# topic Ten

HTML Frames

Learning Objectives

- At the end of this chapter the students should be able to:
  - Use frames to divide web page into many independent rectangular sections.
  - Manipulate frame to display multimedia elements.
  - Use frames to combine two or more web pages

WEB.DESIGN

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Introduction

- Frames can divide the screen into separate windows. Each of these windows can contain an HTML document.

- A file that specifies how the screen is divided into frames is called a frameset.

- If you want to make a homepage that uses frames you should:
  - Make an HTML document with the frameset.
  - Make the normal HTML documents that should be loaded into each of these frames.

- When a frameset page is loaded, the browser automatically loads each of the pages associated with the frames.

Consider this example:

- You are given three web pages, which is welcomepage.htm, menupage.htm and bottompage.htm.

- All the web pages must be display in a single windows/frameset based on the following diagram.

- The diagram is divided into three slice, which is menu, main and bottom.

- The size for menu is 120, and bottom is 50 while the size for main is the rest of the screen.

- By using the information given, construct a complete HTML statement:

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MOHAMAD RAHIMI MOHAMAD ROSMAN | http://rahimi.uitm.edu.my
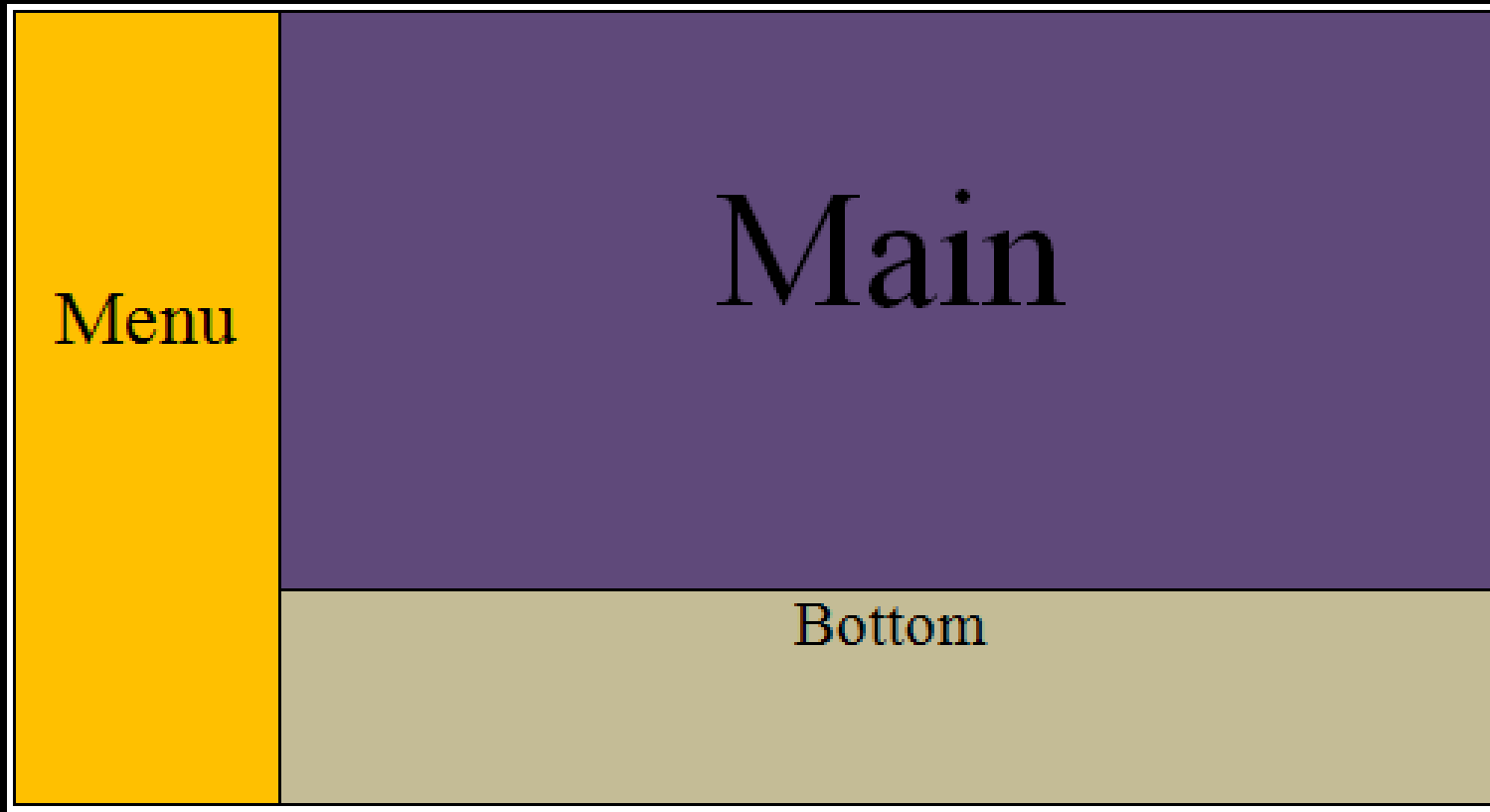
- In order to solve the problem, you must determine how many web pages will be used.
- Previously the question stated that three web pages are used, so you must add **ANOTHER** page, which is the *page for the frameset*.
- Usually the page for the frameset is the starting page for your website, thus we usually named it index.html
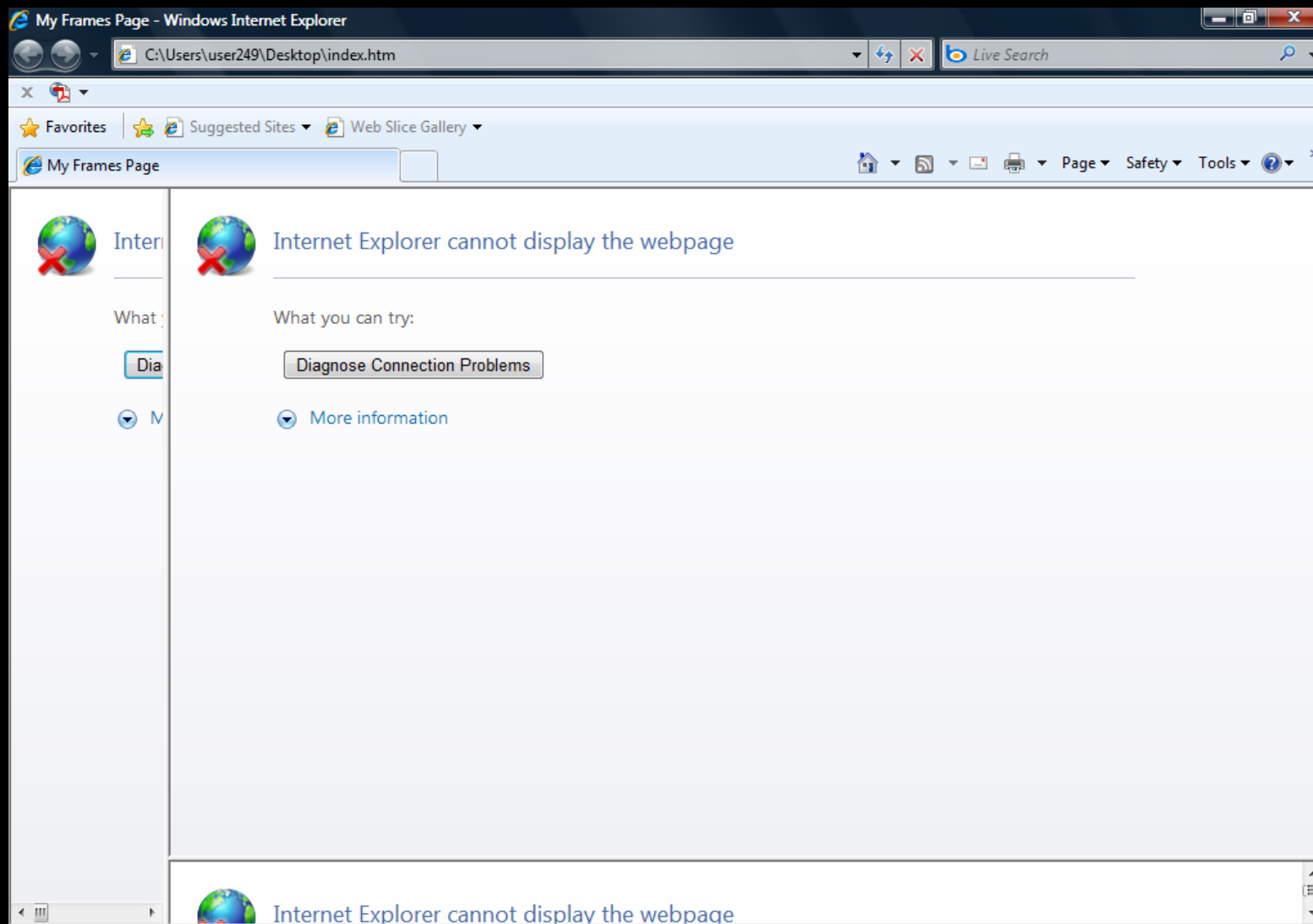
Then, construct the HTML codes for the frameset. Frameset don't have a body tags.

```
<html>
<head>
<title>My Frames Page</title>
</head>
<frameset cols= "120, *">
<frame src= "menupage.htm" name= "menu">
<frameset rows= "*,50">
<frame src= "welcomepage.htm" name= "main">
<frame src= "bottompage.htm" name= "bottom">
</frameset>
</frameset>
```

The frameset code will produce a web page as above figure. You should notice that the page produce an error message. This error occurred because we have not yet written the code for other pages, which are menupage.htm, welcomepage.htm and bottompage.htm.

In order to complete the example below, you have to write three more pages. The first page is menupage.html:

```
menu.html - Notepad
File  Edit  Format  View  Help

<html>
<head>
<title> Welcome to My Site </title>
</head>

<body>
<a href="home.html" target="utama">Home</a><br>
<a href="biodata.html" target="utama">Biodata</a><br>
<a href="family.html" target="utama">Family</a><br>
<a href="education.html" target="utama">Education</a><br>
<a href="gallery.html" target="utama">Gallery</a><br>

</body>
</html>
```

Consider this example:

- Then write another two pages, which is welcomepage.htm and bottompage.htm.
- Put all four files together then click "index.htm" or "index.html" or any name that you give to your frameset.
- It's a good practice to use a standard name and extension for the web page.
- Avoid using a space in the file names because there is some web server that doesn't support long file extension or space within file name.
- Some web server is also case sensitive. They can regard "myFile" as different to "MyFile".

A frameset is simply an HTML document that tells the browser how to divide the screen into split windows

Example of frameset:
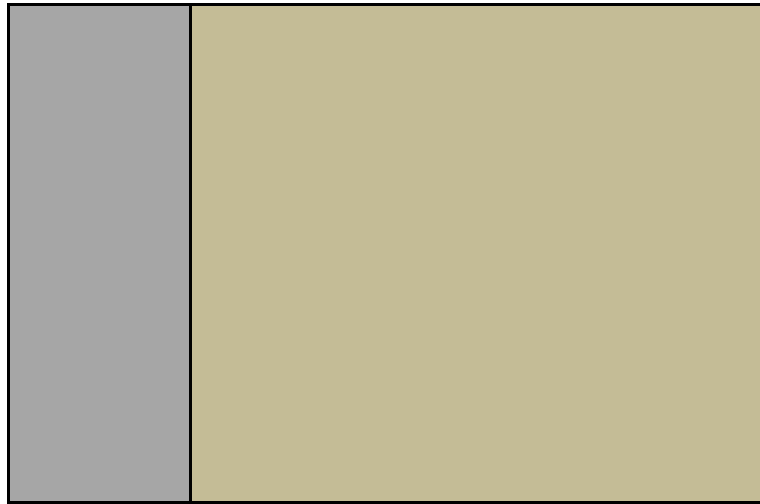
The code would be:

```
<frameset cols= "120, *">
</frameset>
```
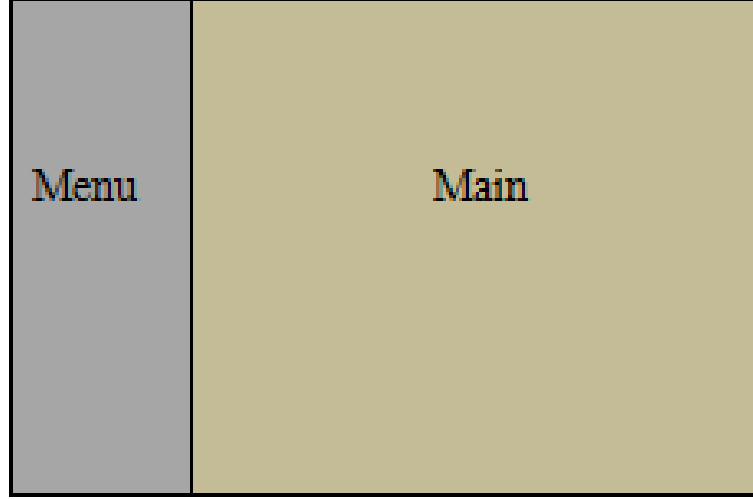
Explanation:
- The screen is divided into two columns (indicated by cols).
- The left being 120 pixels and the right using the rest of the screen (indicated by the *).
- The frame windows would have no names, so the frameset really couldn't be used for any purpose.

Frames: Default Pages

- You can add default pages to frame windows with the *src* setting.

- Default pages are the pages that will be loaded when the frameset is opened the first time.

- Furthermore, we can add names to each frame window using the name setting (compulsory).

- This will allow us to make a link in one frame window, open a page in another frame window.

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Example:

```
<frameset cols= "120, *">

<frame src= "menupage.htm" name= "menu">

<frame src= "welcomepage.htm" name= "main">

</frameset>
```

Menu	Main

Link to other page:

Let just say you want to navigate from home.html to biodata.html. You want the contents of the biodata.html appear in the main section. The syntax for the link is:

```
<a href= "biodata.html" target= "main">Biodata</a>
```

In another situation, you might want to display the contents of the web page in the whole windows, thus navigate away from the frameset. There are two methods that can be used:

Open the page in a new blank page
```
<a href= "biodata.html" target= "_blank">Biodata</a>
```

Open the page in a the current page (navigate away from the frameset)
```
<a href= "biodata.html" target= "_parent">Biodata</a>
```

Frames: Border

- To make frame borders invisible you need to add parameters to the frameset:
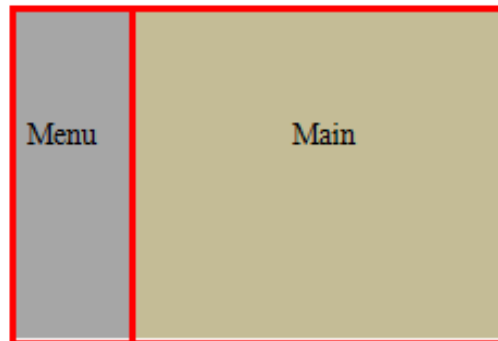
```
<frameset cols= "120, * " frameborder= "0" border= "0" framespacing=
"0">
<frame src= "menupage.htm" name= "menu">
<frame src= "welcomepage.htm" name= "main">
</frameset>
```

The outcome will be as follow:

Menu	Main

Frames: Resizable Border

- Let say that you don't want the frame windows to be resizable because it could affect the design and placement of contents in your web pages.

- In order to prevent that, you should add parameter "noresize" to the frame src lines:

```
<frameset cols= "120, *" frameborder= "0" border= "0" framespacing= "0">
<frame src= "menupage.htm" name= "menu" noresize>
<frame src= "welcomepage.htm" name= "main" noresize>
</frameset>
```

Frames: Scrollbars

- Scrollbars is sometimes necessary but sometimes irritating, thus a good webmaster must make proper used of the scrollbars.

- Let's say you want to display a scrollbar just when it's necessary, in case if the HTML document doesn't fit in the windows:

Disable scrollbar:

```
<frameset cols= "120, *" frameborder= "0" border= "0" framespacing= "0">
<frame src= "menupage.htm" name= "menu" noresize scrolling= "no">
<frame src= "welcomepage.htm" name= "main" noresize scrolling= "no" >
</frameset>
```

Display scrollbar whenever necessary:

```
<frameset cols= "120, *" frameborder= "0" border= "0" framespacing= "0">
<frame src= "menupage.htm" name= "menu" noresize scrolling= "auto">
<frame src= "welcomepage.htm" name= "main" noresize scrolling= "auto" >
</frameset>
```

Always Display scrollbars:

```
<frameset cols= "120, *" frameborder= "0" border= "0" framespacing= "0">
<frame src= "menupage.htm" name= "menu" noresize scrolling= "yes">
<frame src= "welcomepage.htm" name= "main" noresize scrolling= "yes" >
</frameset>
```

Frames: Links Within

- If you have an HTML document with hyperlink on the text "click here" for instance, that links to a page called "register.html" then it appears in the document as:

```
<a href= "register.html">Click Here</a>To Register
```

Frames: Links Within

- Now if the link was in the menu window of our example, and we wanted it to load a page in the main window, the HTML code would be:

```
<a href= "register.html" target= "main">Click Here</a>To Register
```

Frames: Links Within

- We simply added the parameter *target="main"* to the <a href> tag to instruct the navigation so that it would appear in the main window of the frameset.

- Now the link will be opened in the main frame window instead of the menu frame window where the link itself is located.

- Four target names are reserved, and will be interpreted by the browser in this way:

Target	Functions
_blank	loads the page into a new browser window
_self	loads the page into the current window.
_parent	loads the page into the frame that is superior to the frame the hyperlink is in.
_top	cancels all frames, loads in full browser window.

HTML is not a case sensitive programming language. You can have a target with a similar name in your frameset but it's not advisable to do so. Each frame should have a unique name to identify each click.
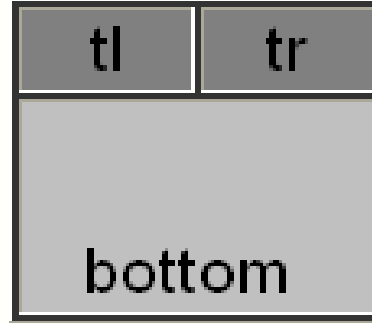
Frameset: Example

On this page you can see examples of different framesets.


```
<frameset rows="16%,84%">
<frame src="top.htm" name="top">
<frame src="bottom.htm" name="bottom">
</frameset>
```

Frameset: Example


```
<frameset rows="16%,84%">
<frameset cols="50%,50%">
<frame src="tl.htm" name="tl">
<frame src="tr.htm" name="tr">
</frameset>
<frame src="bottom.htm" name="bottom">
</frameset>
```

Frameset: Example


```
<frameset rows="16%,84%">
<frame src="top.htm" name="top">
<frameset cols="50%,50%">
<frame src="left.htm" name="left">
<frame src="right.htm" name="right">
</frameset>
</frameset>
```

Frameset: Example


```
<frameset rows="50%,50%" cols="50%,50%">
<frame src="topleft.htm" name="topleft">
<frame src="topright.htm" name="topright">
<frame src="botleft.htm" name="botleft">
<frame src="botright.htm" name="botright">
</frameset>
```

Frameset: Example


```
<frameset rows="50%,50%" cols="50%,50%">
<frame src="topleft.htm" name="topleft">
<frame src="topright.htm" name="topright">
<frame src="botleft.htm" name="botleft">
<frameset rows="50%,50%">
<frameset cols="50%,50%">
<frame src="brtl.htm" name="brtl">
<frame src="brtr.htm" name="brtr">
</frameset>
<frame src="botrbot.htm" name="botrbot">
</frameset>
</frameset>
```

Setting the Border Color

- The bordercolor property can be applied either to an entire set of frames (within the <frameset> tag) or to individual frames (within the <frame> tag).

- The syntax for this property is:

```
<frameset bordercolor= "color ">
```

```
<frame bordercolor= "color ">
```

Using the <noframes> Tag

- In most cases you do not need to include the <body> tags for pages containing frames. However, if you want your page to be viewed by browsers that do not support frames, as well as by those that do, you need to use the <body> tags.

- The difference is that the <body> tags must be placed within a pair of <noframes> tags.

- The <noframes> tag identifies a section of you html file that contains code to be read by frame-blind browsers

```
<html>

<head>

<title>page title</title>

</head>

<frameset>

</frameset>

<noframes>

<body>

</body>

</noframes>

</html>
```

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- If a browser supports frames, it will ignore everything within the <noframes> tags and concentrate solely on the code within the <frameset> tags.

- If a browser doesn't support frames receives this code, it doesn't recognize the <frameset> and <noframes> tags, so it just ignores them.

- However it does know the <body> tags on the page and deals only with them.

- In this way, both types of browsers are supported within a single html file.

- In order to accomplish the <noframes> property, you must create a non framed version of the same page and place it between the body tags.

- For practical purposes, when creating frame web pages you should create both.

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Creating a Frame Layout

- Frame layout is defined using the <frameset> tag.

- The <frameset> tag in this design replaces the <body> tag in a simple page design

```
<html>
<head>
<title>page title</title>
</head>
<frameset>
</frameset>
</html>
```

Creating a Frame Layout

- The <frameset> tag has two properties: rows and cols. you choose only one layout for a single <frameset> tag, either rows or columns.

- You cannot use both properties at once.

- The syntax for specifying the row or column layout for the <frameset> tag is:

```
<frameset rows="row height, row height, row height,...">
<frameset cols="column width, column width, column width,...">
```

Creating a Frame Layout

- Row and column sizes are specified in three ways:
  - Pixels
  - percentage of the total size of the frameset
  - Asterisk - which tells the browser to allocate any unclaimed space in the frameset to the particular row or column.

Creating a Frame Layout

- For example, the tag <frameset rows="160,*"> creates two rows of frames.

- The first row has a height of 160 pixels, and the height of the second is equal to whatever space remains in the display area.

- You can use all three ways of specifying row or column size in a single <frameset> tag.

- The tag <frameset cols="160,25%,*"> creates the series of columns, the first column is 160 pixels wide, the second column is 25% of the display area, and the third column covers whatever space is left.

Exercise

- Create a folder, put your named and uitm id as the folder name, then copy the following file from your last exercise.
  - index.html, rename to home.html
  - family.html
  - education.html
  - gallery.html
  - biodata.html

File   Edit   View   Favorites   Tools   Help

Back   Search   Folders

Address   C:\Documents and Settings\Raimi\Desktop\Week5   Go

File and Folder Tasks

Make a new folder
Publish this folder to the Web
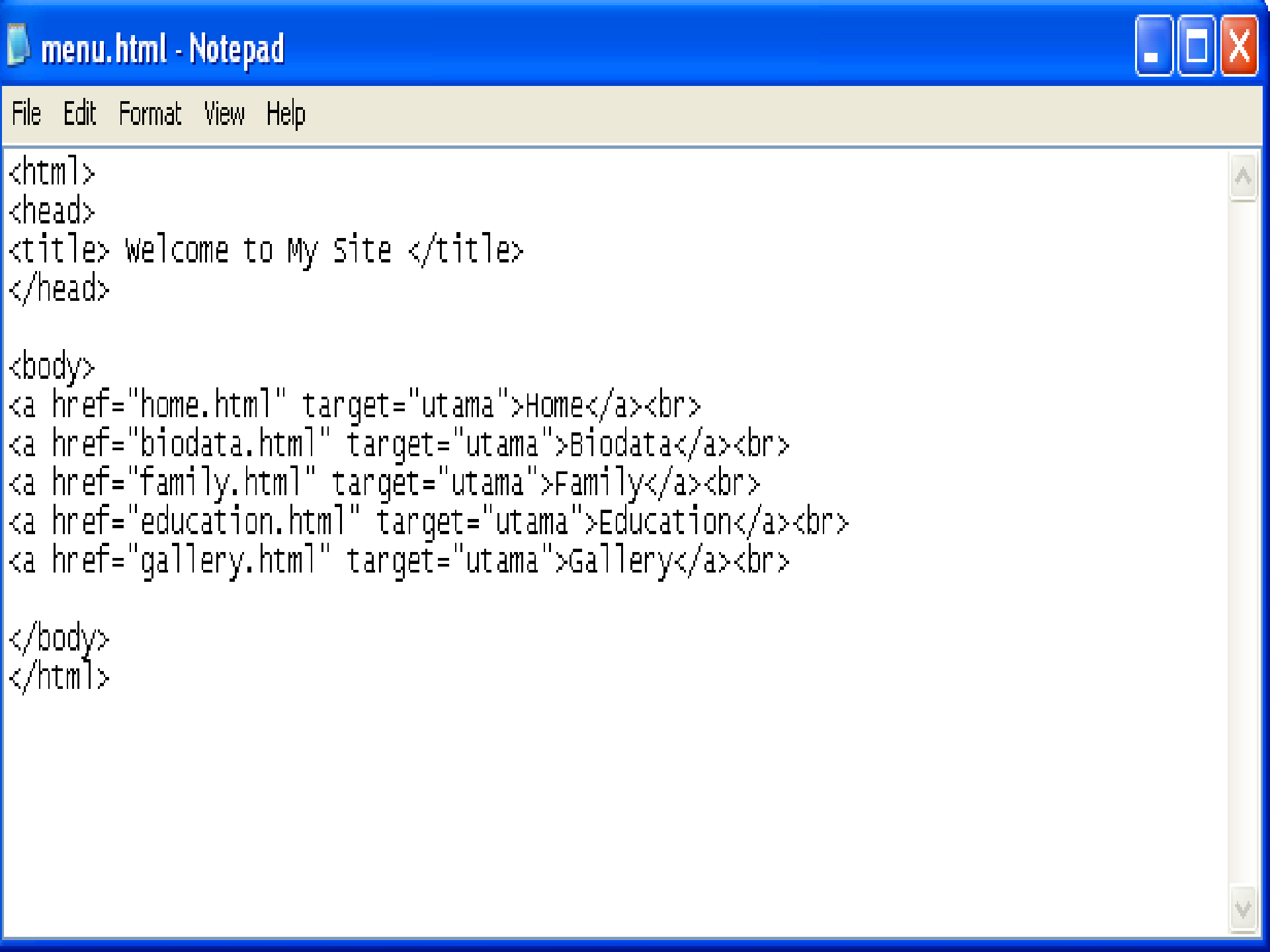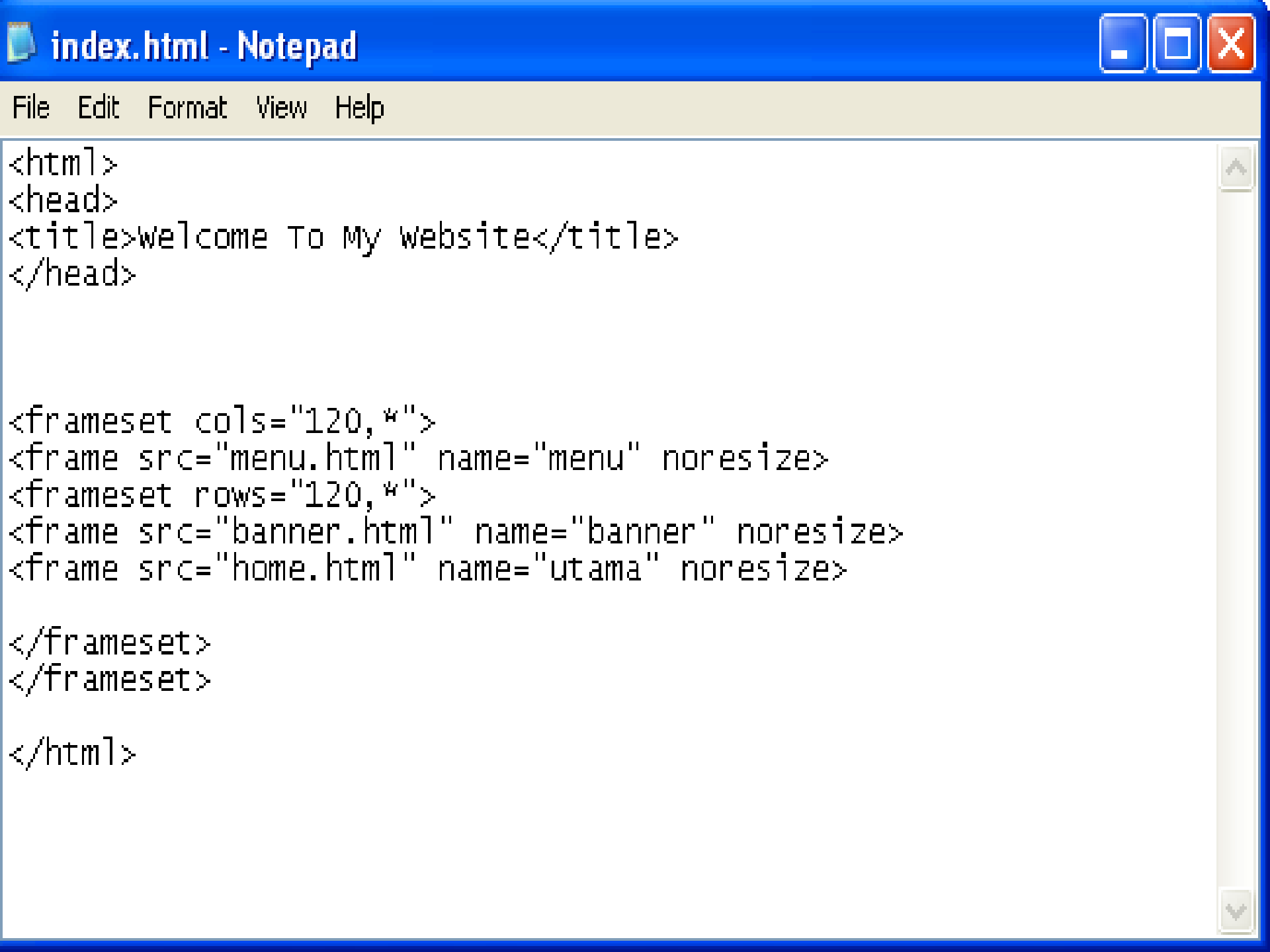Share this folder

Other Places

Desktop
My Documents
Shared Documents
My Computer
My Network Places

Details

Week5
File Folder

Date Modified: Today, January 26, 2008, 11:38 AM

images
File Folder

banner.swf
Flash Movie
10 KB

banner.html
HTML Document
1 KB

biodata.html
HTML Document
1 KB

education.html
HTML Document
1 KB

family.html
HTML Document
1 KB

gallery.html
HTML Document
1 KB

home.html
HTML Document
1 KB

index.html
HTML Document
1 KB

menu.html
HTML Document
1 KB

```
menu.html - Notepad

File  Edit  Format  View  Help

<html>
<head>
<title> Welcome to My Site </title>
</head>

<body>
<a href="home.html" target="utama">Home</a><br>
<a href="biodata.html" target="utama">Biodata</a><br>
<a href="family.html" target="utama">Family</a><br>
<a href="education.html" target="utama">Education</a><br>
<a href="gallery.html" target="utama">Gallery</a><br>

</body>
</html>
```

File   Edit   Format   View   Help

```
<html>
<head>
<title>welcome To My website</title>
</head>


<frameset cols="120,*">
<frame src="menu.html" name="menu" noresize>
<frameset rows="120,*">
<frame src="banner.html" name="banner" noresize>
<frame src="home.html" name="utama" noresize>

</frameset>
</frameset>

</html>
```
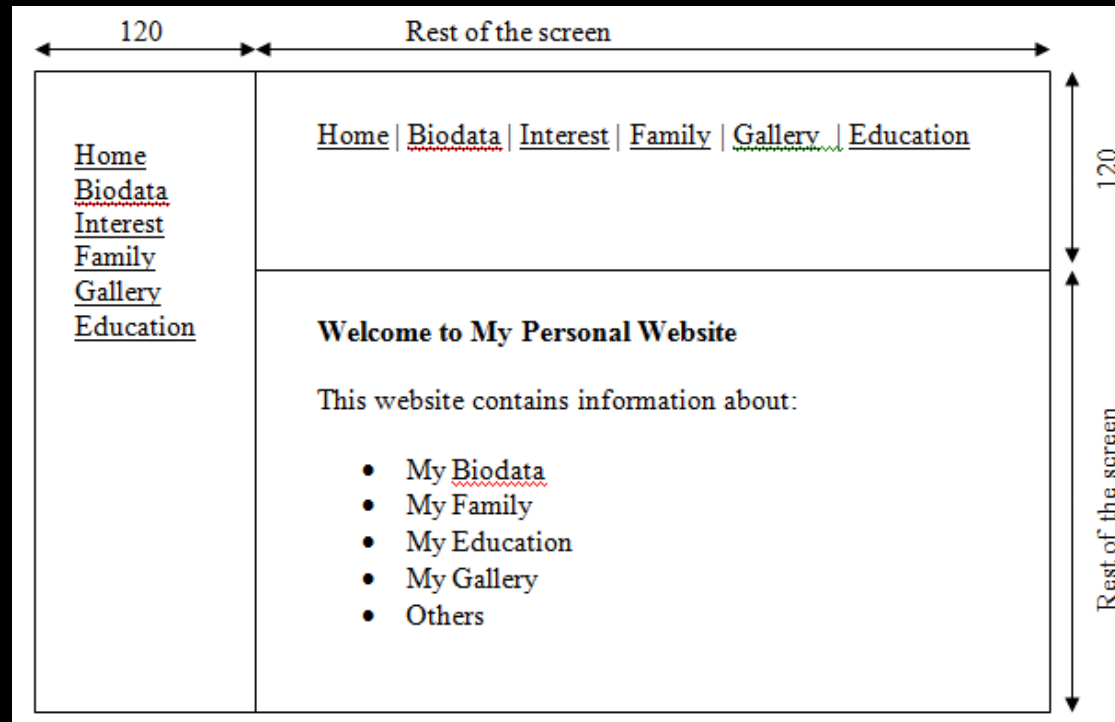
Review Exercise

Exercise

- Create a complete HTML codes for the above web pages. Make assumption if necessary.

Exercise

- You are given a task to create a website for your faculty. Your course coordinator instructs you to use frames as the main page of the website.

- The frame consists of two columns, which the proportion of the first column is 130 while the second column will take the rest of the screen.

- The second column is divided into three rows with proportion of the first column is 50, second column is rest of the screen and the third column is also 50.

- The first column should be regard as the menu part, the first row consider as the top banner, the middle row as main, and the bottom row as the bottom banner.

- Create a complete HTML statement and made assumption if necessary.