Background="../images/texture1.gif"><BR><BR>
  <CENTER><IMG Height=175 Src="../images/sctfamil.gif" Width=150></CENTER>
</BODY>
</HTML>
```

### Code Listing for desc.html

```
<HTML>
<BODY Background="../images/texture1.gif"><BR><BR>
  <B><UL>
    <LI>Mr Ivan Bayross (CEO)
    <LI>Mrs Cynthia Bayross (MD)
    <LI>Miss Mita Engineer (GMS)
    <LI>Mrs Melba Mehta (Sr. Admin Executive)
    <LI>Miss Vaishali Bhayani (Programmer)
    <LI>Mr Ajay Lulia (Programmer)
    <LI>Miss Shilpa Ratwani (Programmer)
    <LI>Miss Jyoti V. (HR Manager)
    <LI>Mr Milind Parab (Marketing Executive)
  </UL></B>
</BODY>
</HTML>
```

### Output For Example 2:



Diagram 7.2

### FOCUS

The DEPL site will now have a starting page as a brief introduction of the company, consisting of Log Name and what the company does in a few words.

The starting page should provide hyperlinks, which give more detailed information about a topic. The Company Logo, Name and the site index must always be visible when the site is navigated through.