## Lab 8 – Javascript and DOM

Create a new folder 'lab08' on the cmslamp14 server Save today's work in this lab08 folder.

## Tasks (10 marks)

- a) Use a *for* loop to create a running total of numbers from 1 to 10. Display the subtotals on the page using document.write. (I suggest that you use <a href="http://www.w3schools.com/JS/tryit.asp?filename=tryjs\_myfirst">http://www.w3schools.com/JS/tryit.asp?filename=tryjs\_myfirst</a> for the questions on this sheet except Question c.)
- b) Write JavaScript to change the backgroundColor of the page. (Set document.bgColor to a value = eg 'darkred'.) Create a function to change the backgroundColor of the page to a color passed in as a parameter. Provide buttons to change the color to a couple of values ie, set event-handlers on the buttons to call the change color function, passing it the different parameters necessary to achieve the desired colors.

Hint: you can either use inline event registration with parameters, or you can use 'addEventListerner'. Note that if you use 'addEventListerner', the second parameter is a **function reference**, which means you have to use a function wrapper, say, function(){changeColor('blue')} as the parameter.

- c) Two files domPrac.htm and domPrac.js are on Canvas. They displays a table with several rows. Implement the function *appendRow()* that will append a new row in a different color at the end of the table. Use prompt(text, default) to take the inputs from users. Try Chrome/Firefox and IE.
- d) Write a JavaScript function that prompts the user to enter a string consisting of several words separated by single spaces, and which will then print, one to a line, the words in the string.
- e) Define a JavaScript "type" to represent a record in a simple email database. It should have properties representing the person's name and the email address. It should have a method which prints the record neatly, giving the, and the email address printed on the same line, with a single "|" character separating the fields.

Use the "constructor and prototype" method for doing this.

Define a JavaScript type to represent a database of records—this should have a property which is an array of records, initially empty on construction, a method which adds a record supplied as a parameter to the database, and a method which prints out all the entries, one to a line.

Again use the "constructor and prototype" method.

Write code which creates a database object, creates 3 records, adds them to the database, and then prints out the whole database.