# BTI225 Assignment 5

# **[80 marks]**

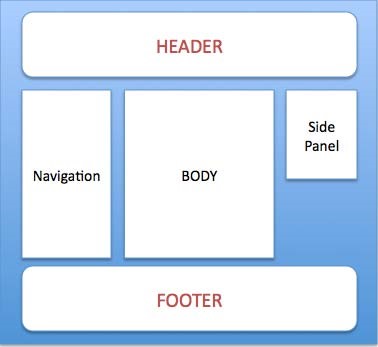
**Due: Friday, March 29, 2018 @23:59**

Objective: practice HTML5, CSS3, JavaScript, and client-side validation.

# Specification:

In this assignment, you are going to develop a “professional-like” website. You will practice the fundamental technologies in web design and development, using HTML5, CSS3, and JavaScript for client-side validation. To make it simple while practicing the technologies, you will create two (2) web pages for this assignment. However, you understand that there will be many pages for real websites and they may follow some similar rules to this assignment.

Taking the advantage of external CSS, design your site (two pages for this assignment) in a consistent style (use external CSS, name it: main.css under subfolder “css”). Absolutely, you still can use some internal and inline CSS based on your design. The layout of these two pages should be BOTH like Figure 1 as follows.



*Figure 1 Layout for web pages*

Figure 1 is abstract schematics. Detailed specification is as follows. You can freely choose other proper features that were not specified. **[12 marks]**

1. The specific height and width of each panel is for you to define.
2. the page should have a background of some color;
3. the text of the header and footer should be in a different color than the rest of the panels.
4. For simplicity, assume that the desktop screen width is fixed and set at 1200px. Ideally there should not be any horizontal scrolling.
5. Title for both pages: A5-your name
6. Header section contains your name and a logo of your choice.
7. The navigation panel includes links to other pages of the website. In our case, make it easy to navigate between these two pages.
8. Footer section includes copy right.
9. Right side panel contains a small email image followed with your email. You can look for a royalty-free email image. Name it: email.gif. Store it under subfolder “img”. Refer to “File structure” section below.
10. All the above information is same for the two pages. The “body” section will be different and explained below.

## Page requirements:

1. **Page 1 (index.html):**

This page is the starting page. Structure this page as above Figure 1.  **[1 mark]**

You must understand and add the following content with your full name in the “body” section in Figure 1.

“I declare that my assignment is wholly 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) except for the information supplied by the BTI225 instructor and / or made available in this assignment for my use. I also declare that no part of this assignment has been distributed to other students.

Name: Type your name here Dated: Type the submission date here “

1. **Page 2, User registration page (registration.html):**

Structure this page as above Figure 1. The “body” section in “Figure 1” includes a form. Try your best to organize and style the form in a nice way. The appearance will be evaluated. The form fields are listed as follows. You can choose proper attributes for each field. Validation rules are specified afterwards. (**[1 mark] each field,** province: **[3 marks], total: [15 marks])**

1. First Name
2. Last name
3. User name
4. Password.
5. Second password, to confirm password match.
6. Phone Number
7. E-mail
8. Street number and street name
9. City
10. Province
11. Postal Code
12. Submit button,
13. Reset button

**Client-side validation** is implemented in external JavaScript file (registration.js) in folder “js”. The validation rules are as follows:

* **All fields** are mandatory (/required).   **[13 marks]**
* **Last Name**: Hidden field. No validation. **[1 mark]**

<input type="hidden" name="lastName" id="lastName" value="Your last name goes here" />

* **First Name:** Hidden field. No validation. (refer to the above code example for “last name”) **[1 mark]**
* **Username**: username must start with a letter, have at least 6 characters.  **[5 marks]**
* **Passwords (both)**: must be at least 8 characters long, start with a character, have at least 1 digit and 1 uppercase. The two passwords must match.   **[5 marks]**
* **Phone** **Number:** must be 10 digits, hyphen in the 4th and 8th position, **[5 marks]**

format:  xxx-xxx-xxxx, for example 111-111-1111.

* **Email**: use html5 input type for default validation   **[1 marks]**
* **Street** **name and number**: text, no further validation
* **City**: must contain letters only.   **[5 marks]**
* **Province**: must be selected from a drop-down list of displayed Canadian provinces. Define ONTARIO as default selection. No further validation is required.
* **Postal Code**: 6 characters in Canadian Postal code format (Letter Digit Letter Digit Letter Digit), e.g., C1A1A7.  **[5 marks]**

**Important:**

* Only when no validation errors, the form (user’s input) will be submitted to https://httpbin.org/post using the POST method.
* Though HTML5 validation is not banned, you are expected/ required to use JavaScript for most of the following validation except the cases that are explicitly specified with HTML5, e.g. emails and required.
* If there are validation errors, do NOT submit the form. Instead, display meaningful error messages in the following ways (“meaningful” is very important). The error messages are supposed to help users to correct the errors and input correctly. This is what I meant “meaningful”. Something like “please match the requested format” (by HTML5 validation) is not considered “meaningful”, because user may have no idea about what’s the “requested format”. Instead, your meaningful error message may specify something like: “Please input phone number in the format of NNN-NNN-NNNN”. **[5 marks]**
* You can use either of the following two options to displaying error messages.

1. Display the error messages when the user clicks the “submit” button OR
2. Display the error messages immediately when the field has been changed.

**Hint**: use the onchange or onfocusout etc. event handler to call JavaScript functions. Show only one error for a field, at a time.

**Note**:

* Using either way described above, errors should be displayed beside or beneath the error fields (based on your design) in red. The error field will be highlighted with red box. This is explained and demonstrated in class.
* Do not use alert() to display error messages.

## File structure:

Text in red (i.e., A5, css, js) are folders. The rest are files. The indentation reflects the location of the files, i.e., Folder A5 includes files: index.html, registration.html, and folder css and js. Foler css includes file main.css. folder js includes file registration.js. folder img includes image file email.gif **[1 mark]**

A5

index.html

registration.html

css

main.css

js

registration.js

img

email.gif

Browser issues:

You should test your complete site with at least Firefox and Chrome. You may display a note in the welcome page which 2 browsers (with versions) your site works the best. Think of client’s convenience. It’s wise to test with different display settings/screen resolutions.

Other Requirements **[5 marks]**

• Your HTML & CSS must be well-formatted and properly commented where appropriate.

• Your code will be evaluated for correctness of syntax and appropriate usage.

• Validate HTML: https://validator.w3.org/

• Validate CSS: https://jigsaw.w3.org/css-validator

• All JavaScript code must not contain any **run-time errors/exceptions**.

## Submission:

**a)** Zip **all of your files** as **A5.zip**

**b)** Upload the zip file to **My.Seneca** under **Assignments -> A5** (same

submission procedure as all previous assignments)

**LATE SUBMISSION:** 10% off up to 5 school days and no submission will be accepted afterwards.