Web Design (COMP 20030)
Practical 4
JavaScript

Practical Exercises

JavaScript frameworks and external libraries cannot be used in this assignment.

Exercise 1

At the bottom of the HTML page provided, using the script element, write JavaScript code to do the following:

Using **document.querySelectorAll**, as shown on lecture slides, iterate over the list "companies" and update the text fields so that they start with the word "name". Using JavaScript, the list should also be edited so that it is given the class of "shadowy-text". To achieve this, you should use a combination of **document.querySelector** and **setAttribute**("class", " shadowy-text").

 Save this file as **q1.html** in the comp20030/practical4 folder.

Exercise 2

Create a web page with a form that has three text boxes with the ids of tb1, tb2, tb3 and a button-type input with the id of b1. The button should be labelled "go".

Write the following script in the head of the webpage. Some means to defer code execution until the DOM is constructed will also be necessary. You can use **window.onload** as shown in the slides to achieve this.

Add an event listener to the button b1. When a **click** event occurs the contents of tb1 and tb2 should be added together and the result appear in tb3.

You can use **document.querySelector** to access the text boxes and their values. For this to function correctly, make sure you give the button the attribute of type, with the corresponding value of "button". In order that tb3 displays the desired value you should use s**etAttribute**("value", *the-number-that-has-been-computed*) where *the-number-that-has-been-computed* is the result of the addition.

Save this file as **q2.html** in the comp20030/practical4 folder.

Exercise 3

This exercise involves editing the answer for q2.html.

If a non-numeric value is entered in one of the text boxes, the user should be informed that there is an invalid value. This message should read "Invalid input" and be contained within a p element that is appended to the form (should appear beneath the form). Consult page 21 of the lecture notes for code that will be useful in achieving this.

isNaN() will be necessary to verify that numerical values are input.

Save this file as **q2.html** in the comp20030/practical4 folder.

Submission Instructions

Create a zip file of the folder containing all this week's solutions.

In Windows you can select the "Practical4" folder, right click and choose send to > Compressed (zipped) archive.

In Mac OS X, you can select the "Practical4" folder, right click and choose Archive.

Name your zip file in the format of "name–practical4– studentnumber.zip", replacing name and studentnumber with your own name and student number.
e.g. "Bloggs,Joe–practical2–12345678". Upload your zip file using the Practical 4 submission form available on Brightspace.