

# INT222 Lab 3 – Section B

## Submission Deadline:

Thursday, Oct 27<sup>th</sup>, 2016 @ 11:59 PM

## Assessment Weight:

5% of your final course Grade

## Objective:

Work with HTML, CSS, and gain practical experience creating and maintaining a web site.

## Specification:

This lab contains two parts - **part A** and **part B**. In part A, you'll work on basic coding tasks for a simple web site. In part B you'll work on CSS styling tasks on an existing web page.

All files are located here: [https://scs.senecac.on.ca/~patrick.crawford/shared/fall-2016/int222/lab3\\_files.zip](https://scs.senecac.on.ca/~patrick.crawford/shared/fall-2016/int222/lab3_files.zip)

Before you begin, **download this zip file and extract the contents**

## Part A – HTML & CSS:

### Getting Started

- Open up the **Part A** directory contained within the zip file (see "**Specification**" above)
- You will find 3 directories, "**media**", "**css**" and "**img**". We will be making use of all files included within these directories.
- **NOTE:** All CSS requirements **must** be added in the included file "**site.css**" within the "**css**" directory
- There are also **8** html files - **index.html**, **list.html**, **table.html**, **image.html**, **audio.html**, **video.html**, **seneca.html** and **honesty.html** - inside the compressed package. Open any HTML file in a web browser and you will find a menu on the top of the web page:

## INT222 - Lab 03A HTML

[Lab3 Home](#)   [List](#)   [Table](#)   [Image](#)   [Audio](#)   [Video](#)   [Seneca](#)   [Honesty](#)

Each item/link on the menu corresponds to an **HTML file** listed above. Note: the link **Lab3 Home** is to the **index.html** page (Home page). The tasks of your lab3 are to edit and update each HTML file based on the detailed requirements listed below.

### Task 1 - Work on the "Lab #3 Home Page" – index.html

- a) Add a **professional greeting** to the visitor, ie: "Welcome to my website, I will be demonstrating HTML5 & CSS3 principles and techniques"... and so on.
- b) Add a **short paragraph** that introduces this website, ie: "This site contains 8 pages, including: Home, HTML Text, HTML Lists"... and so on. **NOTE:** This paragraph must include all relevant links to the 8 pages
- c) Add a **short paragraph** introducing HTML 5, ie: "This site utilizes HTML5: a markup language used for structuring and presenting content on the World Wide Web"... and so on.
- d) Add at least **2 CSS rules** that include the properties: **text** and **font** with different properties and values for each of them. Make use of both of these rules someplace in the paragraphs above.
- e) Create at least **2 CSS rules** with different properties and values for the hyperlinks used in the paragraph in part **b** above

### Task 2 - Work on the "HTML List Page" – list.html

- a) Create a **nested list** with meaningful items, ie: a nested list of fruits, vegetables, sports, video games, etc.
- b) The nested list should contain at least **one ordered list** and at least **one unordered list**.
- c) Create at least **2 CSS rules** with different properties and values for the lists above


### Task 3 - Work on the "HTML Tables page" - table.html

- a) Create two HTML tables:
  - The **1st table** should be composed of the elements: **<table>**, **<tr>**, **<th>**, **<td>** and **<caption>** with meaningful table contents, ie: a table of grades, hockey scores, movies, etc.
  - The **2nd table** should be composed of the elements: **<table>**, **<tr>**, **<th>**, **<thead>**, **<tfoot>** and **<tbody>** with meaningful table contents, ie a table of cell phone plans, basketball scores, types of animals, etc.
- b) Add the following CSS rules for your tables.
  - Create a CSS rule to set the **margin** and **padding** for table cells (**<td>** and **<th>**)
  - Create a CSS rule to set the **border** for the **first table only** (hint: you may use id selector for the first table)
  - Create a CSS rule to set the **border** of **all table cells for the first table** (hint: you may use id selector and contextual selector). Use shorthand format for setting the border.
  - For the **2nd table**, create CSS rules to set different **background and text colors** for table cells with **table head**, **table foot** and **table body** elements.

### Task 4 - Work on the "HTML Images Page" - image.html

- a) Find the image **Seneca** and its URL from the <http://www.senecacollege.ca/> website. Without downloading this image file, show the image in your web page (ie: use an absolute link to the file) – **HINT:** Right-click on the image and choose **"inspect"** – this will take you directly to the html responsible for rendering this image and you can see the relative path to its location on the server. Generate your **absolute path** using this as a starting point.

Lastly, ensure that when the image is not available, the text “**Seneca College**” is visible on the page and make the image is a **hyperlink to the Seneca website**.

- b) Find the given image  with the file named **ict.png** under the "img" sub-folder included in the zip file. Show the image in your web page using a relative path. Ensure that when the image is not available, the text “**ICT School, Seneca College**” is visible on the page and make the image a **hyperlink to the ICT School website**.
- c) Create **CSS rules** to set the **dimensions** (width and height) for the two images (**HINT**: you can use id selectors here)

#### Task 5 - Work on the “HTML5 Audio Page” – audio.html

- a) Create an **<audio>** element to play the provided file **music.mp3** under the "media" folder.
- The player must have **controls** and **automatically start** when page is loaded.
  - The **<audio>** element must be created in **<figure>** element with **<figcaption>**.
- b) Use **CSS** to style the **border** of the **<figure>** element.

#### Task 6 - Work on the “HTML5 Video Page” – video.html

- a) Create a **<video>** element to play the provided file **seneca\_college.mp4** under the **media** folder.
- The player must have **controls** and **automatically start** when page is loaded.
  - The **<video>** element must be created in **<figure>** element with **<figcaption>**.
- b) Use **CSS** to style the **border** of the **<figure>** element.

#### Task 7 - Work on the “Seneca College Page” – seneca.html

- a) Copy several paragraphs (with appropriate headings) about **Seneca College** from **Seneca College** or **Wikipedia** websites.
- b) Create at least **two <div>** elements which contain/group paragraphs. Create at least **four <span>** elements which contain words or phrases.
- c) Create at least **two id attributes** with values to apply to **<div>**, **<span>**, **<p>** or **heading elements** you created.
- d) Create at least **four class attributes** with values to apply to **<div>**, **<span>**, **<p>** or **heading elements** you created.
- e) Create at least **two CSS rules** with at least **one property** for the **ids** and **classes** you created using id selectors and class selectors.
- f) Make sure that all instances of the word “**Seneca**” in your paragraphs or headings for this page are styled to be **red in color** and have a **bold font**.

#### Task 8 - Work on the "Honesty" page - honesty.html

- a) Add date and your name in the provided places to complete the honesty declarations.

#### Other Requirements

- a) All tags/attributes must be in **lower case**.
- b) Make sure to update the title on each of the pages.
- c) All of your html files **MUST not contain any errors** when tested using the W3C Markup Validation Service: <https://validator.w3.org/>

d) Fill out the academic honesty declaration at the top of your site.css file

## Part B – CSS Only:

### Getting Started– [completed sample: 1.png](#)

- Open the **Part B** directory contained within the zip file (see "**Specification**" above)
- locate the "**css**" directory and add the file "**site.css**"
- Open the file "**canadianPT.html**" for editing and add the **<link>** tag to include your new **site.css** file
- Open **canadianPT.html** in a web browser: it should look like this: [1.png](#)
- Open both "**site.css**" and "**canadianPT.html**" for editing/viewing

### Step 1 – Styling the main containers – [completed sample: 2.png](#)

- Notice how the page "**canadianPT.html**" is broken up into major sections: **<div class="main-container">...</div>**, **<header>...</header>**, **<nav>...</nav>**, **<section class="main">...</section>** and **<footer>...</footer>**
- We need to apply styles to these sections, so add the following CSS Selectors (in the file **site.css**) to your page. For each selector, use the suggested CSS Properties to achieve each design requirement. See the completed sample for reference

CSS Selector	Design Requirement	Suggested CSS Properties
<b>.main-container</b>	<ul style="list-style-type: none"><li>• Set the maximum width to 960 pixels</li><li>• No top or bottom margins</li><li>• Left and right margins must be "auto"</li></ul>	<ul style="list-style-type: none"><li>• max-width</li><li>• margin</li></ul>
<b>.main-container nav</b>	<ul style="list-style-type: none"><li>• Set the width to 30%</li><li>• Element is positioned on the left side of the page</li></ul>	<ul style="list-style-type: none"><li>• width</li><li>• float</li></ul>
<b>.main-container .main</b>	<ul style="list-style-type: none"><li>• Set the width to 70%</li><li>• Element is Positioned on the right side of the page</li></ul>	<ul style="list-style-type: none"><li>• width</li><li>• float</li></ul>
<b>.main-container header</b>	<ul style="list-style-type: none"><li>• Padding around the content must be 10 pixels</li><li>• Background colour must be #eeeeee</li><li>• There must be a solid bottom border 1 pixel thick, coloured #cccccc</li><li>• Bottom margin must be 30 pixels</li></ul>	<ul style="list-style-type: none"><li>• padding</li><li>• background-color</li><li>• border-bottom</li><li>• margin-bottom</li></ul>

<b>.main-container header h1</b>	<ul style="list-style-type: none"> <li>• Set the width to 70%</li> <li>• The size of the font must be 24 pixels</li> <li>• Element is Positioned on the right side</li> <li>• The text is right-aligned</li> <li>• Top margin must be 10 pixels</li> </ul>	<ul style="list-style-type: none"> <li>• width</li> <li>• font-size</li> <li>• float</li> <li>• text-align</li> <li>• margin-top</li> </ul>
<b>.main-container footer</b>	<ul style="list-style-type: none"> <li>• position the element beneath all floating elements (“clear” the element)</li> <li>• Padding around the top and bottom must be 20 pixels</li> <li>• Padding around the left and right must be 10 pixels</li> <li>• Background colour must be #eeeeee</li> <li>• There must be a solid top border 1 pixel thick, coloured #cccccc</li> <li>• The size of the font must be 13 pixels</li> </ul>	<ul style="list-style-type: none"> <li>• clear</li> <li>• padding</li> <li>• background-color</li> <li>• border-top</li> <li>• font-size</li> </ul>

## Step 2 – Styling the navigation and logo – [completed sample: 3.png](#)

- Now that the page is looking a little more organized, we want to update the “Canada” logo (flag & name) as well as the side navigation to look a little cleaner. For each selector, use the suggested CSS Properties to achieve each design requirement. See the completed sample for reference

CSS Selector	Design Requirement	Suggested CSS Properties
<b>#logo</b>	<ul style="list-style-type: none"> <li>• Set the width to 30%</li> <li>• The size of the font must be 25 pixels</li> <li>• The font must be bold</li> </ul>	<ul style="list-style-type: none"> <li>• width</li> <li>• font-size</li> <li>• font-weight</li> </ul>
<b>#logo img</b>	<ul style="list-style-type: none"> <li>• The image must be 94 pixels wide</li> <li>• The image must be vertically positioned in the middle, relative to the “Canada” text</li> </ul>	<ul style="list-style-type: none"> <li>• width</li> <li>• vertical-align</li> </ul>
<b>nav ul</b>	<ul style="list-style-type: none"> <li>• Do not show any bullets or numbers for the list</li> </ul>	<ul style="list-style-type: none"> <li>• list-style-type</li> </ul>
<b>nav ul a</b>	<ul style="list-style-type: none"> <li>• render the link as a “block-level” element</li> <li>• remove the underline</li> <li>• Padding around the link must be 5 pixels</li> </ul>	<ul style="list-style-type: none"> <li>• display</li> <li>• text-decoration</li> <li>• padding</li> </ul>

### Step 3 – Styling the province containers – [completed sample: 4.png](#) & [4-resized.png](#)

- Everything is looking pretty good, but the page is very vertical. For a more modern design, we will render all of the provinces as “cards” and allow them to sit side-by-side horizontally. We also want to allow them to move onto the next line and render correctly if the user decides to resize the browser window. For each selector, use the suggested CSS Properties to achieve each design requirement. See the completed samples for reference

CSS Selector	Design Requirement	Suggested CSS Properties
<b>div.province</b>	<ul style="list-style-type: none"> <li>Set the width to 30%</li> <li>Each new element is positioned to the right of the previous element, horizontally (<b>hint: float:left</b>)</li> <li>The margin around the element must be 8 pixels</li> <li>The height of the element must be 310 pixels</li> </ul>	<ul style="list-style-type: none"> <li>width</li> <li>float</li> <li>margin</li> <li>height</li> </ul>
<b>div.province .description</b>	<ul style="list-style-type: none"> <li>The element must not be any higher than 165 pixels</li> <li>Only If the content goes beyond 165 pixels high, show a scroll bar</li> <li>If the content does not fit in the container horizontally, hide the scrollbar</li> <li>The top and bottom margins must be 8 pixels</li> </ul>	<ul style="list-style-type: none"> <li>max-height</li> <li>overflow-y</li> <li>overflow-x</li> <li>margin</li> </ul>
<b>div.province a</b>	<ul style="list-style-type: none"> <li>render the link as a “block-level” element</li> <li>position the text in the middle of the element (horizontally)</li> <li>set the colour of the background to #555555</li> <li>Set the colour of the text to #eeeeee</li> <li>remove the underline</li> <li>Padding around the link must be 5 pixels</li> </ul>	<ul style="list-style-type: none"> <li>display</li> <li>text-align</li> <li>background-color</li> <li>color</li> <li>text-decoration</li> <li>padding</li> </ul>
<b>img.flag</b>	<ul style="list-style-type: none"> <li>set the width to be 100% of the parent</li> </ul>	<ul style="list-style-type: none"> <li>width</li> </ul>

## Other Requirements

- e) Your site CSS file **MUST NOT** contain any **errors** when tested using the W3C CSS Validation Service:  
<https://jigsaw.w3.org/css-validator>
- f) You **MUST add comments** (`/* ... */`) in your CSS code to describe each of the 14 selectors. For example, above the selector `".main-container nav"`, include the comment `/* Select all <nav> elements that are a child of an element with class "main-container" and adjust it's size and position */`
- g) add the following declaration at the top of your site.css file:

```
/******  
*  
* INT222 - Lab #3b  
*  
* I declare that this assignment is my own work in accordance with Seneca  
* Academic Policy. No part of this assignment has been copied manually or  
* electronically from any other source (including web sites) or distributed to  
* other students.  
*  
* Name: _____ Student ID: _____ Date: _____  
*  
*****/
```

## Final Submission Guidelines:

- a) Zip **all of your files** (ie, your **Part A** folder and your **Part B** folder) as **Lab03.zip**
- b) Upload the zip file to **My.Seneca** under **Labs -> Lab 3** (same submission procedure as labs 1 & 2)
- c) **NOTE:** All **HTML & CSS Must not contain any errors** when validated (**HTML:** <https://validator.w3.org/>, **CSS:** <https://jigsaw.w3.org/css-validator> )
- d) **NO LATE SUBMISSIONS** for labs. Late Lab submissions will not be accepted and will receive a **grade of zero (0)**.
- e) After the end (11:59PM) on the due date, the lab submission link on the Blackboard will no longer be available.