

CMSI 182

INTRODUCTION TO COMPUTER SCIENCE

Fall 2009

Assignment 0924

Time to dive into the deep end — we’ve been studying these instructions from our human perspectives, and now it’s time to see if we can get a machine to follow them. We’ll use JavaScript to communicate our will.

Not for Submission

By September 17

1. Acclimate yourself to the process of writing and running JavaScript code, using the examples from the handout and/or the recommended textbook, if you have it.
2. Feel free to take those examples and tweak them; experimentation and “what-if” activities are encouraged. You won’t break anything :)
3. Take note of anything that gets you stuck or confused; we’ll try to address these issues in the next few sessions.

By September 22

4. Take a stab at converting at least one of your chosen “Intro 8” tasks into a working JavaScript program.
5. Recommended work approach: maintain a file containing your latest JavaScript code (WordPad in Windows and TextEdit on Mac OS X will do; try to keep everything as plain text — you don’t need fancy formatting for computer code). When you start working, paste your code into the JavaScript runner page (link available at the course web site). Work with your code; when you’re done, copy/paste this code back into your text file.
6. As before, take note of anything that gets you stuck or confused, and bring these issues up either during or outside of class.

For Submission

Submit the following items by the beginning of class on September 24. As much as possible, bring your latest versions of your programs to class on September 17 and September 22, so that we can address any issues or questions. Throughout the next week and a half, don’t hesitate to contact me (e-mail, phone, office hours, etc.) if you need help outside of class.

Exercise: The “Intro 8” in JavaScript

Choose three of the “Intro 8” tasks and make the computer perform them using JavaScript. Submit your programs to me by **e-mail**. To make your e-mail easy for me to spot, give it the subject line “CMSI 182 *your-last-name* Assignment 0924.”

In cases where a particular task has many variations, state the specific variation that you’re writing up within *comments* in your JavaScript code. This allows you to tell me what you’re up to as I’m going through your programs (and is generally how “the pros” do it anyway).

Reflection: Rise, Programmer!

Once you have finished the exercise, answer the following reflection questions, and submit these *on hardcopy* at the beginning of class on September 24:

1. Before starting the JavaScript code, how confident were you that you could do all three algorithms by hand?
2. What was it like to make yourself express these algorithms within the confines of a computer programming language? What made sense to you, and what did not?
3. How did it feel to see your programs work or not work? Can you relate this feeling to other successes or failures that you might have experienced before?