Computer Science 140

Lab 2

Due: Week of October 15-18.

Purpose:
1. Use Dreamweaver to build a web site containing static HTML pages.
2. Use a table layout structure to build a simple navigation within a web site.
3. Place scaled images into an HTML page.

Overview:

In this lab you will use web page builder Dreamweaver to design and construct a sample web site. There will be minimal presentational formatting since that will be done with CSS.

Resources:
- Online HTML specification: `http://www.w3.org/MarkUp`
- The Elizabeth Castro HTML book – chapters 2-4.
- Online videos for Dreamweaver at
  http://www.adobe.com/designcenter/video_workshop/
- IBM's Web design guidelines:
  http://www.cs.camosun.bc.ca/~langs/comp140-13/labs/lab02/IBM_Ease_of_Use.pdf

Preparation:

1. Review the web design guidelines from the link shown in the resources section.
2. Review notes on the usage of the HTML tags for tables, ordered lists, dictionary lists, anchors and images.

Description:

A popular local take-out restaurant, Pizza Palace, is planning to launch a web site to promote their business. Currently the only information the proprietors need on the web site is the following:
   a. Location of the establishment (just one)
   b. Menu and prices
   c. Employment opportunities
   d. Weekly specials
   e. About the restaurant

The owners are interested to see how your prototype for the proposed web site could be effectively organized and managed.

After you have reviewed the online web design guidelines, you created the following navigation map, also called a **site map**, for the proposed web site where each box represents a single web page. The lines indicate the page links so that each page provides a link to the other pages.
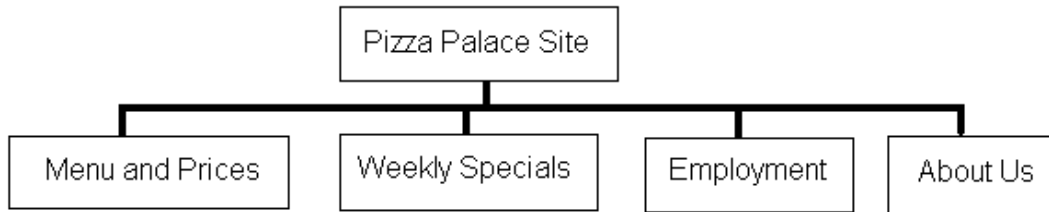
The next step is to design a page layout consistent for all pages. This helps the web site visitors better understand how to navigate the site. Also, other web designers can work from the layout. A possible layout for this site is shown below. This layout measures out the width of the design page at a fixed 1024 pixels which should accommodate most screen resolutions. The owners review the layout and decide that thumbnails and other details are not necessary at this early stage.

The revised page layout is made up as below. The navigation column should be 160 pixels wide while the banner and content sections are elastic (their widths adjust as the window dimensions are resized).
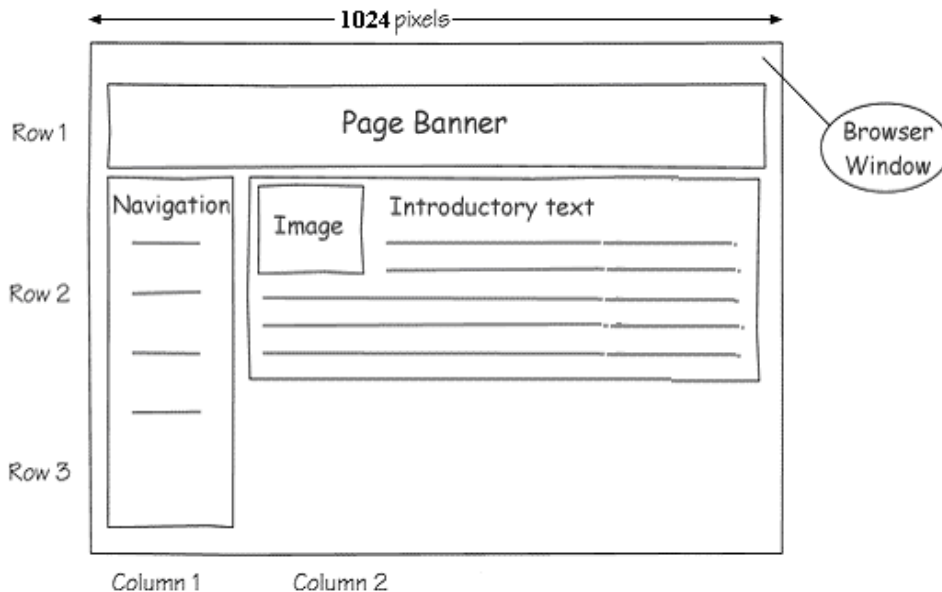

Process:

1. Open the File Explorer and create the following new folders on your H: drive:
   comp140
   comp140\lab02
   comp140\lab02\PizzaPalace
   comp140\lab02\PizzaPalace\images.
   Open WinSCP and copy the new folders to your deepblue account inside the public_html folder. The images used by the lab web site will be stored in the images folder to help organize the structure of the web content.

2. Start the Adobe Dreamweaver application, which in the labs you can find under the Adobe Master Collection folder (Start | All Programs | Adobe Master Collection CS6). As a side note the notation "A | B" means A is the name of a menu selection and B is the name of submenu selection under A. If the dialog window "CS Register your Software" appears, click on the "Don't Ask Again" button at the bottom of the dialog window. If the dialog window "Enter your Adobe ID" appears, click on the skip button.

3. Select new site in Dreamweaver (from menu Site | New Site...). When prompted for the name of your site, enter: `PizzaPalace2`. (The "2" denotes lab 2). When prompted for the local site folder of your site, enter: `H:\comp140\lab02\PizzaPalace`. The click on the Servers menu option on the left side.
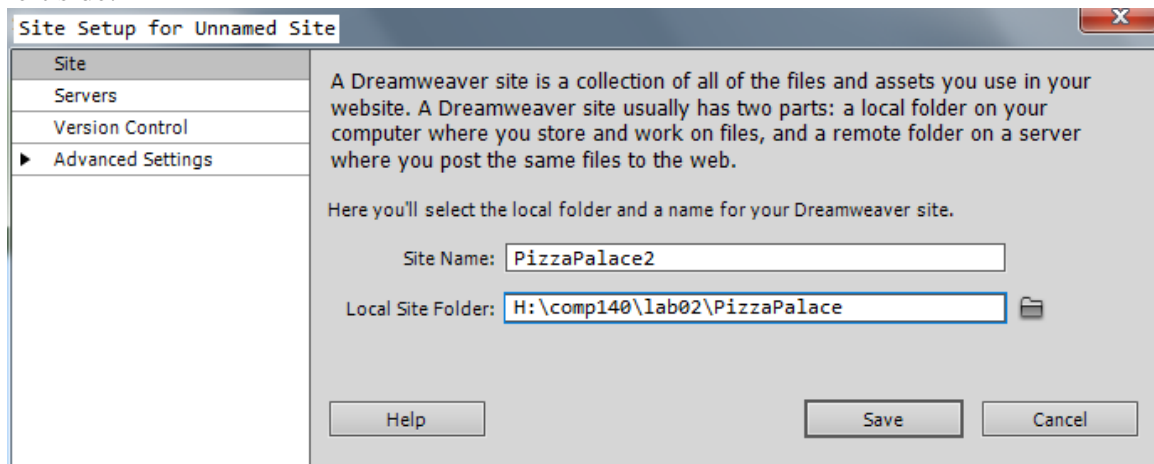
On the Servers panel click on the + symbol to add a new server host setting.
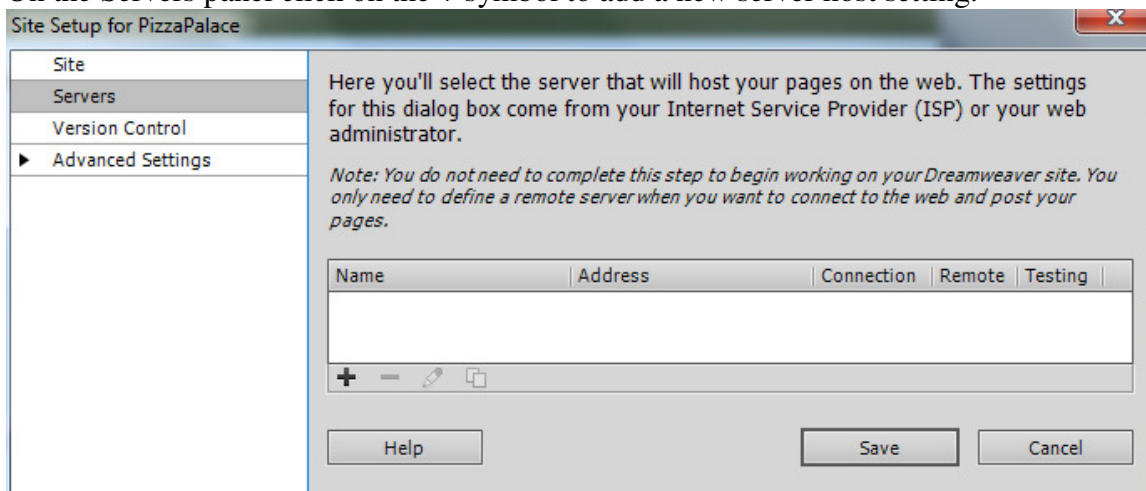

4. On the Servers panel enter the following information as shown.
For the Username enter your deepblue account name (for example, cst393; this lab write up will refer to your deepblue account as `cstxxx`). For Password enter your deepblue account password. For Root Directory enter
`/home/student/cstxxx/public_html/comp140/lab02/PizzaPalace`

For Web URL enter the following: (DreamWeaver will enter a Web URL default

based on the Root Directory but it will not be correct).

`http://deepblue.cs.camosun.bc.ca/~cst`*`xxx`*`/comp140/lab02/PizzaPalace`

Click Test to confirm your entries are accepted. Dreamweaver should reply with "Dreamweaver connected to your Web server successfully.
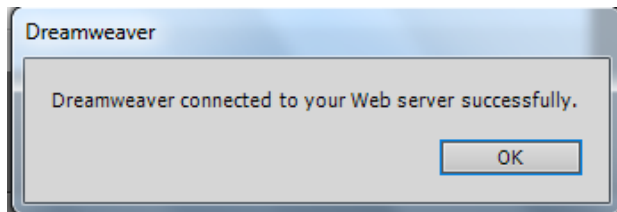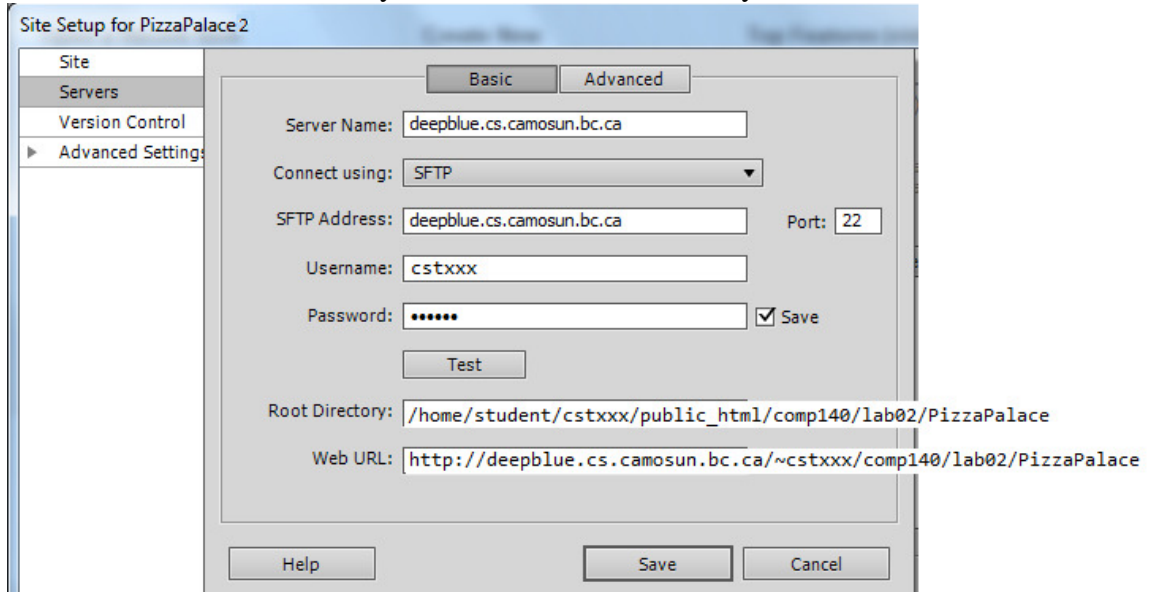
The Site Setup panel will be shown completed. Click on the Save button.
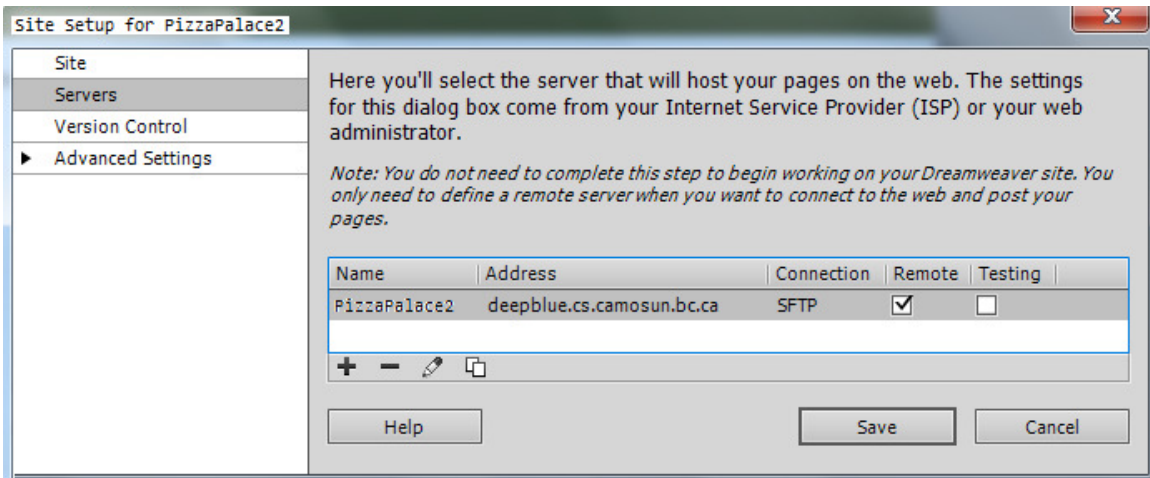
In Dreamweaver you can always edit your site settings through the Site | Manage Site menu.
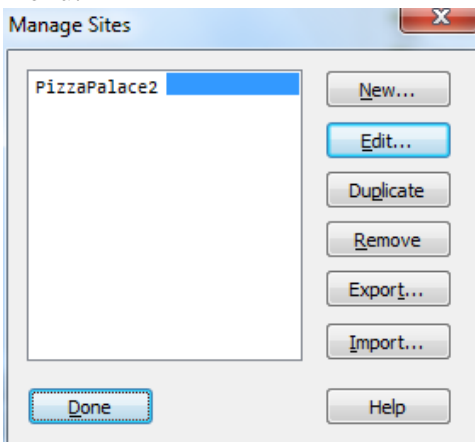
5. On the Local Files panel in the lower right of the DreamWeaver window make sure the second dropdown says "Local view". If "Remote server" is displayed, then click on it to switch to local view.
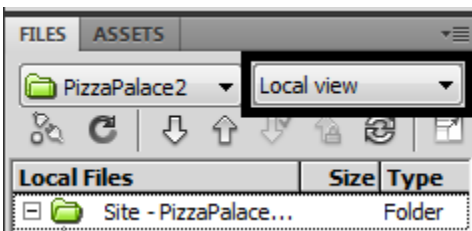
Right click on the Site – PizzaPalace2 and select New File and enter `index.html`

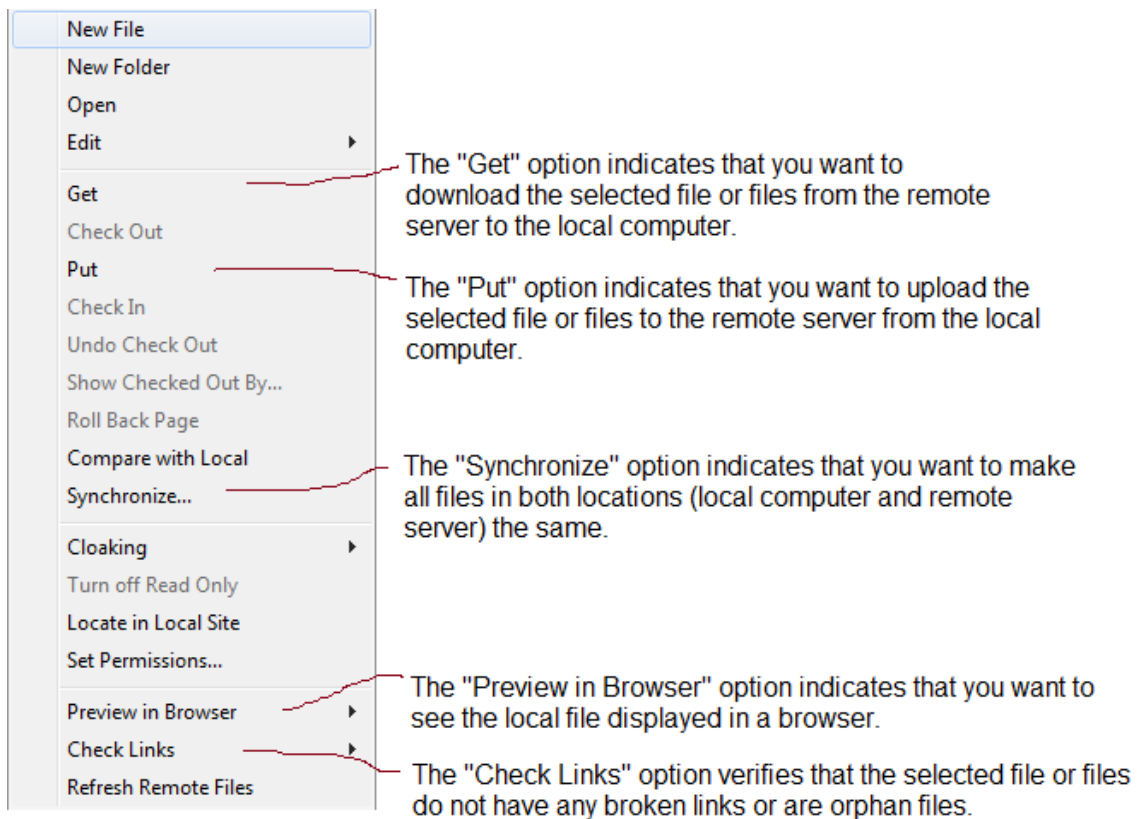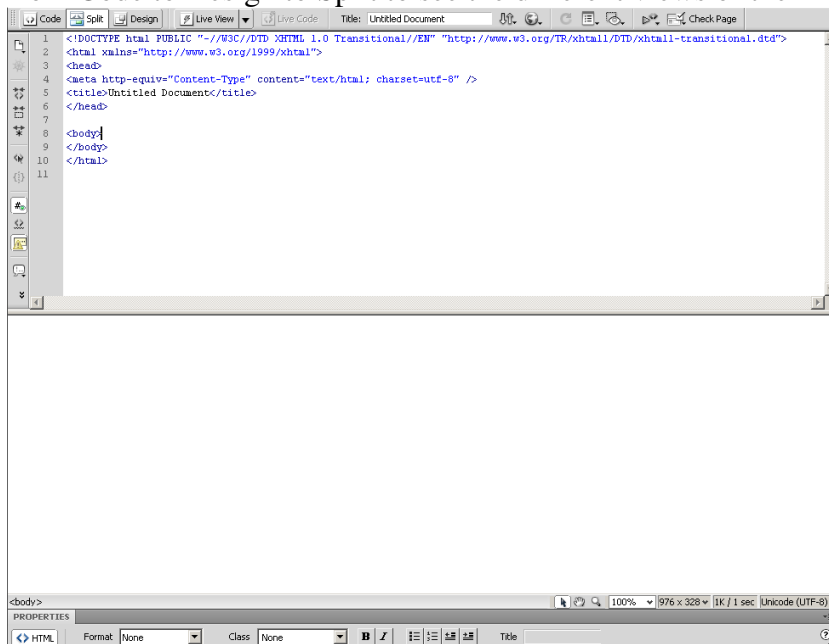| New File	
New Folder	
Open	
Edit	▶
Get	
Check Out	
Put	
Check In	
Undo Check Out	
Show Checked Out By...	
Roll Back Page	
Compare with Local	
Synchronize...	
Cloaking	▶
Turn off Read Only	
Locate in Local Site	
Set Permissions...	
Preview in Browser	▶
Check Links	▶
Refresh Remote Files	

The "Get" option indicates that you want to download the selected file or files from the remote server to the local computer.

The "Put" option indicates that you want to upload the selected file or files to the remote server from the local computer.

The "Synchronize" option indicates that you want to make all files in both locations (local computer and remote server) the same.

The "Preview in Browser" option indicates that you want to see the local file displayed in a browser.

The "Check Links" option verifies that the selected file or files do not have any broken links or are orphan files.

6. Right click on `index.html` and select Open With | Dreamweaver. Switch the view from Code to Design to Split to see the different views of the HTML document.

```
1  <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
2  <html xmlns="http://www.w3.org/1999/xhtml">
3  <head>
4  <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
5  <title>Untitled Document</title>
6  </head>
7
8  <body>
9  </body>
10 </html>
11
```

7. The default font used by Dreamweaver's code view is `Courier New`. If you prefer a different font or perhaps a larger size font in the HTML code view panel, select Edit from the menu and select the Preferences option (or press its shortcut ^U). Under the

Fonts category, the code view Font can be changed to suit your preference. The font `Consolas` size 14pt is a good working font for this type of work.

8. Note that the tab at the top labelled "index.html" has no asterisk. Change the title of the HTML web page from "`Untitled Document`" to "`Welcome to Pizza Palace`". The file name tab should now show "`index.html*`" indicating you have modified the source file but not yet saved it. Once you save the file, the asterisk is not shown.

9. Select File | Save from the top menu. Open the Firefox browser and verify you can see `http://deepblue.cs.camosun.bc.ca/~cstxxx/comp140/lab02/PizzaPalace` in the browser window. If you do not see the updated index.html page in the browser, you have to tell Dreamweaver to upload ("sync") the local files up to the remote site (deepblue). You do this by selecting Site | Synchronize Sitewide... menu option, then click on Preview button. Click the OK button to confirm the upload process to the server. Or you can use the Site | Put command to send only the active HTML file to the server. In your browser bookmark this web page so you can easily refer back to it as needed.

    Dreamweaver has a preview web page menu option under menu File | Preview in Browser | Firefox ; however, this loads up the page locally using the file URL format, e.g. `file:///H:/public_html/comp140/lab02/PizzaPalace/index.html` but your HTML content will not be processed by the Deepblue web server.

10. Return to the Dreamweaver edit window and click on the code view panel just after the `<body>` tag and press Enter three times to insert three blank lines in the HTML source. Enter the HTML source

```
<img src="ball.png" title="golf ball" alt="found golf ball">  A golf
ball.
```

observe how Dreamweaver HTML editor colourizes the HTML keywords and the text. Delete the <u>closing</u> double quotes for the title property and note the changed results in the colorization. Delete the closing angle bracket and note the changes. This will help you recognize problems in future labs in case your HTML is missing closing quotes or angle brackets.

Enter the HTML tags `<div>` `<p>` `<table>` .
Press Enter and then press only the open angle bracket `<` followed by the forward slash `/`.

Repeat the previous sentence twice so that the HTML `</table>` `</p>` `</div>` appears.

Note Dreamweaver determined which element (the table) needed closing first. In HTML it is important to close nested elements in the correct order or the results will have problems. If you think your HTML is not correct, determine if Dreamweaver inserts a missing end tag. Or select File | Validate | Validate Current Document.

Remove all the HTML source you just entered (everything between the `<body>` and `</body>` tags).

11. Click on one of the blank lines in the HTML document (make sure it is between the `<body>` and `</body>` tags) and then select the Insert | Table option from the top menu bar (the keyboard shortcut is pressing ctrl-alt-T). Enter the following updates and click OK.
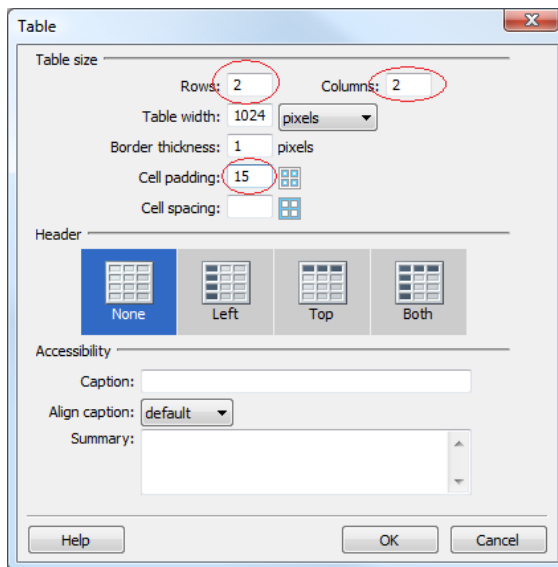
The table shown in the design window will have four cells: two in the top row and two in the bottom row.
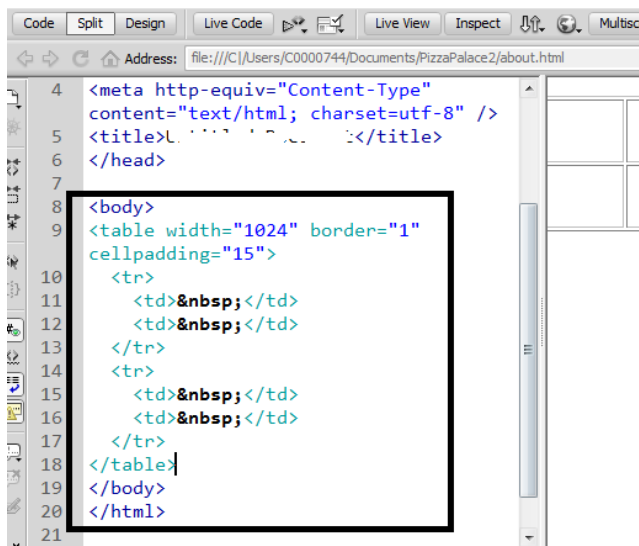
You will merge the top two cells together next so that the top row is the header for the table structure. Switch the view to Design. Make sure Live View in the top toolbar is off. Click and hold the left mouse button within the top left cell and drag the mouse over to the adjacent cell to the right, then release the mouse button. The result should

show the top cells bordered in bold. Next, right click inside one of the selected cells to show the context menu. Use the mouse to select the Table option and then Merge Cells from the submenu.
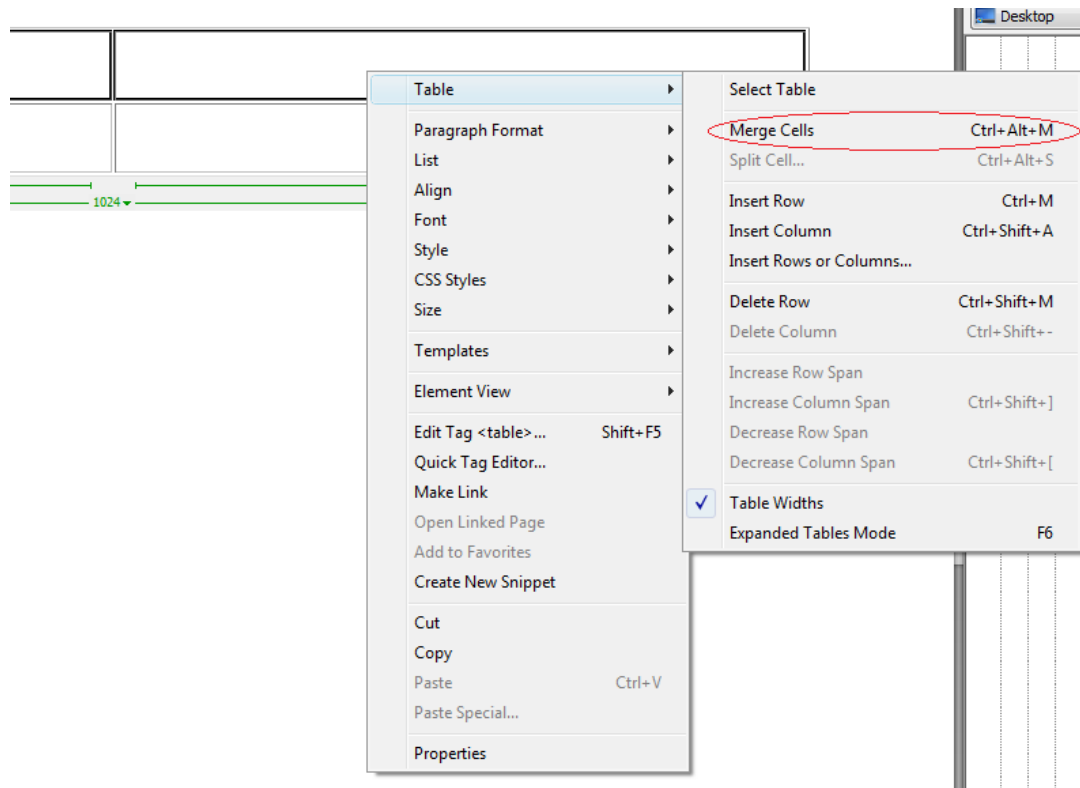
The table will now have a single cell on the top row spanning the two lower cells.

Next step is to format this top cell. Click inside this cell and select from the top menu Modify | Selection Properties. The properties panel for the cell is shown at the bottom of the screen. Click the < > HTML view on the panel just under the Properties tab name. Change the background colour for the cell to red.
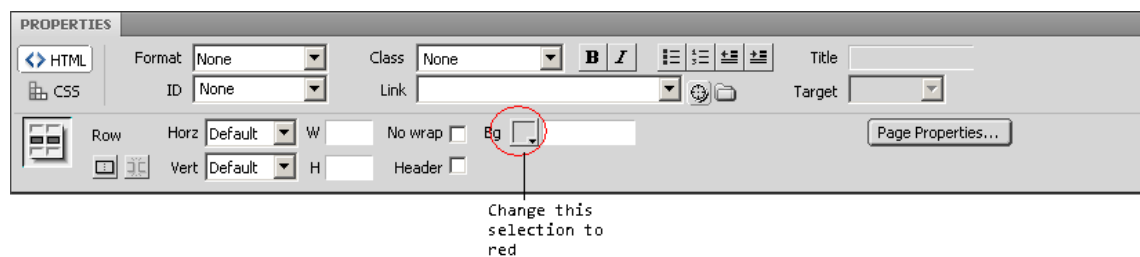
Type in the two words Pizza Palace in the top cell. By default the text will appear in black and aligned to the left within the cell. Highlight the text in the cell. Use the properties panel to make the following changes.

First select the HTML properties on the top left, then select Heading 1 Format. Next select the CSS properties just below the HTML and select a Targeted Rule of "<New Inline Style>". Set the font size, text colour and center align. DreamWeaver may ask if you want to create a new CSS rule – click on the Cancel button if that panel appears.
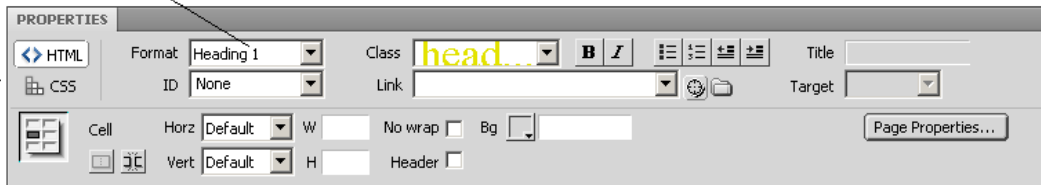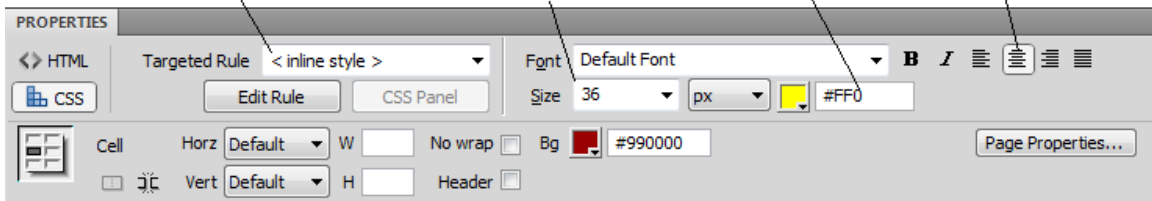
Next you will enter the navigation text links in the table's bottom left cell. To do this just click inside the bottom left cell and enter each link on a separate line:

```
Home
Menu
Specials
Opportunity
About Us
```

Click on the word "Home" and in the property panel's Link textbox enter `index.html`. This creates a hyperlink to the web page `index.html` for the text "Home". Set the Title attribute to "Return to site main page".
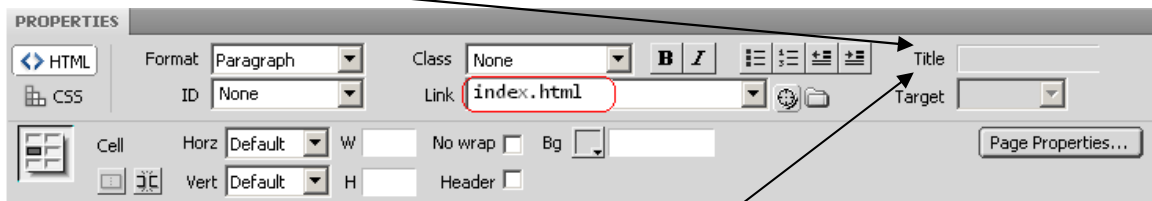

Continue with each navigation link as follows:

"Menu" is a link to `menu.html`, set title to "View current menu"
"Specials" is a link to `specials.html`, set title to "View today's specials"
"Opportunity" is a link to `opportunity.html`, set title to "Employment opportunities"
"About Us" is a link to `about.html`, set title to "All about us"

Note the asterisk * next to the `index.html` tab name. Recall the asterisk indicates unsaved work.
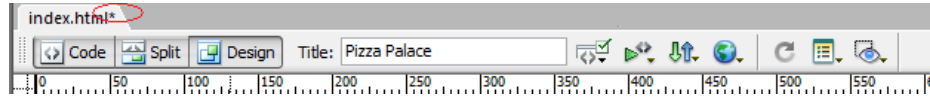
Save the file. Then select File | Save As... to save the file as `menu.html`. Repeat the Save As operation for three new HTML files named `specials.html`, `opportunity.html` and `about.html`. Each of these pages appears the same -- for now. Later you will update the content panel to the right of the navigation column. All pages should have the same layout and navigation panel links which you can test in the browser.
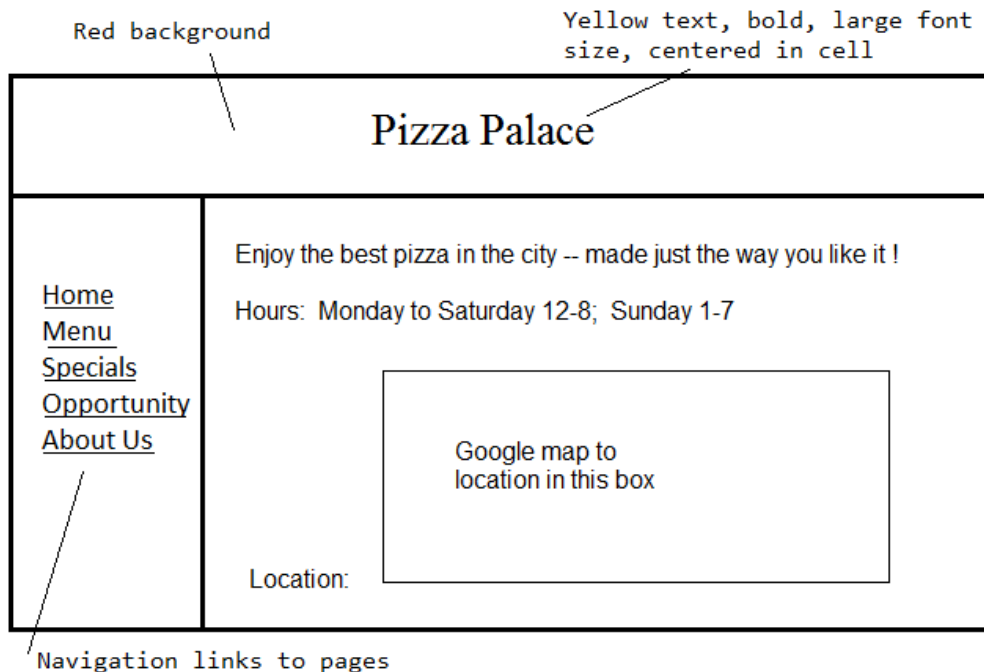
Select the `index.html` page and enter the text as shown above in the bottom right cell. You do not have to make your `index.html` page look exactly like the above as far as text alignment is concerned. For the location you will include an iframe window into your page. The iframe window is the Google map image to the location of the restaurant. To do this, start a browser and enter the URL `http://maps.google.com` and in the "Search the map" text box enter this fictitious Pizza Palace address:

```
4461 Interurban Road, Victoria, BC, V9E 2C1
```

then click on the chains icon button (to the right of the printer icon on the Google page).

Find the "Link" link just above the map on the right and click the link.
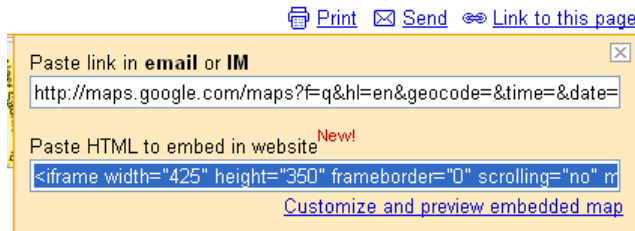
Two textboxes should appear one above the other in the DreamWeaver editor. Click anywhere inside the textbox on the bottom and press ^C to copy it, then paste it (^V) into your HTML document next to the word Location -- the maps frame will be solid gray in the DreamWeaver editor. Do not paste the link into the view pane. If you do, the `<iframe>` tag is rendered as `<iframe>` and not work.

12. Change the `width` attribute for the `table` element from `1024` pixels (default is pixels) to 100%, save the file. The `table` element is defined starting on line 8 below. The `width` attribute should display as `width="100%"` for all the html pages in this lab (menu.html, etc).

```
1   <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
2   <html xmlns="http://www.w3.org/1999/xhtml">
3   <head>
4   <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
5   <title>Welcome to Pizza Palace</title>
6   </head>
7   <body>
8   <table width="1024" border="1" cellpadding="15">
9     <tr>
10      <td colspan="2" bgcolor="#FF0000"><h1 style="font-size: 36px; color:
    Pizza Palace</h1></td>
```

Note how the browser readjusts the table's dimensions as you resize the browser window.

Add in a new `width` attribute for the table's second `<td>` element – shown below in a box – to 160 pixels. This `<td>` should be modified to `<td width="160">`. Save the file. Apply this update to the lab's other html files.

```
7   <body>
8   <table width="1024" border="1" cellpadding="15">
9     <tr>
10      <td colspan="2" bgcolor="#FF0000"><h1 style="font-size: 36px; color: #FF0;
    Pizza Palace</h1></td>
11    </tr>
12    <tr>
13      <td><p><a href="index.html" title="Return to main site page">Home</a></p>
```
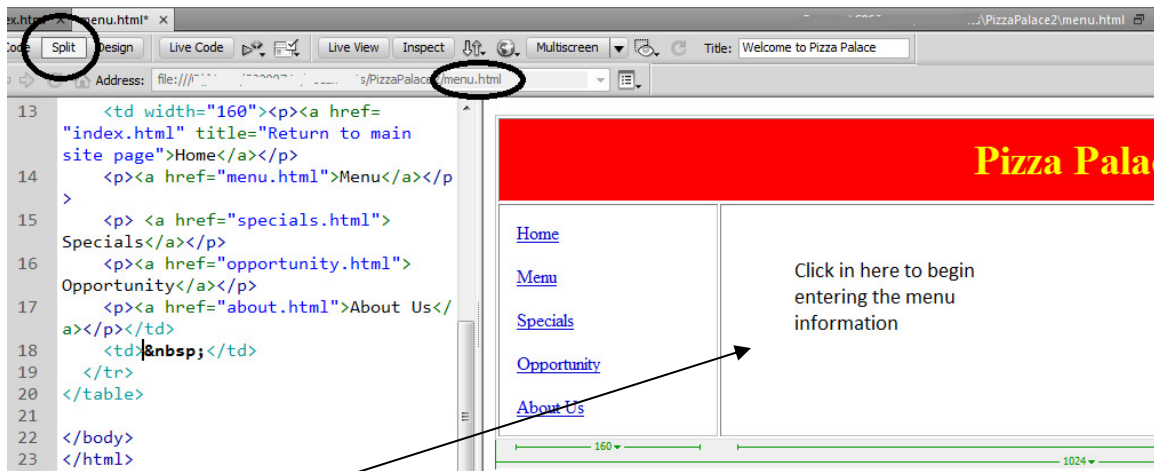
13. Edit the `menu.html` page. Change the page title from "Welcome to Pizza Palace" (as shown below) to "Pizza Palace – Menu Selections"

```
1   <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
2   <html xmlns="http://www.w3.org/1999/xhtml">
3   <head>
4   <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
5   <title>Welcome to Pizza Palace</title>
6   </head>
7   <body>
```

Enter the following menu items and prices. Use the definition list tag `<dl>` and unordered list tag `<ul>`. Place a line break tag after each `</dd>` tag so that the pizza selections are separated by some vertical white space.

(e.g. `<dl>`
```
        <dt>Cheese Pizza</dt>
        <dd>
          <ul>
            <li> individual $5 </li>
            <li> medium $7      </li>
            <li> large  $10     </li>
          </ul>
        </dd>
        <br />
```
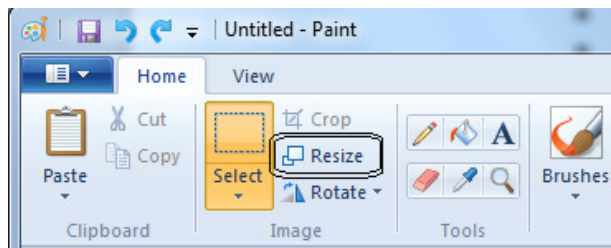.. next two pizzas and the list of toppings as shown in the boxes below.
`</dl>`

```
Pepperoni Pizza
        •   individual $7
        •   medium $10
        •   large $12

Hawaiian Pizza
        •   individual $7
        •   medium $11
        •   large $15
```

```
Toppings – $1 each
        • extra tomato
        • mushrooms
        • green pepper
        • pepperoni
        • pineapple
```

An image of each topping variety should display next to its name (e.g. the image file names are `tomato.jpg`, `mushrooms.jpg`, `greenpepper.jpg`, `pepperoni.jpg`, `pineapple.jpg`). The images are found on the course lab site under lab 2. Copy these files to your `PizzaPalace/images` folder. Use MS Paint to scale the images down to a thumbnail size and rename the files as `tomato_thumb.jpg`, `mushroom_thumb.jpg`, etc.

To do this process, open the image file in Paint. Select Resize as shown boxed below from the toolbar.

Enter the value of 20 in the stretch horizontal and stretch vertical textboxes and click OK. The original image should appear scaled down by 20%. Save the image in jpg format with the file name suffixed by _thumb so you can see from the file name which scaled version you need. Note if you save the thumbnail files in a different format from jpeg, then note the proper file extension name (e.g. png, bmp).

Just below the menu items include this image of a pepperoni pizza but scaled by about half size. You can download it from the lab web site under lab 2. (http://www.cs.camosun.bc.ca/~langs/comp140-13/labs)

14. Specials. Change the web page title to "Pizza Palace – Specials".
    Enter the following specials information into the right side content panel:

```
    Monday and Friday get $1 off any large pizza.

    Every Wednesday, purchase any large pizza and get any
second large for 50% off.
```

15. Opportunity. Change the web page title to "Pizza Palace – Employment Opportunities".

    Enter the following text into the right side content panel:

```
    Looking to earn some extra cash?  We are hiring drivers for
    deliveries on a part-time basis.  Contact us at 800-555-
    1010 for details.  Or email us mandl@pizzapal.bc.ca
```

16. About Us. Change the web page title to "Pizza Palace – About Us"
    Enter the following text:

```
    Brothers Mario and Luigi have one goal in life: to make the
best pizza in the world!  Enjoy any of our pizzas today.
```

17. Add HTML comments to each HTML file after the `<head>` tag which show **your name** as the HTML creator and the date the file was created.

```
<!-- Created by:  A. Student
     Created on: Oct 13, 2013
-->
```

18. Meta tags. Meta tags serve as extra information you insert into an HTML document and are always defined inside the HTML file's `<head>` section. Meta elements are not displayed by the browser. This information can tell the browser what character set to display text, for example. They are sometimes used to help search engines categorize web page content. Not every search engine uses them because it is easy to insert erroneous or misleading keywords in a meta tag. The format of the `<meta>` tag is *similar* to this (for an HTML tutorial page). If you copy and paste from the PDF document, you will need to edit the double quotes characters in the HTML.

```
<meta name="description" content="This page is a tutorial
about using HTML tags" />
```

or

```
<meta name= "keywords" content= "HTML, web, browser, tutorial,
tags" />
```

Provide an appropriate `<meta name="description">` element for each of your HTML pages.

Other uses for a `<meta>` element is to tell the browser to refresh the page every `n` seconds

`<meta http-equiv="refresh" content="60" />` will refresh the browser page every 60 seconds
Or, redirect the browser to another page:
`<meta http-equiv="refresh" content="2;url=http://www.myweb.com" />`
will make the browser wait 2 seconds, then immediately load the page http://www.myweb.com . This can be confusing to users if they suddenly see the page reload in the browser.

Hand In / Demonstration:

A. Confirm with the instructor that your HTML files are working properly in the browser (enter the URL
`http://deepblue.cs.camosun.bc.ca/~cst0xx/comp140/lab02/PizzaPalace` in the address bar of the browser) Use File | Validate | Validate Current Document (W3C) to check the HTML. [10 marks]

   Check:
   a. All links work correctly (no broken links)
   b. Pages' layout style are all consistent
   c. Page header/logo defined
   d. Page titles are all defined
   e. Proper HTML comments provided on each page
   f. Meta tag defined on each page
   g. Images are displayed appropriately (scaled down as needed)
   h. Content text is readable and displayed neatly

   and correctly answer the following questions. [20 marks]

B. Send the instructor an email message (langs@camosun.bc.ca) with the subject "Comp 140 – Lab 2". In the body of the message provide the URL to your web site and an attachment (text file) of the answers to the following questions:
   a. Read the article at the link
      http://webstyleguide.com/wsg3/4-interface-design/2-navigation.html
      and answer the two questions: What is a breadcrumb trail? What features on a web page help users stay oriented on complex web sites?

   b. Read the article at the link
      http://www.ibm.com/developerworks/web/library/web-work.html
      and answer the question: What aspects must you consider when constructing a web site?

   c. Review the short article at
      http://www.webdesignerdepot.com/2012/06/essential-advice-for-restaurant-websites/
      Why does the author recommend not using PDF format documents for online restaurant menus?

   d. A selection of the internet's web pages from years past have been archived by http://www.archive.org/web/web.php. Use this web site to view the main web site page for apple.com during the years 1996 (any day), 2002 (any day), and the current page. Identify the web site design navigation features which had changed and comment how they improved the user experience.