# WEBD6201 – Client-Side Scripting

## Lab 1

### **DOM Manipulation**

Due: Week #3 (Friday January 24, 2020) @ midnight.

Value: 5%

Dom Manipulation Maximum Mark: 21

**Overview**: This lab was made to practice and reinforce your DOM manipulation skills. You will have the opportunity to investigate and identify elements and attributes within an in-depth DOM. You will also get to practice changing elements within the DOM.

#### Instructions:

(5 Marks: Site Structure, 8 Marks: Functionality, 4 Marks: Internal Documentation, 4 Marks: Version Control)

- 1. Project Setup (5 Marks Site Structure)
  - a. Your folder structure should follow the same structure shown in class: (1 Marks: Site Structure)



- b. Create a basic HTML page with a structure as shown in class using **emmet** (see <a href="https://docs.emmet.io/abbreviations/syntax/">https://docs.emmet.io/abbreviations/syntax/</a>). The page should include a link to your app.css and your app.js files from the appropriate folders (Content and Scripts respectively) (1 Marks: Site Structure)
- c. Ensure that you include **jQuery**, **bootstrap**, and **font-awesome** as shown in class. You will use the yarn package manager to acquire these files (1 Marks: Site Structure)
- d. Add a **bootstrap Nav Bar** as shown in class. Ensure that it includes several links including **Home**, **Products**, **Services**, **About Us** and **Contact Us** (the 5 pages that most sites include). (2 Marks: Site Structure)

#### 2. Simple DOM Manipulation (8 Marks: Functionality)

- a. Using only JavaScript change the **Products** link found in the Navbar above to **Projects**. (2 Marks: Functionality).
- b. Using only JavaScript, add another link to the Navbar above named **Human Resources**, that sits between **About Us** and **Contact Us**. You may **not** hard code this in the html file this must be done using DOM manipulation. Ensure that you also include an appropriate font-icon using Font-Awesome (3 Marks: Functionality).
- c. Using only JavaScript, add another Navbar at the bottom of the page that is a "fixed bottom" navbar (see <a href="https://getbootstrap.com/docs/4.4/components/navbar/">https://getbootstrap.com/docs/4.4/components/navbar/</a>). Ensure that you include a copyright statement with the current date in the Navbar. You final navbar should look like: (3 Marks: Functionality)
  - © CopyRight 2020
- 3. Include Internal Documentation for your program (4 Marks: Internal Documentation):
  - a. Ensure you include a comment header at the top of your app.js file that indicates: Your Full Name, StudentID and Date Completed (2 Marks: Internal Documentation).
  - b. Ensure your program uses contextual variable names that help make your code human-readable (1 Marks: Internal Documentation).
  - c. Ensure you include inline comments as required. As a rule the code should be descriptive but sometimes some information is required, especially before any function you include (1 Marks: Internal Documentation)
- **4.** Share your files on **GitHub** to demonstrate Version Control Best Practices **(4 Marks: Version Control).** 
  - a. Your repository must include **your code** and be well structured (2 Marks: Version Control).
  - b. Your repository must include **commits** that demonstrates the project being updated at different stages of development each time a major change is implemented (2 Marks: Version Control).

#### **Evaluation Criteria**

Feature	Description	Marks
Site Structure	Your Project adheres to the site structure described (including Assets, Content and Scripts folders)	5
Functionality	The program's deliverables are all met and the program functions as it should. No errors appear as a result of execution. User Input does not crash the program.	8
Internal Documentation	A comment header is present and includes the name of the student, studentID, and date completed.	4
Version Control	GitHub commit history demonstrating regular updates.	4
Total		21

#### SUBMITTING YOUR WORK

Your submission should include:

- 1. A zip archive of your project uploaded to DCConnect
- 2. A link to your complete project files on GitHub

Please zip all files in to a single project archive.

This assignment is weighted 5% of your total mark for this course.

### Late submissions:

• 20% deducted for each additional day.

External code (e.g. from the internet or other sources) can be used for student submissions within the following parameters:

- 1. The code source (i.e. where you got the code and who wrote it) must be cited in your internal documentation.
- 2. It encompasses a maximum of 10% of your code (any more will be considered cheating).
- 3. You must understand any code you use and include documentation (comments) around the code that explains its function.
- 4. You must get written approval from me via email.