LAB 02 – INTRODUCTION TO CSS
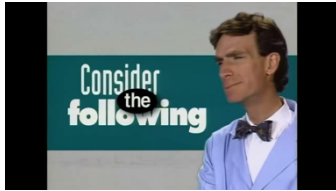
READINGS:

Introduction to CSS

References:
Lesson 4 Introduction to CSS, HTML5, JavaScript, and jQuery 24-Hour Trainer, by Dane Cameron 2015.

CONSIDER THE FOLLOWING

- What is difference between a CSS selector, declaration, property, value?
- What is the difference between an **id** and a **class** selector?
- What are 3 ways of incorporating CSS into your web pages?

COMP215 LAB 02 – BASIC CSS STYLING

1. Download the "lab-excersizes**.zip"** file from Brightspace
2. Right click > Extact All… to unzip the file into a folder, but make sure you extract it in a location you will remember (Perhaps: Documents > SaskPoly > COMP215 > Lab02)
3. Create a folder named **assets** in your new directory and add a style sheet file to the it called **mystlyes.css**.
4. Use the stylesheets from exercises 1 & 2 as a template for your new style
5. Start with an h1 tag:

```
h1 {
        font-family: Verdana, Arial, Helvetica, sans-serif;
        font-size: 24px;
        color: #0099CC;
}
```

6. Open the **index.html** and attach the CSS style sheet **mystlyes.css**
7. Open the page in your browser (Chrome, Edge, etc.) and take a look at the changes

NOTE:

Make sure you are putting your CSS rules in the external stylesheet and not directly in the HTML

8. Add a rule to the CSS page to change the text: "Multiple Styles Will Cascade Into One" so that it follows these rules:

```
font-family: Verdana, Arial, Helvetica, sans-serif;
font-size:18px;
color:#0066FF;
```

9. Add these rules to the paragraph selector:

```
font-family: Verdana, Arial, Helvetica, sans-serif;
font-size: 12px;
color: #0000FF;
```

10. **Navigation Links**: Provided are links to the pages using the **Previous…, Next…, & Home** buttons.

11. **Navigation Bar**: Create a navigation bar to contain all the navigation links on each of the three pages of the site in a div element.

    a. Wrap the div element around the selection and give it an id of navigation

    b. Create a new style rule for the div so that it has a light grey background

    c. Feel free to customize the CSS rules to improve the appearance of these elements

12. Modify the CSS Rule Definition for the paragraph element in the CSS file to set the line height to 1.8 em & set the text alignment to justify.

13. Place some pseudo class style rules for all link (<a> elements) contained in the navigation div elements, as follows:

```
div#navigation a:link {
      font-family:Verdana, Arial, Helvetica, sans-serif;
      font-size:12px;
      color:#0000FF;
}
div#navigation a:visited {
      font-family: Arial, Helvetica, sans-serif;
      font-size:12px;
      color:#0000FF;
}
div#navigation a:hover {
      font-family: Arial, Helvetica, sans-serif;
      font-size:12px;
      color:#000099;
      background:#FFFF00;
}
```

14. Add an h3 element below the navigation links on each page. Add the following text to the element: "Prepared by student Name" and substitute your name for "Student Name." Set the style for the h3 element in the CSS file as follows:

```
Geneva, Arial, Helvetica, sans-serif
10px
#FF0000
```

15. Set the body background color to #FFCC99 in the CSS file.

16. Replace he holiday styling with your style sheet on your pages and verify that all the formatting has been applied to all three pages

17. View the pages and test the links

COMP215 LAB 02 - CSS MENUS

This second part of our CSS lab is a little more complex. It will demonstrate a real-world application of CSS. It contains 2 exercises. In Exercise I you will create a rollover menu out of an unordered list of hyperlinks using the code provided below. In Exercise II, you will create an unordered list of hyperlinks using your own code and design.

REFERENCES

- https://www.w3schools.com/css/css_boxmodel.asp
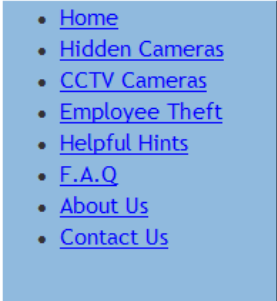- https://www.w3schools.com/css/css_navbar.asp

LAB ASSIGNMENT

The main objective of Part I is to interpret the code and its effect on the design of the page. You can copy and paste the code from this document into your HTML or CSS file depending on its target location. Note that the electronic copy of this document will illustrate the Design View in color.

1. Create a new folder on your site called CSSMenu

2. Add an index page. To this page add the following list of links using the code supplied:

Code View	Design View

`<div id="button">`
`<ul>`
    `<li><a href="#">Home</a></li>`
    `<li><a href="#">Hidden Cameras</a></li>`
    `<li><a href="#">CCTV Cameras</a></li>`
    `<li><a href="#">Employee Theft</a></li>`
    `<li><a href="#">Helpful Hints</a></li>`
    `<li><a href="#">F.A.Q</a></li>`
    `<li><a href="#">About Us</a></li>`
    `<li><a href="#">Contact Us</a></li>`
`</ul>`
`</div>`
	• Home
	• Hidden Cameras
	• CCTV Cameras
	• Employee Theft
	• Helpful Hints
	• F.A.Q
	• About Us
	• Contact Us

3. Add a style sheet (CSS) to the site. You can use a name of your choice for the style sheet following the standard naming conventions. Add the following code to the style sheet and attach it to your index page. Next, look at the properties for #button viewing each category.

Code View	Design View
| ```
#button {
        width: 12em;
        border-right: 1px solid #00000;
        padding: 0 0 1em 0;
        margin-bottom: 1em;
        font-family: 'Trebuchet MS', 'Lucida Grande',
          Verdana, Lucida, Geneva, Helvetica,
          Arial, sans-serif;
        background-color: #90BADE;
        color: #333;
}
``` | • Home<br>• Hidden Cameras<br>• CCTV Cameras<br>• Employee Theft<br>• Helpful Hints<br>• F.A.Q<br>• About Us<br>• Contact Us |

NOTE

- The first rule is for the #button DIV (ID). It defines the space that the menu will occupy, and provides a context for the menu so that we can define the way the list and links will behave inside the DIV

- Font size is based on browser preferences, so (almost) all units are in ems. The bottom padding is there to extend the DIV down beyond the menu of links so that you can see the background of the DIV. The bottom margin is to separate the DIV from what follows it. The colors are arbitrary, and you can change them when completed

- View the page to see what is looks like so far. It should look like the Design view above. Take a look at the CSS Rule Definitions for #button. Select each of the Category items then modify the type settings then view the effect in your browser. Take a look at the changes in the code. Once you are satisfied that you understand how the changes affect your design, return the properties to their original state. You can also copy over the code to overwrite your changes.

4. The first rule is for the #button DIV (ID). It defines the space that the menu will occupy, and provides a context for the menu so that we can define the way the list and links will behave inside the DIV.

NOTE

- Font size is based on browser preferences, so (almost) all units are in em
- The bottom padding is there to extend the DIV down beyond the menu of links so that you can see the background of the DIV
- The bottom margin is to separate the DIV from what follows it
    - The colors are arbitrary and you can change them once completed
- View the page to see what is looks like so far
    - It should look like the Design view above
- Take a look at the CSS Rule Definitions for #button
- Select each of the Category items then modify the type settings then view the effect in your browser
- Take a look at the changes in the code
- Once you are satisfied that you understand how the changes affect your design, return the properties to their original state
- You can also copy over the code to overwrite your changes

Code View	Design View
| ```css
#button ul {
        list-style: none;
        margin: 0;
        padding: 0;
        border: none;
}

#button li {
        border-bottom: 1px solid #90bade;
        margin: 0;
}
``` | Home<br>Hidden Cameras<br>CCTV Cameras<br>Employee Theft<br>Helpful Hints<br>F.A.Q<br>About Us<br>Contact Us |
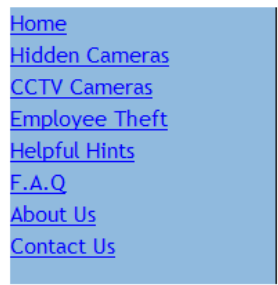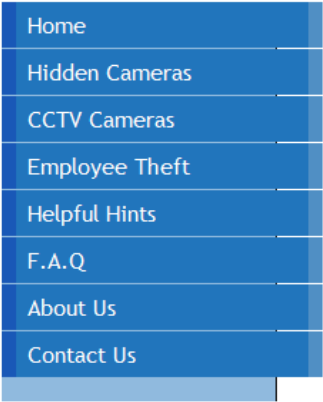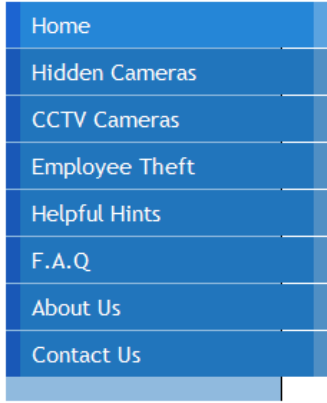
5. The next step is to define what the list and list items will look like

   a. Since all the list items are links, we're really just removing most formatting from the lists
   b. Now the bulk of the look and feel comes in by formatting the link tags (<a>) that exist inside list item tags (<li>) that exist inside the div tags with a button id
   c. Add the following code to the style sheet. Check out the categories for the newly added #button li a rule. Experiment by modifying the rules and viewing in your browser
   d. Once you are satisfied that you understand how the changes affect your design, return the properties to their original state

Code View	Design View
| ```
#button li a {
        display: block;
        padding: 5px 5px 5px 0.5em;
        border-left: 10px solid #1958b7;
        border-right: 10px solid #508fc4;
        background-color: #2175bc;
        color: #fff;
        text-decoration: none;
        width: 100%;
}
``` |  |

6. The last step is to define the hover effects. Add the following code to the style sheet. Notice the #button li a:hover rule is added to the CSS Styles. Modify the settings in the Background and Border category then view the effects in your browser.

Code View	Design View
| ```
#button li a:hover {
        border-left: 10px solid #1c64d1;
        border-right: 10px solid #5ba3e0;
        background-color: #2586d7;
        color: #fff;
}
``` |  |

FINAL EXERCISE

Now that you have some background information on creating a rollover menu out of an unordered list of hyperlinks, it's time to put some of your creativity to use. Your task is to create an **original** rollover menu of hyperlinks. The menu must include the following links:

- COMP215 – Labs Homepage
- Saskatchewan Polytechnic Home Page
- mysaskpolytech

The link information is purposely set at a variety of string lengths to see how you can best organize and design the menu.

Define a new site and create an index html document. You must attach and use a style sheet. All other design elements can be of your choosing. You can use the information from Part I of this exercise as a guide, but **I implore you to use you're your own creative design & flair**.

(END OF LAB 02)