

IS 242 Web Application Development I

Lab sheet 5: Introduction to JavaScript

Objective

The objective of today's lab is to get you started creating some JavaScript to add some interactivity to the web page.

Enabling JavaScript

Before you can run code examples with JavaScript on your computer, you may need to change your browser's security settings. By default, Internet Explorer 9 prevents scripts on your local computer from running, and displays a warning message. To allow scripts to run in files on your computer, select Internet Options from the Tools menu. Click the Advanced tab and scroll down to the Security section of the Settings list. Check the box labeled Allow active content to run in files on My Computer. Click OK and restart Internet Explorer. HTML5 documents on your own computer that contain JavaScript code will now run properly. Firefox, Chrome, Opera, Safari (including on the iPhone) and the Android browser have JavaScript enabled by default.¹

JavaScript Debugging

It is difficult to write JavaScript code without a debugger. Your code might contain syntax errors, or logical errors, that are difficult to diagnose. Often, when JavaScript code contains errors, nothing will happen. There are no error messages, and you will get no indications where to search for errors.

Searching for errors in programming code is called code debugging. Debugging is not easy. But fortunately, all modern browsers have a built-in debugger.

Built-in debuggers can be turned on and off, forcing errors to be reported to the user. With a debugger, you can also set breakpoints (places where code execution can be stopped), and examine variables while the code is executing. Follow the steps below to activate debugging in your IE browser.

Internet Explorer

- Open the browser.
- From the menu, select tools.
- From tools, choose developer tools.
- Finally, select Console.²

While you are working on the exercises below, have some syntax errors and see how they are reported.

¹ Deitel & Deitel (2011). *Internet and World Wide Web How to Program, 5th Edition*.

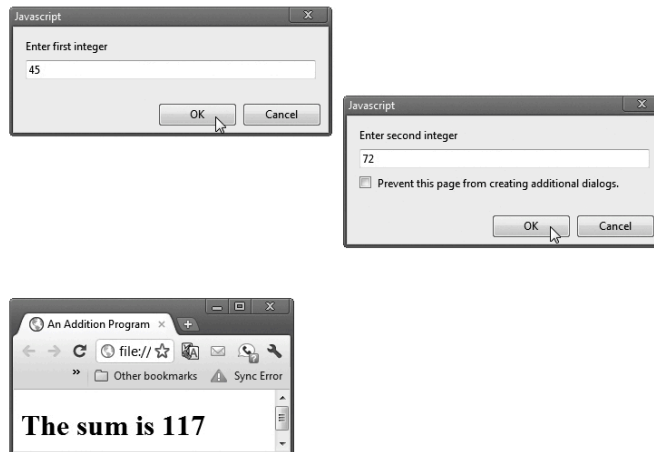
² http://www.w3schools.com/js/js_debugging.asp

Exercise 1

Spend 30 minutes; at least, to try the examples we have covered in the lecture. The examples you try should cover most of the topics covered in the lectures including functions, events, conditional statements, loops and popup windows.

Exercise 2

- a) As we have discussed in the lecture, prompt boxes are used to obtain input from the user. Using prompt boxes, write a script that asks the user to enter two numbers and then computes the sum and displays the result as seen below. Note that the returned values are of type string. (*hint: use **parseInt** function which converts its string argument to an integer*).



From Internet and World Wide Web How to Program, 5th Edition


- b) What happens if you do NOT enter a value or choose *cancel* in one of the prompt boxes? Why?
- c) Modify your script so that you use a *function* to sum the two numbers.

Exercise 3

Go back to the website you have created last week and display the current date and time in the home page, you can do that right under the contact details or anywhere else. Provide a button to update the current time and date. A function should be used to accomplish this functionality. The resulted page should look similar to the one given below.

Sara's Cake


home my recipes catering about



Cupcake class

Cupcake decorating class
One week course

In this class you learn how to work with fondant and buttercream to create delicious designer toppers. After the class, you take home your fashionable treats



Cake decorating

Cake Decorating Class
Three day workshop

In this class you learn how to work with fondant and buttercream to create delicious designer toppers. After the class, you take home your fashionable cake

Popular Recipes

- [Chocolate Cupcake](#)
- [Vanilla Cupcake](#)
- [Raspberry flavored cupcake](#)
- [Date Cake](#)

Contact

Sara's bakery
Sultanah Street
Sultanah
Medina

Time:
Mon Mar 02 2015 22:12:52
GMT+0300 (AST)

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So you basically need to display the current date and time once the page gets loaded and also provide the user with the ability to update that by clicking on the button. The latter was covered in the lecture (the last slide in lecture 9), however, you need to think of a way to display the current date and time once the page gets loaded. (hint: `<body onload="function()">`).

Good luck;