

CS 1033

MULTIMEDIA AND COMMUNICATIONS

Lab 4: Website Design

Remember to have your memory stick ready to back up your work in every lab!

Learning objectives for this lab

- Create a website with text and images using an online html5 editor
- Apply formatting to text to change its colour, size, and emphasis
- Set and edit a webpage's title property
- Add a bulleted list using the HTML list structure
- Add links of different kinds into a website
- Create bookmark anchors and link to them
- Upload websites to a server to make them accessible online

Introduction

Professional websites are often coded using HTML and other programming languages. There are programs that help by generating the code so that you can visually design the website and let the software do the coding work behind the scenes. This kind of software is called WYSIWYG: what you see is what you get. For this course we will be using a combination of WYSIWYG using <https://html5-editor.net/> and editing html source code to create the content on your website.

HTML5-Editor

HTML5 Editor is a free web content composer that integrates all essential applications to design a website into one complete unit. It is a ready to use web/HTML editor in your web browser with no registration, login, download, or installation required. It provides valid html5 markup editing.

The link to the editor is: <https://html5-editor.net/>

Glossary

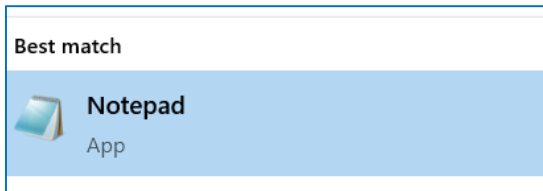
WYSIWYG	What You See Is What You Get; describes software that provide visual design editors to generate the required HTML code
browser	a program that displays websites, i.e. Chrome or Firefox
HTML	the primary language used to create websites, it uses tags around text to create hyperlinks, images, and text effects on the World Wide Web.
hyperlink	clickable text or images that takes you to another webpage, website, or location within a webpage

Activity 1

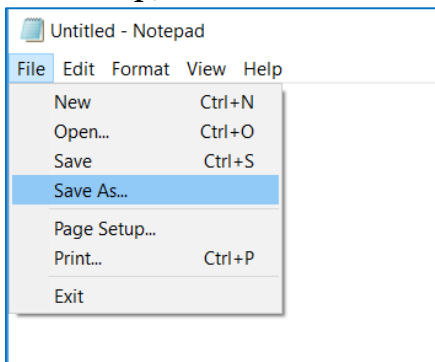
Preparing your website project folder and files

In this first exercise we will prepare the website project folder by creating the necessary subfolders and html files.

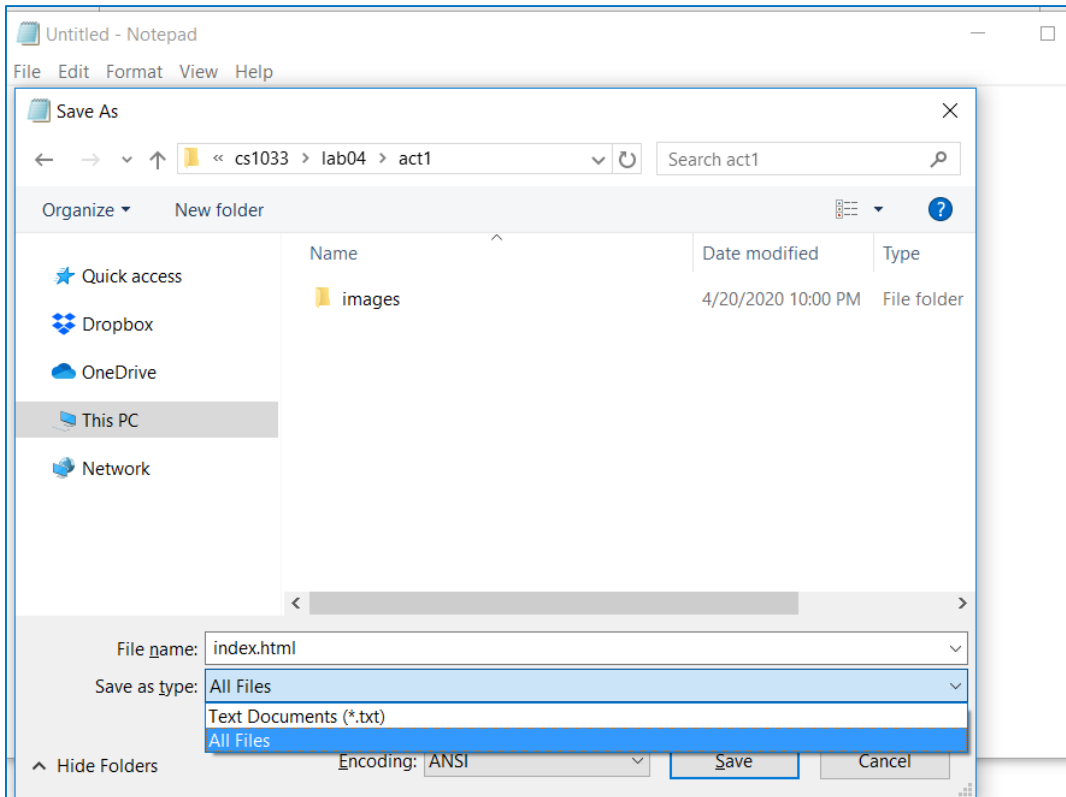
1. Navigate to your **cs1033** folder on your memory stick (it should have been created in the first lab) and create a folder called **labo4**. Go into it and create a sub-folder called **act1**. Go into **act1** and create a sub-folder called **images**.
2. Open <http://www.csd.uwo.ca/~bsarlo/cs1033/labs/lab04/act1> . Download the file into **cs1033/lab04/act1/images**.
3. Use the Windows search tool (magnifying glass at the bottom of the Windows bar) to find and open Notepad.



4. On the top, click on File > Save As



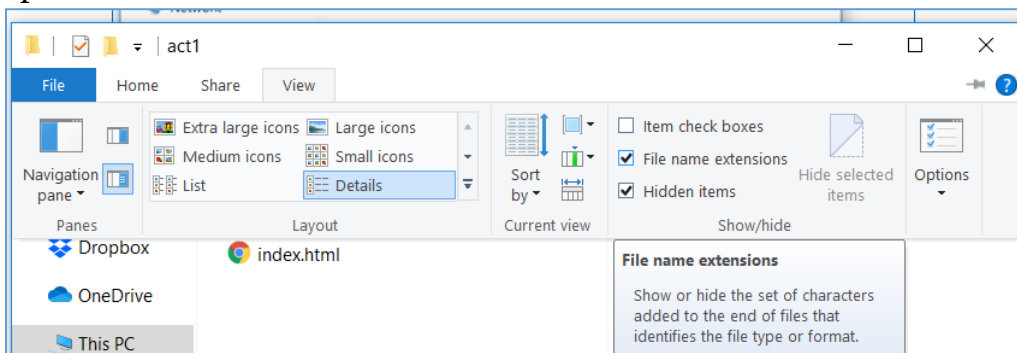
5. In the opened prompt, navigate to **cs1033/lab04/act1**
6. In the *File name* option: type "index.html" and select All Files for the *Save as type*: option. This step is necessary to create the proper html file, otherwise the browser will not recognize the html extension and the webpage will not open. It should look like this:



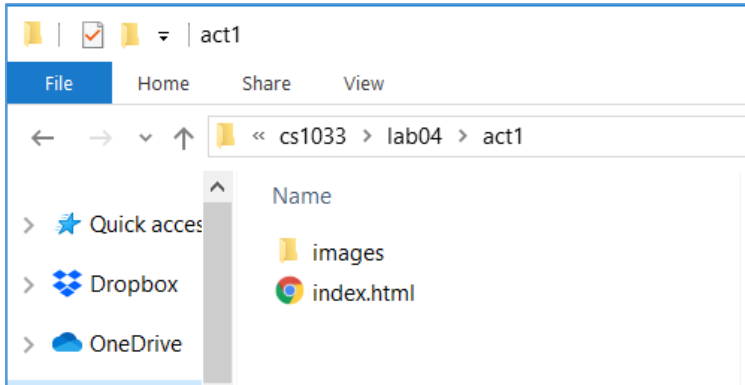
Hit the Save button

Without closing Notepad, navigate back to the file explorer to show the extension of the files in your folder.

On the upper tool bar click on View and find the Show/hide area. Check the option File name extensions if it is unchecked.

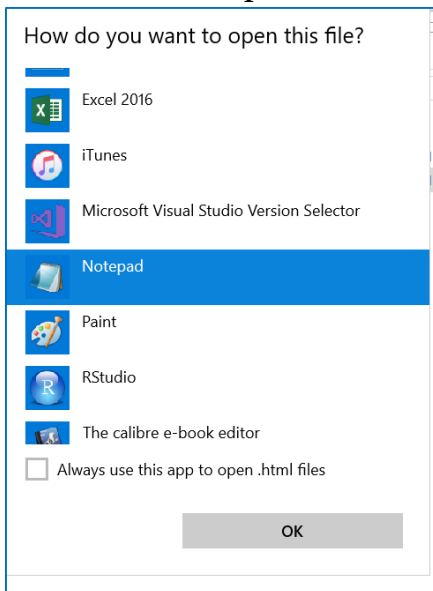


After doing that, in **cs1033/lab04/act1**, you should see the following two items with their extensions:

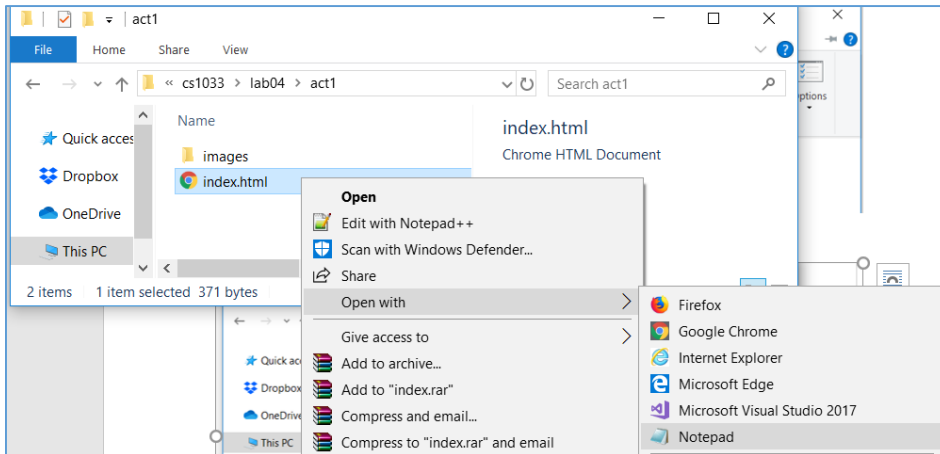


The index.html file is where all the html source code for your **homepage** will be saved. Note that the html file for the website's homepage (or landing page) should always be named "index.html" (not INDEX.html, Index.html, etc...).

7. Close Notepad by selecting the File menu and then select Exit. Right now, if you tried to click on index.html, because it is a webpage file (.html), it would be opened by your default browser but sometimes, when we are making changes, we want to open it using an editor like Notepad. We will show you how to open your .html files in Notepad when you need to edit the file.
8. Go to your file explorer and find your **act1** folder that contains the file "index.html" and right-click the file "index.html".
9. Right click and select Open with > Choose another app and select Notepad. If you did not find Notepad on the list, click on More Apps and scroll down to find it.



10. Select Notepad and make sure to uncheck the box "Always use this app to open .html files". This will ensure that your webpage will always open in your internet browser. Click OK.

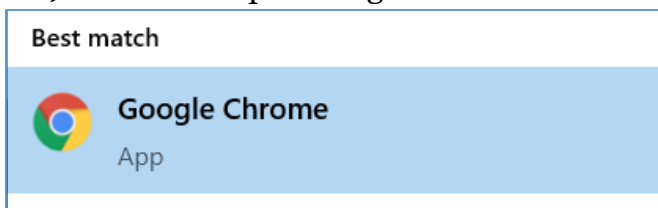


11. Leave “index.html” open in Notepad as we go onto the next step.

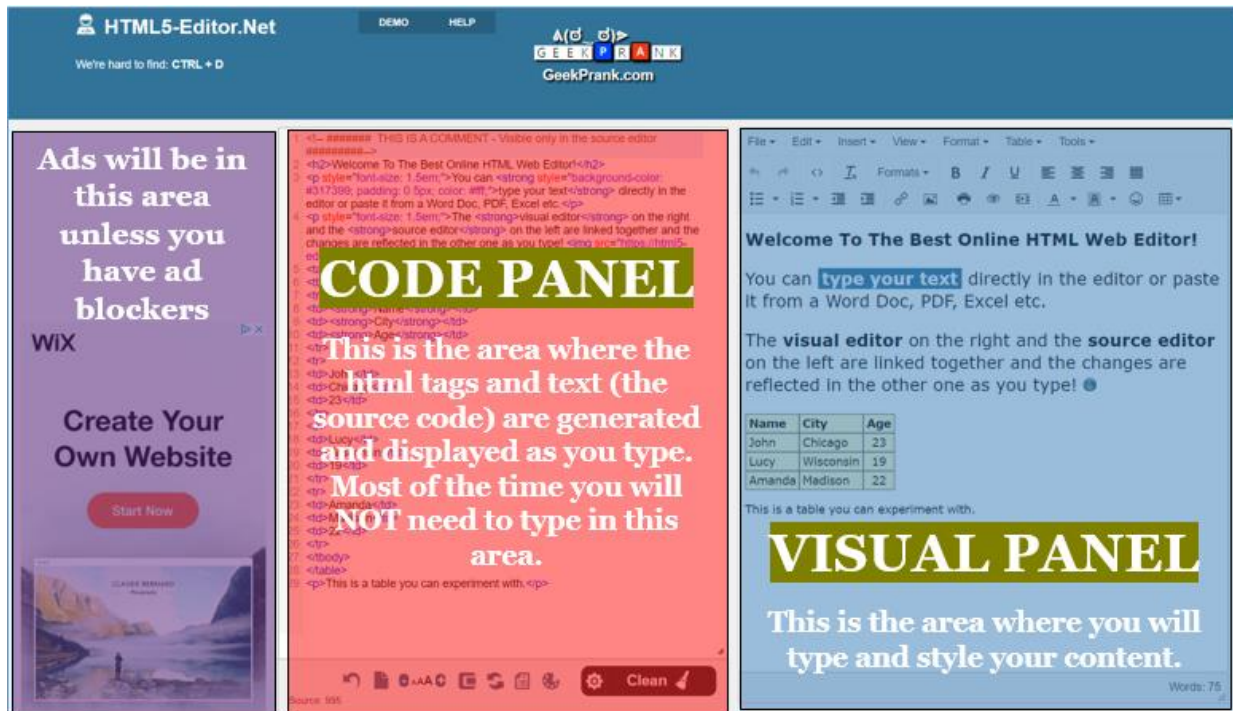
Getting started with Html5-Editor

In this second exercise, you will begin learning the basics of using Html5-Editor.net to create a simple webpage with text and images.

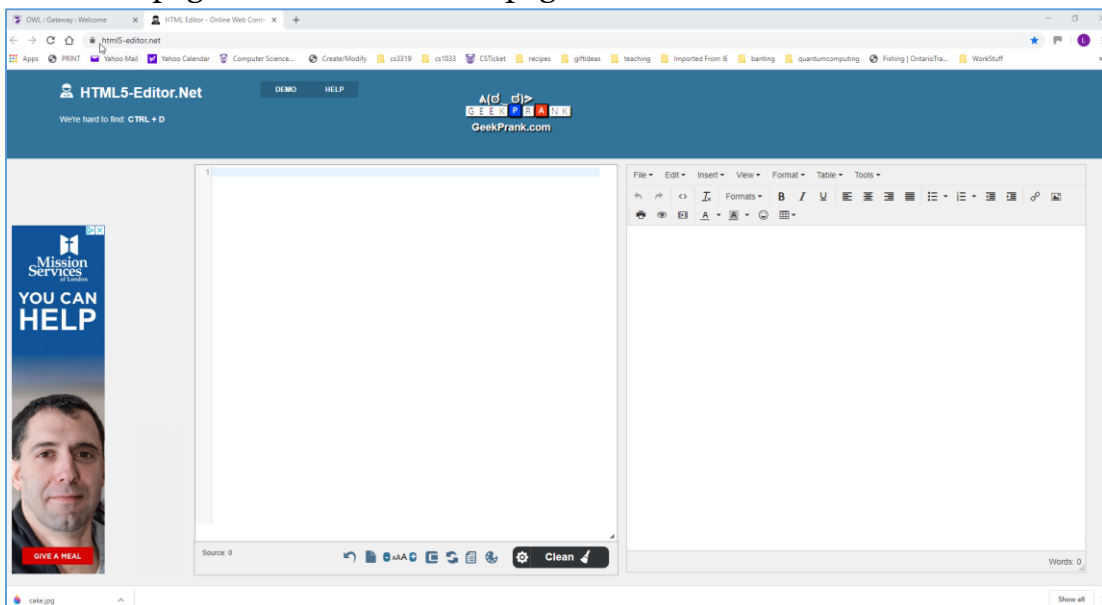
12. Use the Windows search tool (magnifying glass at the bottom of the Windows bar) to find and open Google Chrome browser.



13. In Chrome’s navigation bar type: <https://html5-editor.net/> and you will open the following website:



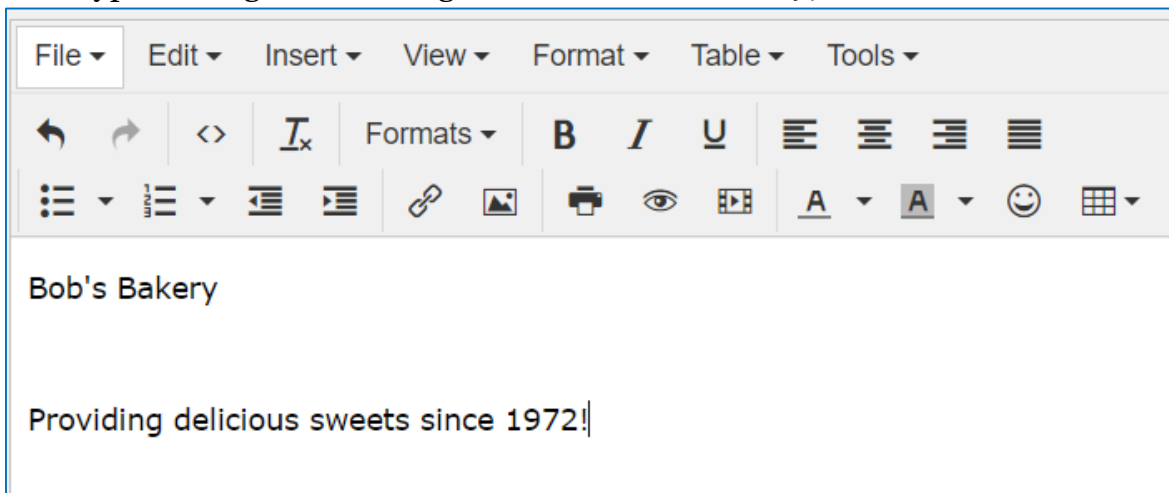
The red area will be referred to as the Code Panel in all labs, and it is where the html markup and source code is generated as you create and add contents to the website page on the workspace on the blue (right) area which will be referred to as the Visual Panel in all labs. Initially this page might have sample content in it, reload the page to start with a clear page like this:



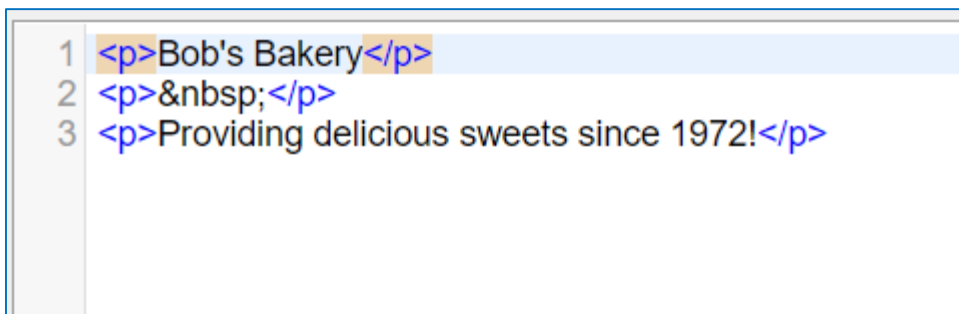
IMPORTANT: Please note that this online editor has NO SAVE function. If you close the browser or tab you will LOSE all your work! This lab tutorial will teach you how to save your work and get you to save often!

14. Click in the Visual Panel area so that you see the cursor blinking there.

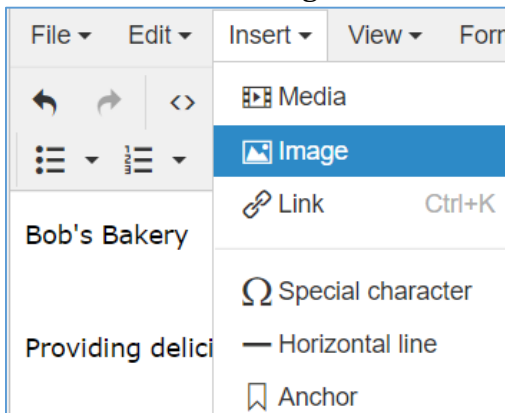
15. Type the words "Bob's Bakery".
16. Hit Enter twice to leave some empty space.
17. Then type the slogan "Providing delicious sweets since 1972!"



18. You will notice on the Code Panel the html tags generated when you added the text content.



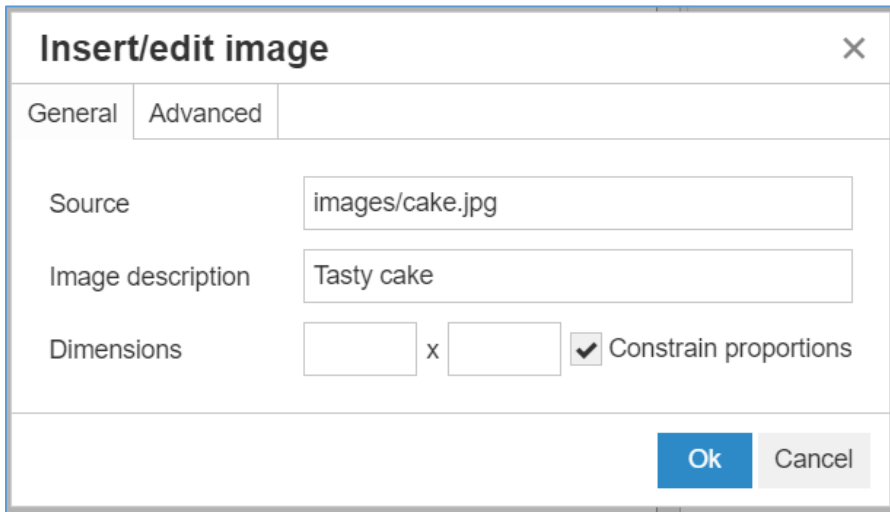
19. On the Visual Panel, hit Enter twice more after the last typed slogan.
20. Now we would like to insert an image below the last sentence. Press Enter twice.
21. Click on Insert > Image



22. In the Insert/edit Image window, move to the *Source* textbox and type "images/cake.jpg". This is the location path of the **images** sub-folder you created in the **act1** folder. It is important to note that this location is a relative path to

your act1 folder. It is NOT an absolute path such as c:\\users\\john\\desktop\\act1\\image. It is relative because it assumes you are already in your act1 folder. Within the images subfolder, it points to a file called **cake.jpg** that downloaded in step 2. Also note that many web servers are case sensitive so you MUST type the exact same case as you used when creating your folders and filenames. Thus *images/cake.jpg* is correct but *Images/Cake.jpg* would NOT work once you upload your webpage to a webserver. Be very careful when typing in file and folder names!

23. In the *Image description* textbox type "Tasty cake". Click Ok.



24. On the Code Panel, find the <img....> html tag for the recently added cake image. After *alt= "Tasty cake"* but before the />, add the following attribute: *title = "Yummy cake"*. Your html code should look like this:

```
1 <p>Bob's Bakery</p>
2 <p>&nbsp;</p>
3 <p>Providing delicious sweets since 1972!</p>
4 <p>&nbsp;</p>
5 <p></p>
```

25. In the Code Panel select all the html source code. Right click on the selected code and click Copy.
26. In Windows file explorer, navigate to **cs1033/lab04/act1** where you created the **index.html** file.
27. If it is not already open, then open **index.html** with Notepad.
28. Click Edit>Paste.
29. Save your code by clicking File>Save.
30. Unfortunately, html5-Editor.net does not generate ALL the html tags that we need to create a complete webpage. We will always need to add 5 more tags and

their closing tags for each of our webpages. We will have to manually type the tags into Notepad. The five tags are

- a. <!DOCTYPE> tag to tell which version of html we are going to use
 - b. <html> tag to tell it is a webpage
 - c. <head> tag to give some information about the page
 - d. <title> tag that shows the name of the page in the browser tab at the top of the browser
 - e. <body> tag that tells when the content starts that shows in the body of the browser.
31. Move your cursor above the code you just pasted into Notepad and hit enter twice. Then move your cursor back up to the top of Notepad and type in the following:

```
<!DOCTYPE html>
<html>
<head>
<title> Home | Bob's Bakery </title>
</head>
<body>
```

32. Move your cursor to the bottom of the text you just pasted into Notepad and hit enter twice. Type in the following closing tags:

```
</body>
</html>
```

33. Your Notepad file should now look like this:

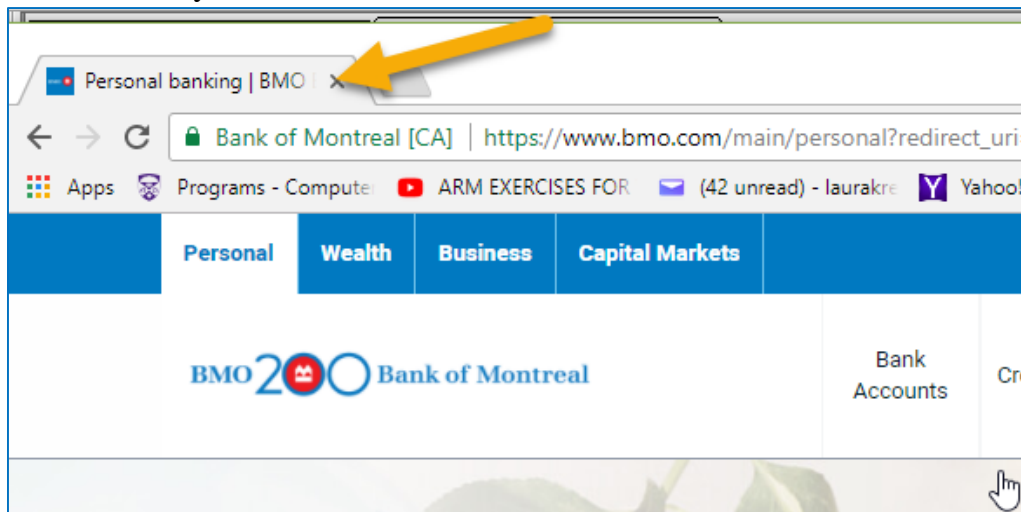
```
index.html - Notepad
File Edit Format View Help
<!DOCTYPE html>
<html>
<head>
<title>Home | Bob's Bakery</title>
</head>
<body>

<p>Bob's Bakery</p>
<p>&nbsp;</p>
<p>Providing delicious sweets since 1972!</p>
<p>&nbsp;</p>
<p></p>

</body>
</html>
```

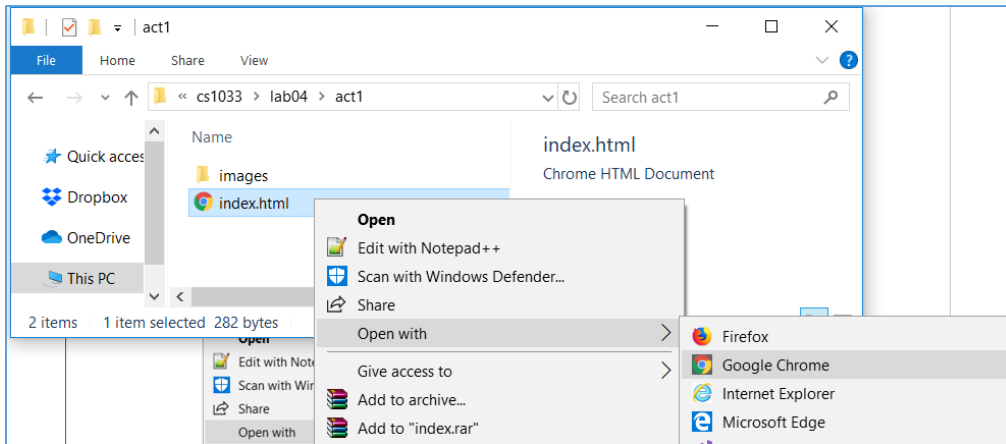
34. Click File>Save.

Notice the <title> tag under the <head> tag. This is the text that will show up in the tab when you view a website in a browser as shown below.



In this example it will be **Home | Bob's Bakery**

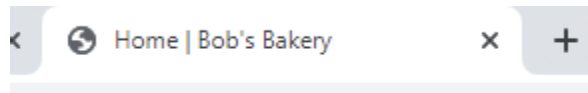
35. Go back to **cs1033/lab04/act1**. Right-click on index.html and click Open With > Google Chrome (or choose another web browser in this list).



36. The webpage in the browser should look the same as below:



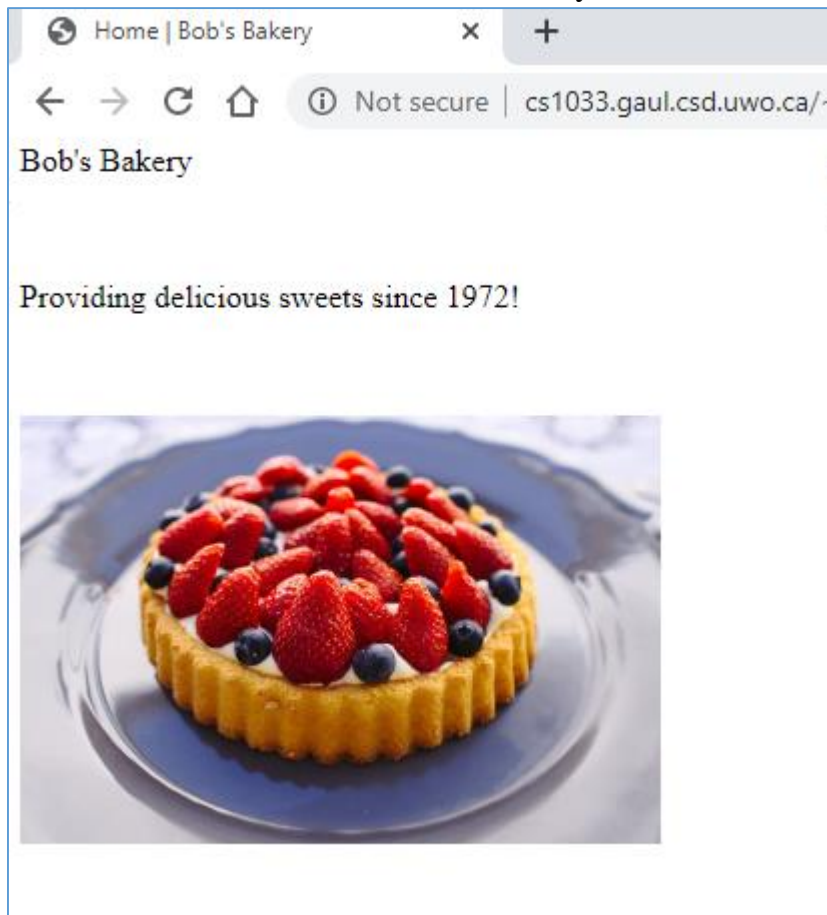
37. Look in the browser tab. The text shown there is the title property you set earlier.



Uploading the website

1. Use the Windows search tool (magnifying glass at the bottom of the Windows bar) to find and open WinSCP. You will be connecting to the Gaul server to upload the webpage to a webserver in order to test the webpage you just created on the World Wide Web and make sure it looks correct.
2. Enter the following information into WinSCP:
 - a. File protocol: SFTP
 - b. Host name: cs1033.gaul.csd.uwo.ca
 - c. Port number: 1033
 - d. User name: Your Western User ID
 - e. Password: Your Western Password
3. Click Login.
4. When connected, you should see your lab01-lab03 folders (called a directory in WinSCP) that you created a few weeks ago on the Remote side (right panel). On the Remote side (the right side), create a new directory (folder) called **lab04**. Make sure this folder has its Permissions set to 0755. This is usually the default, but if, for some reason it's different, change it to 0755 now.
5. Click into the **lab04** folder.
6. In the Local side (left panel), navigate to **F:/cs1033/lab04**. Click on the **act1** folder containing your webpage and drag it across to the Remote side to upload it.
7. Open a new tab in Google Chrome and go to:
<http://cs1033.gaul.csd.uwo.ca/~youruserid/lab04/act1/> where **youruserid** is your own Western username.

8. You should see the website almost exactly as below.



9. Hover over the first image to see the hover tag “Yummy Cake” (this was set by the title attribute you gave the image).

CONGRATULATIONS! You just created your first webpage in the course.

REMEMBER: AFTER EVERY TASK ON HTML5-EDITOR, ALWAYS COPY AND PASTE YOUR CODE FROM THE BROWSER TAB TO YOUR ACTIVE HTML FILE TO AVOID LOSING YOUR WORK!

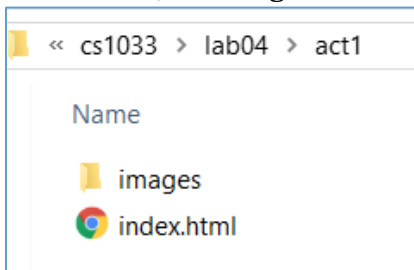
THIS IS VERY VERY VERY IMPORTANT AS HTML5-EDITOR HAS NO SAVE OPTION AND YOU WILL LOSE ALL YOUR WORK IF YOU CLOSE OR REFRESH THE HTML5-EDITOR TAB YOU ARE WORKING ON.

Activity 2

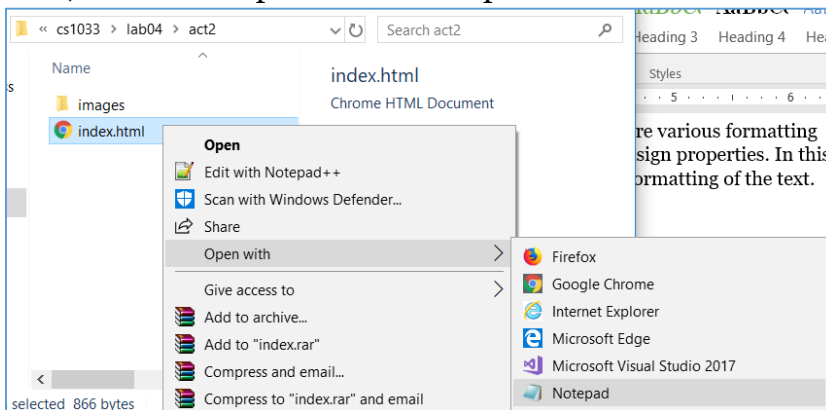
Formatting content

The webpage you have so far is a little boring and basic. There are various formatting options that allow you to change font size, colours, and other design properties. In this exercise you will add more content to the page and change the formatting of the text.

1. If not already done, close any files open left from *act1* (*index.html*), both in HTML5-editor online and in Notepad, to avoid mixing up files between activities.
2. Go into the File Explorer and navigate to **F:/cs1033/lab04**.
3. Create a new sub-folder called **act2**.
4. Go back to your **act1** folder and select all the files and folders within it (should be *index.html*, an *images* sub-folder). Hit Ctrl+C to copy (NOT a cut) these files.



5. Now move up and out of **act1** and down into **act2**. Hit Ctrl+V to paste the files here.
6. Make sure that on your file explorer, under the View tab that file name extensions is checked as you did in Activity 1.
7. In the newly created *act2* folder, Click once on the file *index.html*, then right-click, and select Open With> Notepad.



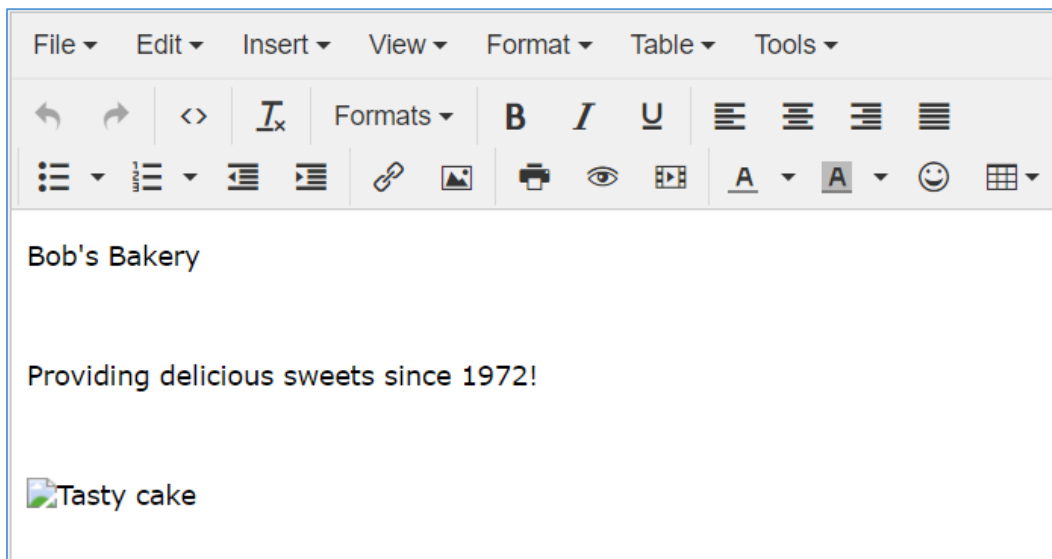
8. Highlight all the content between, but not including, the tags `<body>` and `</body>`. Then hit Ctrl+C to copy the content selected. Leave “*index.html*” open in Notepad as we go onto the next step for *act2*.

9. In your Chrome browser, go <https://html5-editor.net/> again and on the Code Panel, click anywhere inside the box so that you see a blinking cursor inside.
10. Hit Ctrl+V to replace whatever is inside the Code Panel with the new content. The content of the html editor should look as follows:

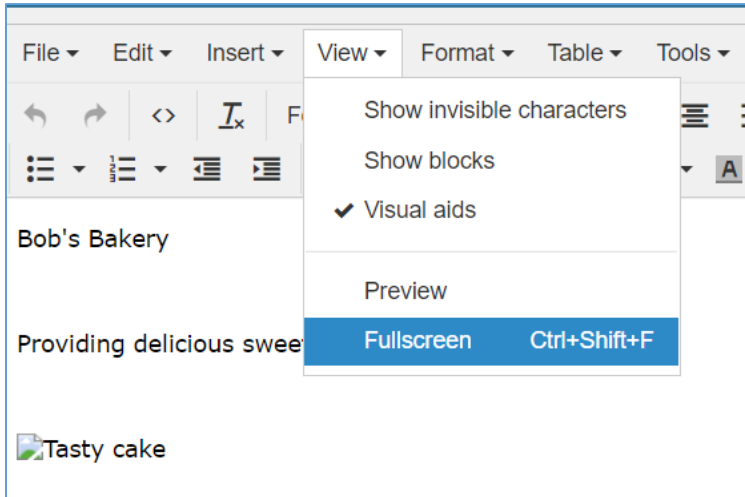
```
1 <p>Bob's Bakery</p>
2 <p>&nbsp;</p>
3 <p>Providing delicious sweets since 1972!</p>
4 <p>&nbsp;</p>
5 <p></p>
```

You will notice the Visual Panel side will appear as below. The image doesn't appear when you are working on html5-editor.net as the **images** folder is on your local machine.

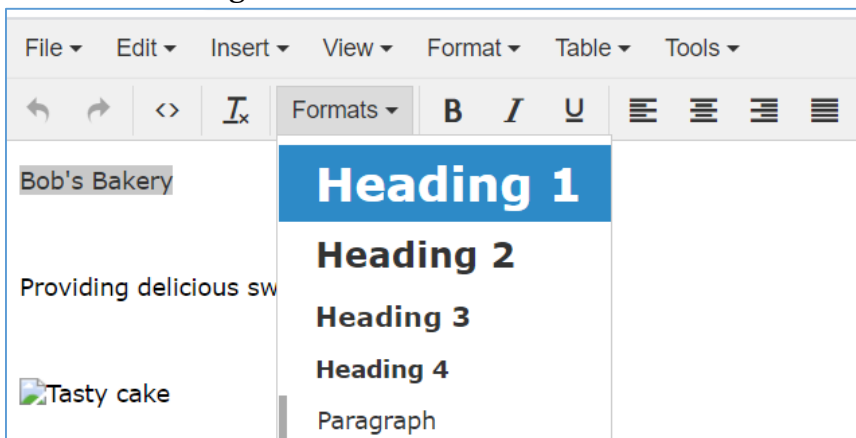
REMEMBER THAT: Every time you want to check how your webpage will look with the working images, you have to perform the steps in Activity 1 (i.e. copying the html code in html5-editor to an html file that is open in Notepad, saving, and opening the html file with an internet browser such as Chrome):



11. Next, on the Visual Panel, select View >Fullscreen. Now your Visual Panel will be the approximate size of how your end result webpage would appear. **Work in Fullscreen mode while constructing your website on the Visual Panel to get a better visual sense of your end result.**

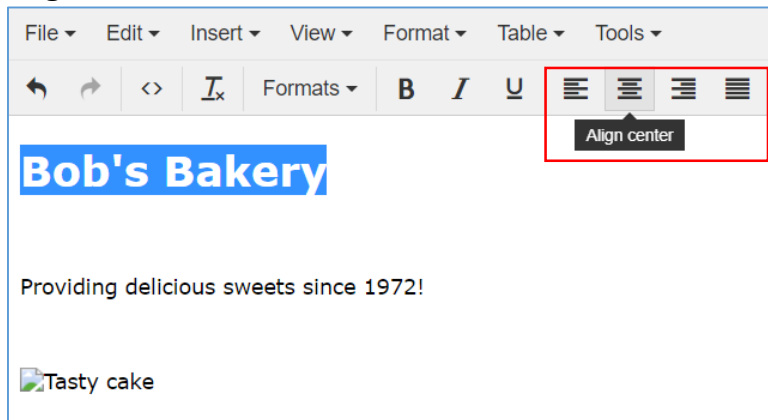


12. Highlight (select) the text "Bob's Bakery" at the top of the Visual Panel.
13. Just above that, click on Formats (note: do NOT select the Format menu in the primary menu bar rather click on the Formats button in the secondary menu bar) Click on Heading 1.

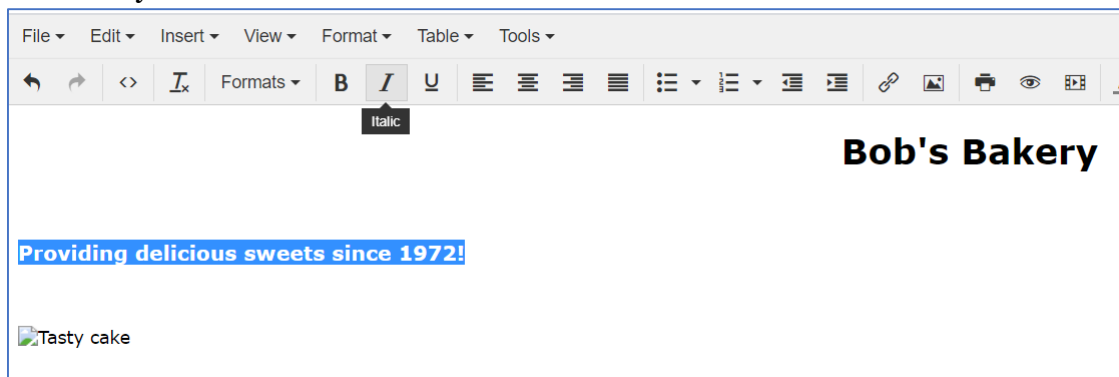


14. Now highlight this same text and change it to Heading 2 to see the size difference.
15. Repeat this with Headings 3 and 4.
16. Once you have observed the text in all 4 heading sizes, revert it to Heading 1 so that it's large at the top.

17. Now try to locate the Left, Center, Right, and Justify alignment icons. Click the Align center icon.



18. Now highlight the slogan "Providing delicious..." and change the formatting to Heading 3.
19. With this text still highlighted, click the italic button (the titled I icon) in the Secondary Format Toolbar.



20. Save your work so far by exiting Fullscreen mode (Click View > Fullscreen). Click anywhere inside the Code Panel. Select all content (Ctrl+A) and copy (Ctrl+C) your html code so far.
21. If Notepad is not still open, then go to **F:/cs1033/lab04/act2** and open **index.html** with Notepad.
22. Select all the content between <body>...</body> and hit Ctrl+V to replace it with new html. Click File>Save. Your index.html Notepad content should look something like this:

```
index.html - Notepad
File Edit Format View Help
<!DOCTYPE html>
<html>
<head>
<title>Home | Bob's Bakery</title>
</head>
<body>

<h1 style="text-align: left;"></h1>
<p>&nbsp;</p>
<h3><em>Providing delicious sweets since 1972!</em></h3>
<p>&nbsp;</p>
<p></p>

</body>
</html>
```

Keep your index.html file open.

NOTE: this is how you have to save your work from now on. Make sure you do the above steps every so often, i.e.

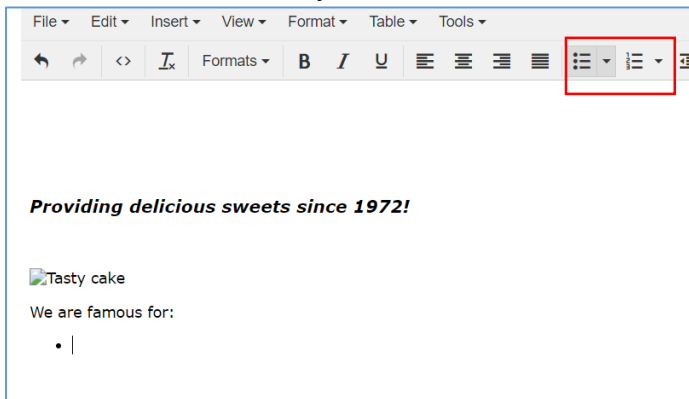
- Work in html5-editor and format your work
- Get out of Fullscreen view and go the html tags on the Code Panel of html5-editor
- Hit Ctrl+A to select all your new work
- Hit Ctrl+C to copy all your work
- Do NOT close your browser
- Go back into the webpage you were working on in Notepad and select all the text between the tags <body> and </body>
- Hit Ctrl+V to replace all that selected text with the newer version
- Hit File>Save to save your changes in Notepad
- REMEMBER TO DO THESE STEPS EVERY SO OFTEN so that you do not lose your work.

23. Go back to your html5-editor that still has the content you were just working on and return the html5-editor to Fullscreen mode (View>Fullscreen).

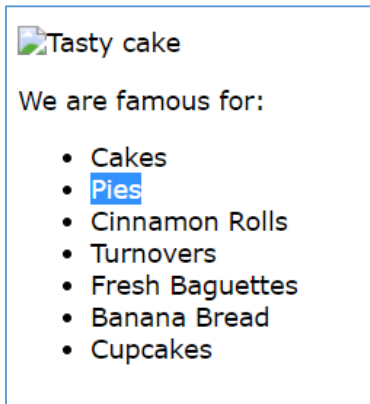
24. Click after the broken image of cake.jpg and hit Enter once.

25. Type "We are famous for:" and then hit Enter to go to the next line.

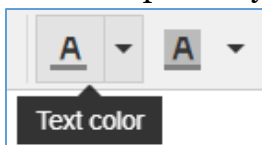
26. In the Secondary Format Toolbar, click the Unordered list button to create a bulleted list. Secondary Format Toolbar



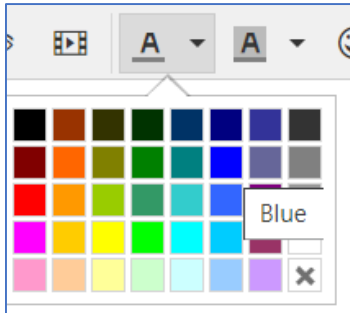
27. Type "Cakes" beside the first bullet point. Hit Enter to add another bullet.
28. Continue adding to this list the following items: "Pies", "Cinnamon Rolls", "Turnovers", "Fresh Baguettes", "Banana Bread", and "Cupcakes".
29. Highlight the words "Pies" in the list.



30. On the Secondary Format Toolbar, look for the Text Color and Background Color options. These represent the text foreground/font colour and the background colour respectively. They are probably black and white respectively by default.



31. Click the Text color option to bring up the colour selection panel. Click on a blue shade (called Blue) from the selection panel. If you hover over the colours on the panel, you can see the colours' names as below:



Click anywhere to un-highlight the word "Pies" and see that it is now blue.

We are famous for:

- Cakes
- Pies
- Cinnamon Rolls

32. Highlight the word "Turnovers" from the list.
33. Click directly on the Text color option which is already set as the same Blue shade as "Pies". The Text color option saves the text colour of the last colour selection.
34. Now both "Pies" and "Turnovers" should have the same blue font while the other items are still black.

We are famous for:

- Cakes
- Pies
- Cinnamon Rolls
- Turnovers
- Fresh Baguettes
- Banana Bread
- Cupcakes

35. Click at the end of "Cupcakes" and hit Enter twice so that your cursor is below the list, not entering a new bullet point.
36. Type "Items in blue are available in a variety of fruit flavours"
37. Highlight this entire line you just added and hit the Italics icon to italicize it.
38. Highlight the word "blue" from this line and set it to the last-picked colour so it matches the shade of blue used for those 2 list items (i.e. Pies and Turnovers).
39. The bottom of your webpage should now look like this:

We are famous for:

- Cakes
- Pies
- Cinnamon Rolls
- Turnovers
- Fresh Baguettes
- Banana Bread
- Cupcakes

Items in blue are available in a variety of fruit flavours

40. Click at the end of the word "flavours" and hit Enter twice.
41. Type "aaa" on the new line. The text is still italicized from the above line.
42. Look at the Italics icon in the Secondary Format Toolbar. Notice it is shaded grey. Highlight "aaa" and click the *I* icon to deactivate the Italics option. While the "aaa" is still highlighted, remove it by pressing backspace.
43. Make sure this new line does not have italics on and type the following text:
"Serving the **London** region for over 40 years!". Highlight the word "London" and make it Bold by selecting the B option from the Secondary Format Toolbar. Make sure the last entered sentence is not italicized as sometimes the Italics option remains activated from last use on html5-editor.

Items in *blue* are available in a variety of fruit flavours

Serving the **London** region for over 40 years!

Save your work so far the same way you did before by copying and pasting the html code from the Code Panel of html5-editor to the open index.html file in Notepad. Make sure you select the content between <body> and </body> and hit Ctrl+V. Then Click File> Save.

44. Go back to html5-editor in your active browser tab and convert the Visual Panel to Fullscreen mode again. Highlight the top text "Bob's Bakery" and delete it. Keep your cursor in the position where the text just was at the top. Hit the Align left icon in the Secondary Format Toolbar.
45. Open another tab on Chrome.
46. On the new tab, open <http://www.csd.uwo.ca/~bsarlo/cs1033/labs/lab04/act2/> in Chrome. Download banner.jpg into **lab04/act2/images**.
47. Insert an image in the cursor spot where "Bob's Bakery" was, following the same steps in Activity 1. Set the *Source* field to "images/banner.jpg". Set the *Image description* field to "Bob's Bakery banner". Click Ok.

Insert/edit image [X]

General | Advanced

Source:

Image description:

Dimensions: x ☒ Constrain proportions

Ok Cancel

48. Exit Fullscreen mode.
49. Under the View menu, select Preview and look at your page in preview mode. You won't be able to see your banner image that you just inserted, you will just see the Image Description for now. If you ever forget to put something for the Image

Description, html5-editor gets a bit confused and can't show anything here so make sure you ALWAYS include an Image Description.

50. While still in Preview mode, hover your mouse over the location where your banner should be displayed. Notice that nothing happens. You can add a hover explanation to each image, but you must do it by editing the HTML tags in the Code Panel rather than in the Visual Panel. We will add a hover tag to our banner now.
51. Close the Preview window by clicking on the close button in the bottom right corner.

In the HTML tag area on the left side, find the banner.jpg tag and add the *title* attribute “Bob’s Bakery Is Best” by putting your cursor immediately after the text *img* and hit the spacebar once and then type exactly what is highlighted in the green area in the image below. You MUST type the quotes (both the single and double quotes) exactly as shown

```
1 <h1 style="text-align: left;"></h1>
2 <p>&nbsp;</p>
```

52. Select all the html code in the Code Panel (Ctrl+A) so far and hit Ctrl+C.
53. Go to your open **index.html** file for **act2**. If you already closed the index.html file, reopen it by Navigating to **F:/cs1033/lab04/act2** and opening **index.html** with Notepad.
54. Select the content between but not including the <body>...</body> and hit Ctrl+V to replace it with new html. Click File>Save. Your index.html Notepad content should look something like this:

```
index.html - Notepad
File Edit Format View Help
<!DOCTYPE html>
<html>
<head>
<title>Home | Bob's Bakery</title>
</head>
<body>

<h1 style="text-align: left;"></h1>
<p>&nbsp;</p>
<h3><em>Providing delicious sweets since 1972!</em></h3>
<p>&nbsp;</p>
<p></p>
<p>&nbsp;</p>
<p>We are famous for:</p>
<ul>
<li>Cakes</li>
<li><span style="color: #0000ff;">Pies</span></li>
<li>Cinnamon Rolls</li>
<li><span style="color: #0000ff;">Turnovers</span></li>
<li>Fresh Baguettes</li>
<li>Banana Bread</li>
<li>Cupcakes</li>
</ul>
<p><em>Items in <span style="color: #0000ff;">blue</span> are available in a variety of fruit
flavours</em></p>
<p>&nbsp;</p>
<p>Serving the <strong>London</strong> region for over 40 years!</p>

</body>
</html>
```


The highlighted html is all the work you've done on html5-editor so far.

55. In Notepad, click File > Save.

56. Go back into WinSCP. Connect to the Gaul webserver if you are not still connected from before.

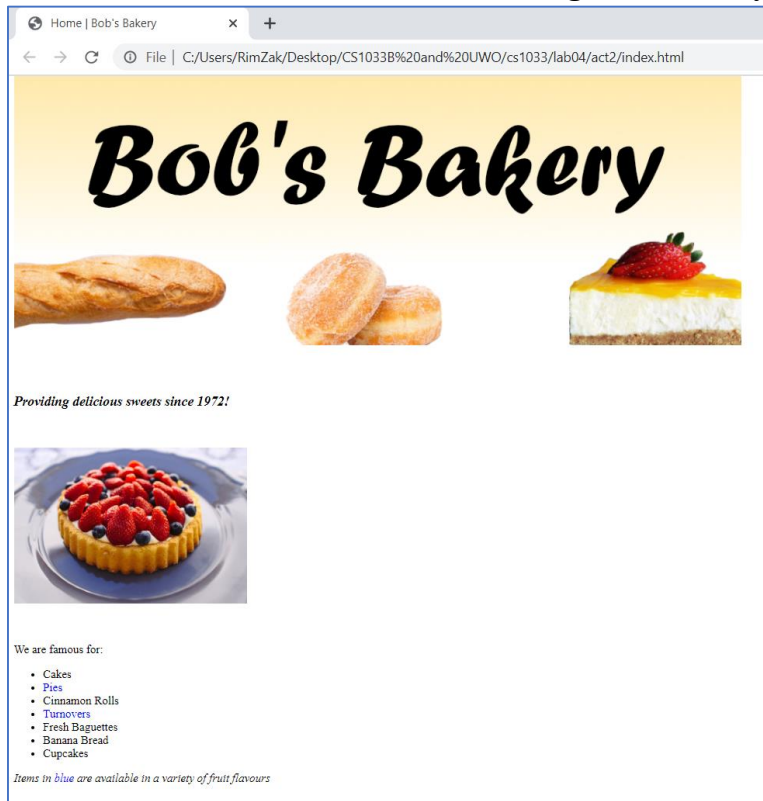
57. In the Remote side, go into *lab04* (you may have to step up one level if you are currently inside the *act1* sub-folder). Create a new sub-folder (directory) called *act2*.

58. In the Local side, navigate to **lab04/act2**. Select all the files and the images folder inside *act2* on the Local side and drag them across and drop them inside the *act2* folder on the Remote server side.

59. In Chrome, open: <http://cs1033.gaul.csd.uwo.ca/~youruserid/lab04/act2/> where **youruserid** is your own Western username.

60. Check that the banner image shows up properly. If not, double-check that you typed the banner.jpg filepath correctly in the *Source* field in html5-editor visual editor.

61. Your act2 website should look something like this on your Chrome browser:



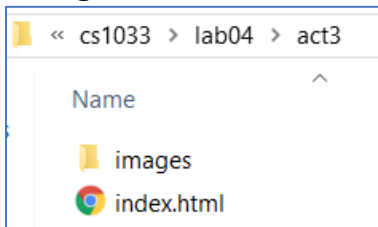
Activity 3

Hyperlinks

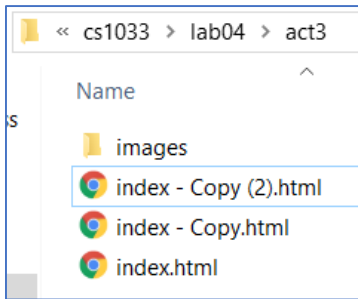
Hyperlinks, often shortened to *links*, are one of the fundamental features of websites. They are how we connect webpages to each other within a site, we also use them to point/link to other websites. There are several types of links: internal, external, email, images, downloadable files, and bookmarks. This activity will introduce you to these different kinds of links.

Page titles and headers

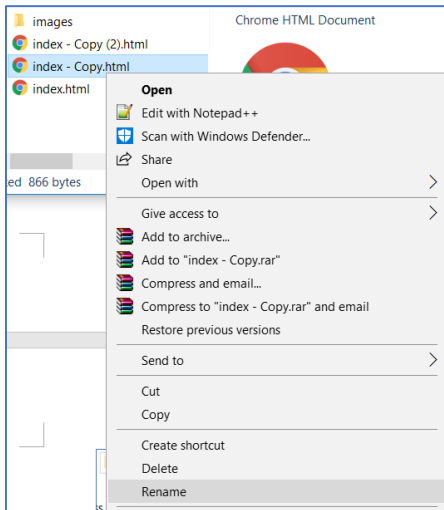
1. If not already done, close any files open left from *act2* (*index.html*), to avoid mixing up files between activities.
2. Go into the File Explorer and navigate to **F:/cs1033/lab04**.
3. Create a new sub-folder called *act3*.
4. Go into *act2* and select all the files and folders (CTRL+A should select everything) within it. Hit Ctrl+C to copy (NOT cut) these files.
5. Now go out of *act2* and into *act3*. Hit Ctrl+V to paste the files here.



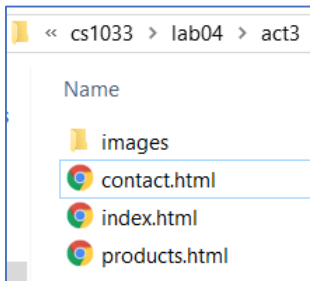
6. Open <http://www.csd.uwo.ca/~bsarlo/cs1033/labs/lab04/act3> in Chrome. Download all three files in this folder and put them in your activity 3 images folder → **lab04/act3/images**.
For Bob's Bakery website project, we will create two new webpages in addition to the homepage (**index.html**). The new webpages are for:
 - Products (**products.html**)
 - Contact (**contact.html**)
7. In file explorer, navigate to **cs1033/labs/lab04/act3**. Select **index.html**. Hit Ctrl+C then Ctrl+V twice to create the two new html files (two copies of index.html).



8. Select one of the copies and right-click. Click on Rename.



9. Type the file name “contact”. Make sure the filename is lowercase.
 10. Repeat the same step on the other index.html copy, and rename it to “products”.
- Your html files in the **act3** folder will look as follows:



On the file explorer navigate to show the extension of the files in your folder (if not already done before) and make sure the files extensions are html. Make sure your files are not called contact.html.html or products.html.html.

11. Now we want to change the webpage property titles (the text that shows up in the tabs in browsers) in both **products.html** and **contact.html** so they appear correctly when opened on the web browser (Chrome). Select contact.html file, right-click, and select Open With> Notepad.
12. At the beginning of the notepad file, find the <code><title></code> tag under the <code><head></code> tag. Replace the content between <code><title></code> and <code></title></code> with the following page title:

```

<!DOCTYPE html>
<html>
<head>
<title>Contact | Bob's Bakery</title>
</head>
<body>

```

13. Click File > Save. Close the file.
14. Repeat the same for the file **products.html**. Replace the content between <title> and </title> with the following page title:

```

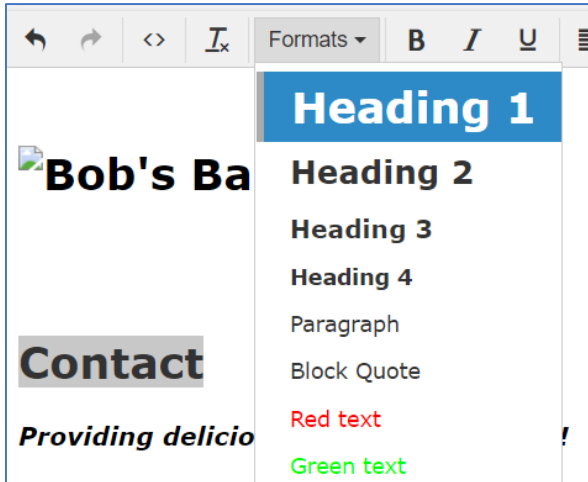
<!DOCTYPE html>
<html>
<head>
<title>Products | Bob's Bakery</title>
</head>
<body>

```

15. Click File > Save. Close the file.
16. After changing both the <title> tags, if you open **contact.html** and **products.html** with Chrome, you should see the following titles on tabs respectively:



17. Next we would like to add headers at the beginning of every webpage's contents to reflect the page's titles. In **act3** folder, select **contact.html** and right-click. Open with >Notepad.
18. Highlight all the content between the tags <body> and </body>. Then hit Ctrl+C to copy the content selected. Leave **contact.html** open in Notepad as we go onto the next steps.
19. In your Chrome browser, go <https://html5-editor.net/> again (you can use the same tab from before or open a new tab) and on the Code Panel, click anywhere inside the box so that you see a blinking cursor inside.
20. Hit Ctrl+A to select all then Ctrl+V to replace whatever is inside the box with the new content (even if the box was initially empty).
21. Next, on the Visual Panel side, select View >Fullscreen.
22. Click just above the slogan "Providing..." and hit Enter twice. Between the banner image and that slogan, type the word "Contact". Highlight this word now and change the formatting to Heading 1.



23. Save your work the same way you did before by exiting Fullscreen mode (View>Fullscreen), copying and pasting the html code from the Code Panel (Ctrl+A and then Ctrl+C) to the open **contact.html** file in Notepad. Make sure you select the content between <body> and </body> and hit Ctrl+V. Then Click File> Save. The contents of **contact.html** in Notepad should look similar to the below:

```

contact.html - Notepad
File Edit Format View Help
<!DOCTYPE html>
<html>
<head>
<title>Contact | Bob's Bakery</title>
</head>
<body>

<h1 style="text-align: left;"></h1>
<p>&nbsp;</p>
<p>&nbsp;</p>
<h1>Contact</h1>
<h3><em>Providing delicious sweets since 1972!</em></h3>
<p>&nbsp;</p>
<p></p>
<p>&nbsp;</p>
<p>We are famous for:</p>
<ul>
<li>Cakes</li>
<li><span style="color: #0000ff;">Pies</span></li>
<li>Cinnamon Rolls</li>
<li><span style="color: #0000ff;">Turnovers</span></li>
<li>Fresh Baguettes</li>
<li>Banana Bread</li>
<li>Cupcakes</li>
</ul>
<p><em>Items in <span style="color: #0000ff;">blue</span> are available in a variety of
fruit flavours</em></p>
<p>&nbsp;</p>
<p>Serving the <strong>London</strong> region for over 40 years!</p>

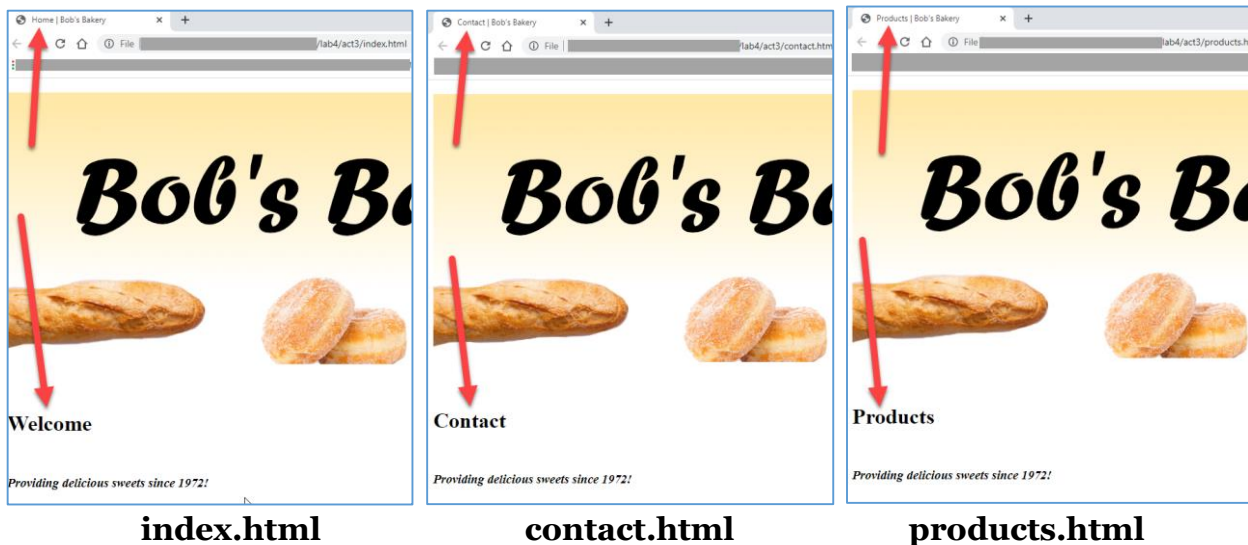
</body>
</html>

```

24. Repeat this step in the Products page (**products.html**) but type "Products" as the header.

25. Repeat this step in the Home page (**index.html**) but type "Welcome!" as the header.

26. If you open each html file with Chrome, your webpages will appear as so:



Internal links

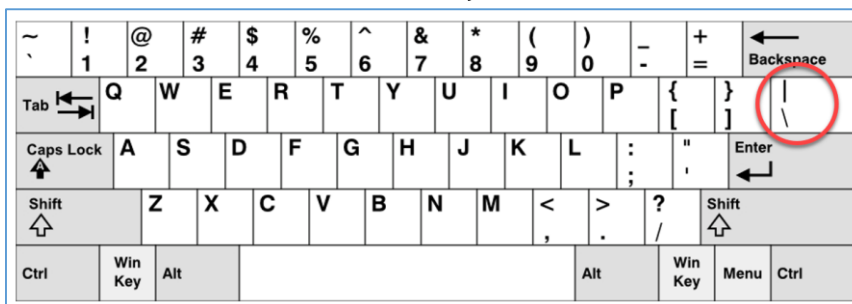
Now we are going to make the pages have a menu bar with working links so that we can navigate between the 3 pages.

27. Open with Notepad **index.html** in your **act3** folder and copy the contents between the <body> and </body> tags to html5-editor Code Panel as we have done many times before (after copying from Notepad, in html5-editor do Ctrl+A then Ctrl+V).

28. Next, on the Visual Panel side, select View >Fullscreen.

29. Click on the right of the banner and hit Enter.

30. On this new line, type the text: "Home | Products | Contact" (note: the | symbol is on the keyboard near the Enter button and you have to hold Shift to get the vertical line rather than the slash)



31. Highlight the word "Home".

32. From the Visual Panel menu bar click Insert > Link.

Insert link [X]

Url:

Text to display:

Title:

Target:

[Ok] [Cancel]

33. In the Links pop-up window, the *Url* textbox is where you will set the path of the link. Click inside the *Url* textbox and type “index.html”.

Like when inserting an image, it is important to note that the location of the file **index.html** is a relative path to your act3 folder. It is NOT an absolute path such as c:\\users\\john\\desktop\\act3\\index.html. It is relative because it assumes you are already in your act3 folder. Within the **act3** folder, it points to an html file called **index.html**.

Also note that many web servers are case sensitive so you MUST type the exact same case as you used when creating your folders and filenames. Thus index.html is correct but Index.html or INDEX.html would NOT work. Be very careful when typing in file and folder names!

Leave the *Title* field empty and *Target* as None as we don't want to open a new tab when we click on the link.

Insert link [X]

Url:

Text to display:

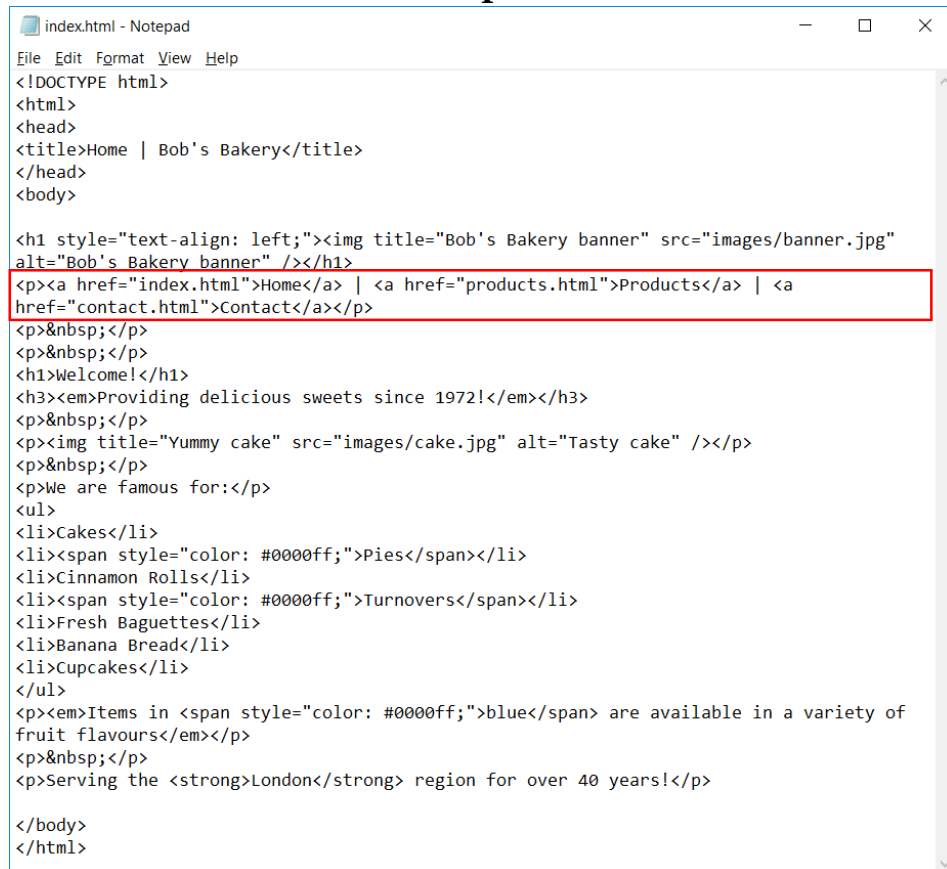
Title:

Target:

[Ok] [Cancel]

34. Push OK.
35. Highlight the word Products. Click Insert > Link and set the *Url* to **products.html** as a relative path. Push OK.
36. Highlight the word Contact. Insert a link and set *Url* to **contact.html** as a relative path. Push OK.
37. Save your work the same way you did before by exiting Fullscreen mode (From the View menu unclick Fullscreen), copying and pasting the html code from the Code Panel to the open **index.html** file. Make sure you select the content

between `<body>` and `</body>` and hit Ctrl+V. Then Click File> Save. The contents of **index.html** in Notepad should look similar to the below:



```
index.html - Notepad
File Edit Format View Help
<!DOCTYPE html>
<html>
<head>
<title>Home | Bob's Bakery</title>
</head>
<body>

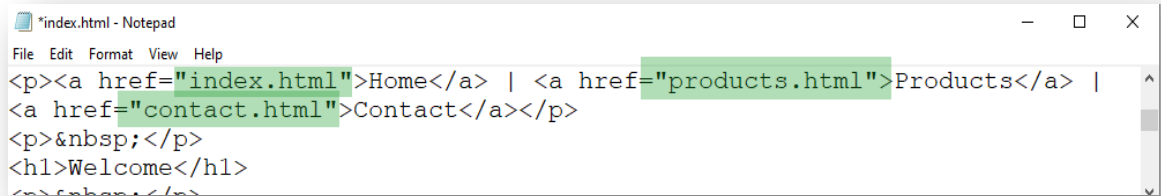
<h1 style='\"text-align: left;\"><img title='\"Bob's Bakery banner\" src='\"images/banner.jpg\"
alt='\"Bob's Bakery banner\" /></h1>
<p><a href='\"index.html\">Home</a> | <a href='\"products.html\">Products</a> | <a
href='\"contact.html\">Contact</a></p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<h1>Welcome!</h1>
<h3><em>Providing delicious sweets since 1972!</em></h3>
<p>&nbsp;</p>
<p><img title='\"Yummy cake\" src='\"images/cake.jpg\" alt='\"Tasty cake\" /></p>
<p>&nbsp;</p>
<p>We are famous for:</p>
<ul>
<li>Cakes</li>
<li><span style='\"color: #0000ff;\">Pies</span></li>
<li>Cinnamon Rolls</li>
<li><span style='\"color: #0000ff;\">Turnovers</span></li>
<li>Fresh Baguettes</li>
<li>Banana Bread</li>
<li>Cupcakes</li>
</ul>
<p><em>Items in <span style='\"color: #0000ff;\">blue</span> are available in a variety of
fruit flavours</em></p>
<p>&nbsp;</p>
<p>Serving the <strong>London</strong> region for over 40 years!</p>

</body>
</html>
```

38. Next we would like to replicate the navigation links we just created in index.html in the other two webpages **products.html** and **contact.html** so that the website is consistent and you can go back and forth the different webpages. You can create them again using the same steps as above **OR** you can use the following steps to replicate the navigation links faster.

- a. Select/highlight the content in the red box in the Notepad image above. Hit Ctrl+C.
 - b. Navigate to the **act3** folder, select **products.html** and Open with> Notepad.
 - c. Click after `...banner" /></h1>` (the html tags for the banner image) and hit Enter to go to a new line.
 - d. Then paste the html link tags that create the menu that you just copied to where you cursor currently is by hitting Ctrl+V.
 - e. Click File>Save
39. Repeat the same to replicate the navigation links for **contact.html**.
40. Close all 3 html notepad files.
41. Go into the File Explorer into **labo4/act3**, right-click on index.html, and click Open With > Google Chrome.

42. In Chrome, click each of the links from each page to make sure all the links open the other 2 pages properly. If any of the links don't work, open the file with the broken link using Notepad, then check your spelling of the file names as shown in the green areas below (spelling and case must match exactly):



```
*index.html - Notepad
File Edit Format View Help
<p><a href="index.html">Home</a> | <a href="products.html">Products</a> |
<a href="contact.html">Contact</a></p>
<p>&nbsp;</p>
<h1>Welcome</h1>
<hr/>
<p>Footer</p>
```

External links

43. Open with Notepad **products.html** in your **act3** folder and copy the contents between the `<body>` and `</body>` tags to html5-editor.net Code Panel as we have done many times before (Ctrl+A then Ctrl+V).
44. Next, on the Visual Panel side, select View >Fullscreen.
45. Delete everything under the slogan "Providing..." including the cake image.
46. Move your cursor to 2 lines below that slogan. Type the sentence "All our products are made fresh in the store. We follow all health and safety guidelines described on the official Baking Association of Canada website". If the sentence was Italicized, un-italicize it.
47. Highlight the words "Baking Association of Canada" from this sentence.
48. At the top, click Insert > Link.
49. In the *Url* textbox, type in the following link: <https://www.baking.ca>. Make sure you remember the https:// when typing in your link.
50. Leave the *Title* field empty. Click on the *Target* drop-down and select New Window. This means the website will open in a new tab/window in the browser which is what you must ALWAYS choose for external links but NEVER for internal links.

Insert link	
Url	<input type="text" value="https://www.baking.ca"/>
Text to display	<input type="text" value="Baking Association of Canada"/>
Title	<input type="text"/>
Target	<input type="text" value="New window"/>
<input type="button" value="Ok"/> <input type="button" value="Cancel"/>	

51. Push OK.
52. Save your work the same way you did before by exiting Fullscreen mode, copying and pasting (Ctrl+A then Ctrl+C) the html code from the Code Panel to the open **products.html** file. Make sure you select the content between <body> and </body> and hit Ctrl+V. Then Click File> Save. Close the notepad file.
53. Open **products.html** with Chrome.
54. Click on the link you added. If this was done correctly, it will open up the www.baking.ca website in a new tab.

Email links

55. Open with Notepad **contact.html** in your **act3** folder and copy the contents between the <body> and </body> tags to html5-editor.net Code Panel as we have done many times before (Ctrl+A then Ctrl+V).
56. Next, on the Visual Panel side, select View >Fullscreen.
57. Delete everything under the slogan "Providing..." including the cake image.
58. Move your cursor to 2 lines below that slogan.
59. Type the following contact information given below. Make sure the Italics icon is switched off. Put each line of information below on its own line (i.e. hit enter between lines). Format the bolded lines to be Heading 4.

Put your first name and last name for the email address, for example homer@simpson.com

Phone
(725) 555-1323

Email
YOURFIRSTNAME@YOURLASTNAME.com

Address
LASTTWO DIGITSOFYOURSTUDENTNUMBER Main St. W.
CITYNAME

Put the last 2 digits of your Western student number for the street number on Main St. W

Put your favourite city OR a city you would love to visit for the CITYNAME

60. Highlight the email address: "yourfirstname@yourlastname.com".

Providing delicious sweets since 1972!

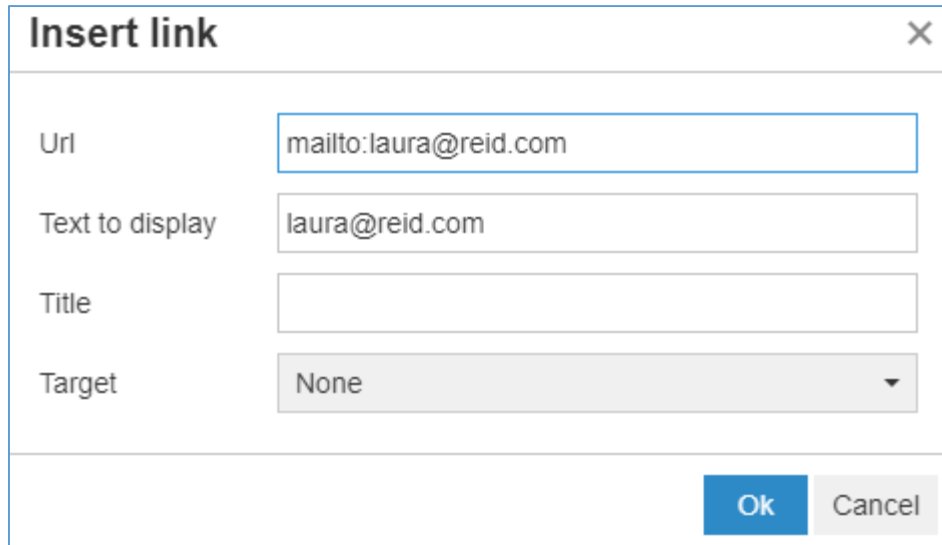
Phone
(725) 555-1323

Email
laura@reid.com

Address
88 Main St. W.
Dubai

61. At the top, click Insert > Link.

62. In the *Url* textbox, you might notice this email address is automatically inserted by html5-editor with <mailto:> at the beginning ("mailto:yourfirstname@yourlastname.com") indicating that it is an email address. However, if the *Url* textbox is empty in your case, type in it "mailto:yourfirstname@yourlastname.com" as show below:



Insert link [X]

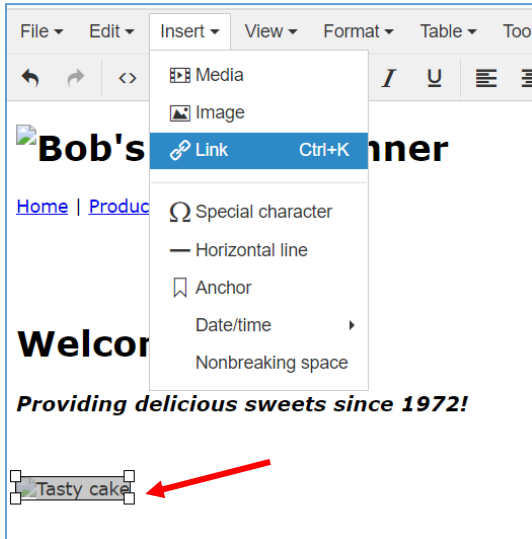
Url	<input type="text" value="mailto:laura@reid.com"/>
Text to display	<input type="text" value="laura@reid.com"/>
Title	<input type="text"/>
Target	<input type="text" value="None"/>

Ok Cancel

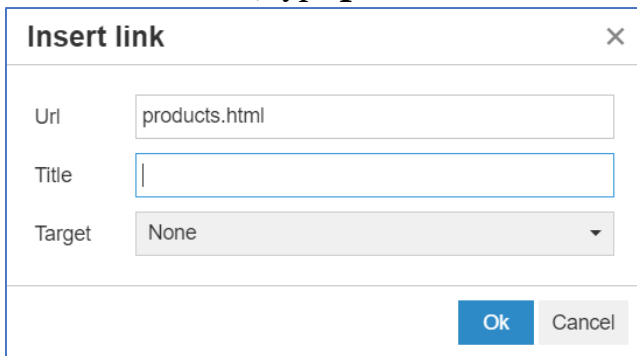
63. Push OK.
64. Save your work the same way you did before by exiting Fullscreen mode, copying and pasting the html code from the Code Panel to the open **contact.html** file. Make sure you select the content between <body> and </body> and hit Ctrl+V. Then Click File> Save. Close the Notepad file.
65. Open **contact.html** with Chrome.
66. Click on the email link. If done correctly, clicking this link will try to open up Windows Mail, Outlook, or another email program. Do NOT actually send an email to this address! This is a fake address so just close any program that launched from clicking this link.

Image links

67. Open with Notepad **index.html** in your **act3** folder and copy the contents between the <body> and </body> tags to html5-editor.net Code Panel as we have done many times before (Ctrl+A then Ctrl+V).
68. Next, on the Visual Panel side, select View >Fullscreen.
69. Select the image of the cake halfway down the page (cake.jpg,) and at the top click Insert >Link.



70. In the *Url* textbox, type **products.html** as a relative path. Push OK.



71. Save your work the same way you did before by unchecking Fullscreen mode, copying and pasting the html code from the Code Panel to the open **index.html** file. Make sure you select the content between `<body>` and `</body>` and hit Ctrl+V. Then Click File> Save. Close the Notepad file.

72. Open **index.html** with Chrome.

73. Click on the cake image. It should bring you to the Products page.

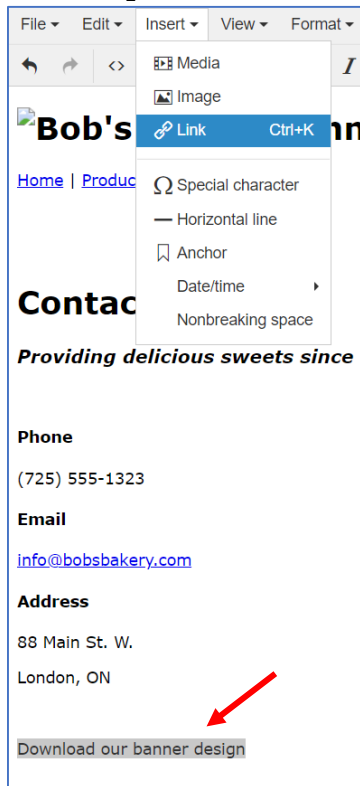
Note: image links can also work with external website links. They are made the same way but you would change the *Target* field to New Window and make sure you remember to start the link with either `https://` or `http://`.

Download links

74. Open with Notepad **contact.html** in your **act3** folder and copy the contents between the `<body>` and `</body>` tags to html5-editor.net Code Panel as we have done many times before (Ctrl+A then Ctrl+V).

75. Next, on Visual Panel side, select View >Fullscreen.

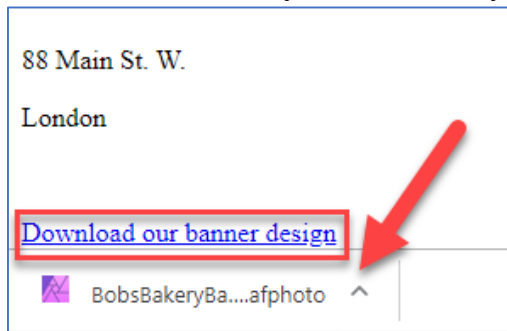
76. Move your cursor to the bottom of the content, below the contact info.
77. Hit Enter a couple times to make extra space.
78. Type: "Download our banner design" and highlight this new line of text.
79. At the top, click Insert > Link.



80. In the *Url* textbox, type "images/BobsBakeryBanner.afphoto" which is the Affinity file used to create the banner image. Push OK.

81. Save your work the same way you did before by unchecking Fullscreen mode, copying and pasting the html code from the Code Panel to the open **contact.html** file. Make sure you select the content between <body> and </body> and hit Ctrl+V. Then Click File> Save. Close the notepad file.
82. Open **contact.html** with Chrome.

83. Click the "Download our banner design" link at the bottom. The Affinity file should automatically download to your computer.

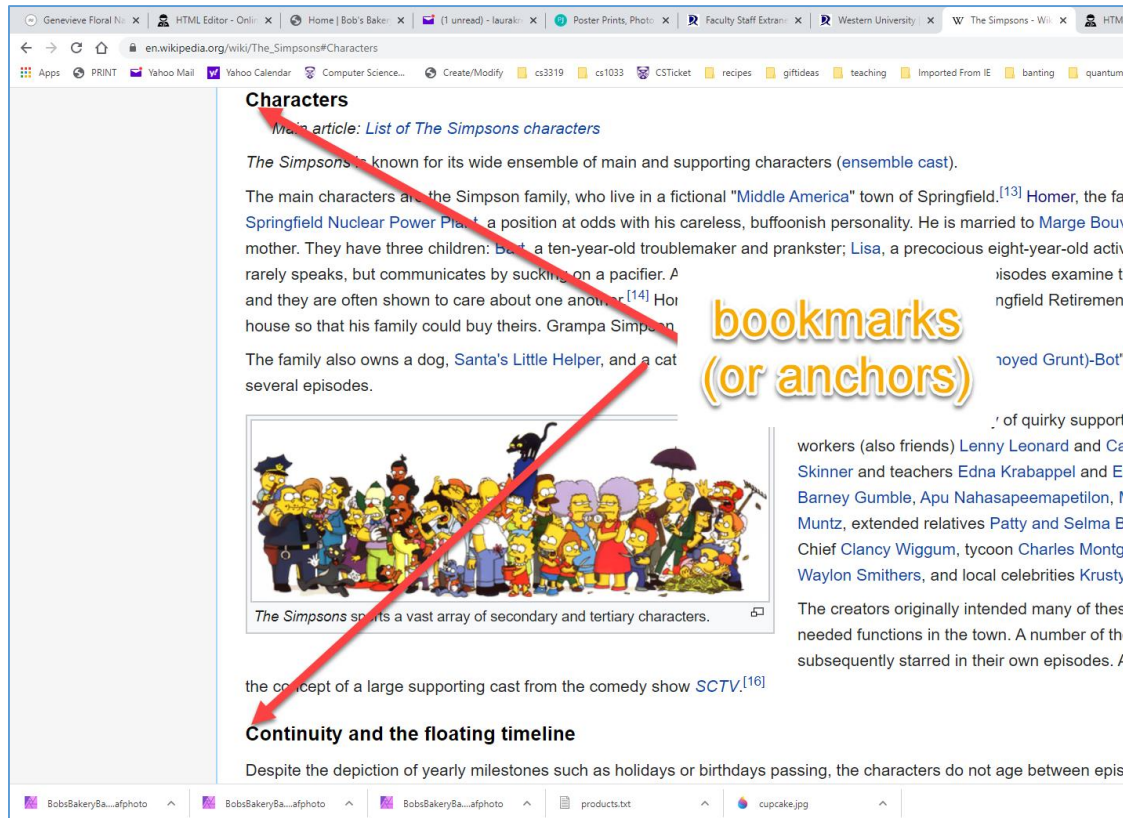


NOTE: if the download doesn't work, check that you spelled the name of the .afphoto file correctly. Also make sure that you downloaded the affinity banner file from here: <https://www.csd.uwo.ca/~bsarlo/cs1033/labs/lab04/act3/> into your act3/images folder.

Bookmarks

In this exercise, we will make links that jump from a top list of items down the page to the area that describes them. The location that you are jumping down to is called the anchor or the bookmark and the area that you click to do the jumping is called a bookmark link. For example, in this Wikipedia page about The Simpsons https://en.wikipedia.org/wiki/The_Simpsons, if you scroll down to the Contents you will see this:

A screenshot of the Wikipedia page for "The Simpsons". The page is divided into three main sections. On the left is a sidebar with navigation links like "Upload file", "Special pages", and "Languages". The middle section contains the main article text, starting with "February 6, 2019 for a thirty-first and thirty-second season...". Below the text is a "Contents" section with a list of links: "1 Premise", "1.1 Characters", "1.2 Continuity and the floating timeline", "1.3 Setting", "2 Production", "2.1 Development", "2.2 Executive producers and showrunners", "2.3 Writing", "2.4 Voice actors", "2.5 Animation", "3 Themes", "4 Hallmarks", "4.1 Opening sequence", "4.2 Halloween episodes", and "4.3 Humor". On the right is a "Data" section with information about the show, including "Genre", "Created by", "Based on", "Developed by", "Voices of", "Theme music", "Opening theme", "Composer(s)", and "Country of". Red arrows point from the "Contents" list to the corresponding sections in the main article. A yellow text "Bookmark links" is overlaid on the right side of the "Contents" list.



84. Open with Notepad **products.html** in your **act3** folder and copy the contents between the <body> and </body> tags to html5-editor.net Code Panel as we have done many times before (Ctrl+A then Ctrl+V).

85. Next, on the Visual Panel side, select View >Fullscreen.

86. Click at the end of the line of text with the Baking Association of Canada link. Hit Enter a few times to add more space.

87. Type the following text, hitting Enter between each line:

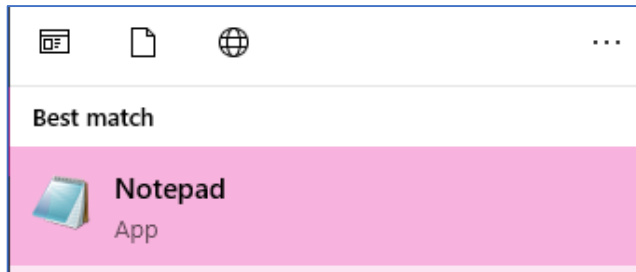
Breads and Rolls
Cakes
Pies
Other

88. Hit Enter a few times after "Other" to add more space.

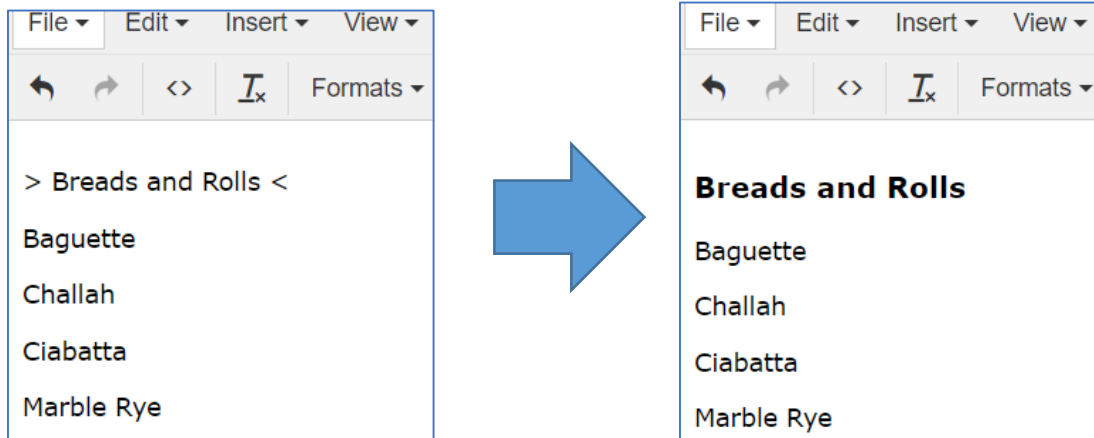
89. Open

<http://www.csd.uwo.ca/~bsarlo/cs1033/labs/lab04/act3/products.txt> in Chrome. Select all of the text in this file (Ctrl+A) and hit Ctrl+C to copy it.

90. Open Notepad in Windows (so that you have an empty Notepad, not one of the three files you have been working on) and paste (Ctrl+V) the text you just copied into the Notepad window. You need to do this because when you copy from the Internet and paste it directly into html5-editor.net's Visual Panel, you keep the formatting with it. We do not want any formatting. Notepad will remove any formatting.



91. While in the Notepad that you opened in the step above, hit Ctrl+A again to select everything and then hit Ctrl+C to copy everything in Notepad.
92. Click back into html5-editor.net Visual Panel, to the bottom of the Products page. Hit Ctrl+V to paste all the product info from the file into this webpage.
93. You will need to format each of the 4 category headers from this file, matching the text you typed above. They are identified with > and < around them. For each header, remove the triangular brackets and change the formatting to Heading 3.



94. Save your work so far by unchecking Fullscreen mode, copying and pasting the html code from the Code Panel to the open **products.html** file in Notepad Make sure you select the content between <body> and </body> and hit Ctrl+V. Then Click File> Save.
95. Go back to your active html5-editor.net tab, and View the Visual Panel as Fullscreen. Scroll to the bottom of this content and hit Enter 10 times after the Turnover (assorted flavours) line.
96. At the bottom of this extra space, go to Insert > Image. In the *Source* field type "images/cupcake.jpg". In the *Image description* field type "Yellow Cupcake". Press Ok.

Insert/edit image

General

Advanced

Source

images/cupcake.jpg

Image description

Yellow Cupcake

Dimensions

x

☒ Constrain proportions

Ok

Cancel

97. We also want to add a title attribute (hover information) to the cupcake.jpg image we just added. To do that, uncheck Fullscreen mode.

98. On the Code Panel, find the <img....> html tag for the recently added cupcake image. After </p>
56 <p></p>

```

99. On the Visual Panel go back to View>Fullscreen.

100. Move your cursor to the beginning of the "Breads and Rolls" header line that you added from the file (NOT the very first one that you typed yourself) as indicated by the red arrow:

Bread Rolls

Cakes

Pies

Other

**Breads and Rolls**

Baguette

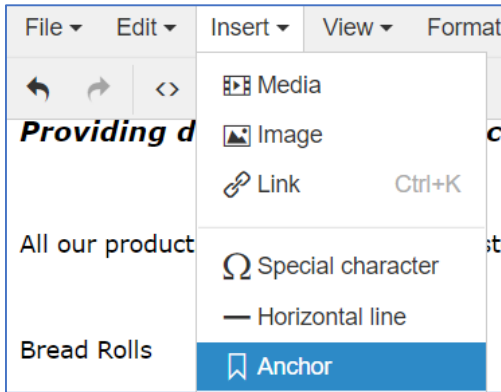
Challah

Ciabatta

Marble Rye

Naan

101. We are now going to give this location in the page an anchor name (or an id) that we can reference in order to be able to jump to this location. We get to pick the anchor name but each anchor name in your page MUST be unique (the anchor name is the unique id for this location, so all Id's must be different, just like your Western Username is an id for you). From the top, select Insert > Anchor.



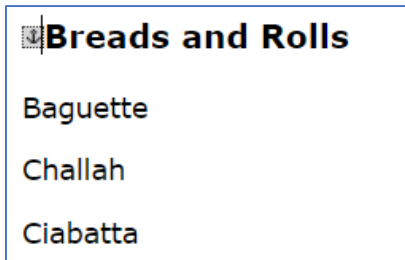
102. You will be prompted to give a name to this anchor in a small pop-up window.

A screenshot of a small pop-up window titled 'Anchor' with a close button (X) in the top right corner. Inside the window, there is a label 'Id' followed by an empty text input field. At the bottom right of the window are two buttons: 'Ok' (in blue) and 'Cancel' (in grey).

103. In the *Id* field, type "breads". Push OK. NOTE: anchor names can NEVER have a space in them and it is best to make them lower case and MUST start with a letter and then just have letters and numbers, no special characters like quotes or @, etc....

A screenshot of the same 'Anchor' pop-up window. The text input field now contains the word 'breads'. The 'Ok' and 'Cancel' buttons remain at the bottom right.

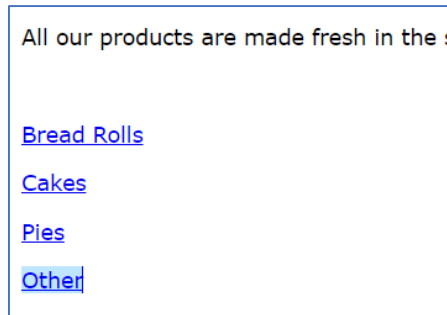
104. A little grey anchor icon will appear beside this header.



105. Repeat these steps on the "Cakes" header. Name this anchor "cakes".
106. Repeat these steps on the "Pies" header. Name this anchor "pies".
107. Repeat these steps on the "Other" header. Name this anchor "other".
108. Now the anchors are all set so we can now create bookmark links that jump to these anchors on this webpage.
109. Save your work so far by exiting Fullscreen mode, copying and pasting the html code from the Code Panel to the open **products.html** file. Make sure you select the content between `<body>` and `</body>` and hit Ctrl+V. Then Click File> Save.
110. Go back to your active html5-editor.net tab, and View Visual Panel as Fullscreen.
111. Scroll up to the 4 category names you typed in near the top of the page. Highlight the category "Breads and Rolls".
112. At the top, click Insert > Link.
113. Click on the drop-down *Anchor* list and select 'breads'. Notice how the *Url* field changed to #breads. Note that the # indicates this is a bookmark link, so the link will look for an anchor on your page with the same name as the name you type after the #. Push Ok.

A screenshot of the "Insert link" dialog box. It has a title bar with "Insert link" and a close button (X). The dialog contains five input fields: "Url" with the value "#breads", "Text to display" with the value "breads", "Title" (empty), "Anchors" with a dropdown menu showing "breads", and "Target" with a dropdown menu showing "None". At the bottom right, there are "Ok" and "Cancel" buttons.

114. Highlight "Cakes" from that same area. Insert a link that points to #cakes by selecting 'cakes' from the *Anchor* drop-down. Push Ok.
115. Repeat these steps with "Pies" linking to #pies.
116. Repeat these steps with "Other" pointing to #other.



117. Save your work the same way you did before by unchecking Fullscreen mode, copying and pasting (Ctrl+A then Ctrl+C) the html code from the Code Panel to the open **products.html** file. Make sure you select the content between <body> and </body> and hit Ctrl+V. Then Click File> Save. Close the Notepad file.
118. Open **products.html** with Chrome.
119. Click on each of the category links there to jump down to the corresponding category section below.
120. Now we want to place a link in the homepage (**index.html**) to point to the "cakes" anchor on the **products.html** page.
121. Open with Notepad **index.html** in your **act3** folder and copy the contents between the <body> and </body> tags to html5-editor.net's Code Panel as we have done many times before (Ctrl+A then Ctrl+V).
122. Next, on the Visual Panel side, select View >Fullscreen.
123. In the bulleted list, highlight the text "Cakes".
124. At the top, click Insert > Link.
125. We want this link to point to the "cakes" anchor on the **products.html** page so we have to combine this link to include both the file name and the anchor. In the *Url* textbox, type in "products.html#cakes" which is a relative path to your act3 folder. Push Ok.

126. Scroll down to the very end of the workspace and click beside the sentence "Serving the **London** region for over 40 years!". Press Enter twice. Type including the brackets: "(~***youruserid*** created this webpage on

**mm/dd/yyyy)**". Make sure you use the bold and italics formats as shown. Highlight this sentence and Align right.

127. Save your work the same way you did before by unchecking Fullscreen mode, copying and pasting the html code from the Code Panel to the open **index.html** file. Make sure you select the content between <body> and </body> and hit Ctrl+V. Then Click File> Save. Close the Notepad file.
128. Open **index.html** with Chrome.
129. Click on the "Cakes" link in the bulleted list and make sure that it jumps to the Products page at the Cakes section.
130. Go back into WinSCP. Connect to Gaul if you are not still connected from before.
131. In the Remote side, go into *lab04*. Create a new sub-folder called *act3*.
132. In the Local side, navigate to **lab04/act3**. Select the files inside *act3* on the Local side and transfer them across to *act3* on the Remote server side.
133. Open: <http://cs1033.gaul.csd.uwo.ca/~youruserid/lab04/act3/> in Chrome, where **youruserid** is your own Western username.
134. Click all the links and check that everything works properly online.

## Lab4 OWL Submission

1. In your Internet browser, go to <https://owl.uwo.ca> and login with your UWO username and password.
2. Go to your CS1033 OWL site.
3. On the left-side panel, click on **Week By Week**. Click on the **Week 4** button, then click on the **Lab 4** button, this will take you directly to the **Lab 4** submission area in Owl.
4. In the textbox under Submission, copy and paste your submission link which is: <http://cs1033.gaul.csd.uwo.ca/~youruserid/lab04/act3/>
5. Click on Submit.

**Remember to save all your Lab04 folder on your backup memory stick!**