ITSE 2302 – Program 01

All of the assignments in this course must be uploaded to Bb **and** *published to your student website*. Use the numbered list below **and** the Common Requirements as a confirmation checklist.

- Complete the steps described at the Website Setup & Publishing links in the "Assignments" section in Bb.
- Use the course material located at
  - [HTML Tutorial](#) , [CSS Tutorial](#) , [JavaScript Tutorial](#)
- Program 01 can be completed using content from these tutorial sections:
  - HTML HOME – DOM Node Lists
- Develop the page/site <u>for your user</u> – Communicate with your user.

Requirements (identify the requirements by #*number*):

Example showing how to identify requirements.

Note: the requirements below refer to the index.html page within the program## folder unless otherwise stated.

1. The Program 01 link on your top-level page should open an index.html page in the program01 folder that has a lightbulb image centered at the top of the page that, when clicked, toggles the lightbulb between the on and off states. See this [note](#).
2. Just below the light bulb, the current date and time are displayed and updated each time the light bulb is clicked.
3. Construct a page that demonstrates a three column page using the Bootstrap framework. Supply a link to this page from index.html.
4. Use the HTML picture element to show different images based on browser width.
5. Demonstrate responsive text using the CSS font-size "vw" (viewport width) setting.
6. Include a Select List of entries "Small, Medium, and Large". When "Small" is selected, a small image is displayed. When "Medium" is selected, a medium

image is displayed. When "Large" is selected, a large image is displayed. Precise size is your choice but the selections should be relative (e.g. medium larger than small).

7. Button – clear the entire page, set the body background to another color, and display the message, "Page Cleared". Include navigation to return to index.html. Hint: Call a function from index.html that uses document.write() to output the required HTML elements.

8. Button – change the text content in a paragraph, change the text color, and change the text size. Also, send the new text to the console.

9. Use the HTML Geolocation API to display the user's latitude and longitude. Chrome and Firefox both require use of https://(secure) protocol when using Geolocation. Therefore, test with IE, Edge, or Opera.

10. User can enter 2 numbers in 2 text boxes and click a button. Populate four labels with the results of adding, subtracting, multiplying and dividing the numbers.

11. Demonstrate that when adding a number string, like "77", to a number, like 99, the operation is treated as a string operation.

12. User enters a number and you determine if it is odd or even. Hint: use the modulus operator. If it is odd, display an image of a "die" showing a odd side. If it is even, display an image of a "die" showing an even side.

13. Button – when clicked, increments a number or decrements a number based on status of an "increment/decrement" checkbox. Use increment and decrement operators.

14. Include a select list with values (names 1-4). Button – displays name that has been selected in an h1. Display each name in a different color.

15. Use the HTML Drag/Drop API to drag an image into a 300x100 px div.

16. Use JavaScript to change the background color of a div when the mouse moves over the div and changes the background color back to the original when the mouse moves off.

NOTE: If you encounter problems with your **relative** image, audio, or video files displaying on your website there are two common problems to check:

1. Check the permissions of the remote file by R-clicking and selecting "Properties" in WinSCP or "File Permissions" in FileZilla. Try setting permissions to 655 or 777 for files and/or directories that are not functioning correctly.
2. Ensure the path to your file is correct. If you have configured your site with an image folder within each program folder, the source should be:
   `src="images/imageName.jpg"`
   However, if you have just a single, top-level images folder, the source should be:
   `src="../images/imageName.jpg"`
3. Review the section "src Location Examples" in the Website Setup instructions for more information.

TEST – TEST – TEST your **website** to ensure the requirements are met.

1. Use the list above **and** the Common Requirements as a confirmation checklist.
2. Not meeting all requirements = 0 points for the assignment.
3. Complete the appropriate Program ## confirmation in Bb by the due date.
4. Upload your .zip file to Bb under the appropriate Program ## link by the due date.
5. Ensure your assignment functions correctly on your student website and that all requirements are identified by "#XX".

6. Remember to study for the exam. Distributing learning over time is far superior than panic-study in close proximity to the exam date.