

## Activity List for Tutorial 9 JavaScript, Dec 3

### Files/folders for this activity list:

- ✓ folder: cut-n-paste JS 1
- ✓ folder: cut-n-paste JS 2
- ✓ folder: sample code - Date object
- ✓ folder: sample code - functions
- ✓ folder: samples code (demo)
- ✓ folder: tracing code tips
- ✓ folder: weaving\_excerpt
- ✓ activitylist-Tut9, Dec 3

### JavaScript basics (& debugging)

- ✓ 9.1 & 9.2 JavaScript notes
- ✓ 9.1 Debugging your code

### Objects (and math operators)

- ✓ 9.2 folder: DOM (Document Object Model)
- ✓ 9.2 Objects-based programming notes
- ✓ 9.2 Date objects
- ✓ 9.3 math oprs notes, and math oprs exerc (operators)
- ✓ 9.3 Math\_obj\_notes fa12 (Math objects)

### Functions

- ✓ 9.3 Output\_Input\_Functions Notes
- ✓ Homework 9 (Tutorial 9 JavaScript intro)
- ✓ End of semester info, grades, etc

\* All items above are helpful to study for test 3 except for Debugging your code. But you should know the three types of errors and that the F12 key (or fn+F12) will open the debugger in your browser.

Time frame for activities: ~5 classroom hours approx.

### Overview:

This is the Activity List for **Activities - Tutorial 9 (JS), Dec 3**. Download this folder from **Activities folders** folder in *Lessons* module of Brightspace and unzip it. If you need help with unzipping, refer to the document about zipping/unzipping in *Course Resources* module. Then move the files to your CS103 folder on your home computer. Keep your files organized. (Find help in managing your files in *Preliminary course documents* folder.)

The activities consist of about 5 classroom hours of lessons and instruction. Follow the activity list to guide you. The activities will help reinforce your learning about the basics of JavaScript programming language. The activities included here, except for **Homework #9**, are ungraded practice and notes covering the topic of Tutorial 9, JavaScript. You will read and complete the entire Tutorial 9 for **Homework #9**. Tutorial #9 will guide you in creating a program a count-down clock to New Year's 2024.

### **Graded Homework:**

Complete graded homework assignment **Homework #9 (Tutorial 9)**. (LAST GRADED HW) Find it in this folder but also in *Lessons* Tab of Brightspace in a folder called *Homework*. **Due: Fri Dec 22 11:59pm**. Submit it to its corresponding Drop Box also in *Lessons* Module, *Homework*. Also referenced in Activities item #2 below.

Test 3 reminder:

Test 3 will be online and available **Tues Dec 19 through Fri Dec 22 11:59pm**. It consists of all of **Tutorial 9** except for pp678-679 and p718-722. Also, it will include 3 topics in **Tutorial 10**: comparison and logical operators, if and if-else statements, and loops. Comparison operators are talked about in section 10.2, on p760 to the top of p761. Read about if statements in section 10.3, from the middle of page 773 through p774 and the middle of p777 to the top of p778. Read about loops in section 10.2, on p756 through to the top of p760. For loops, you will be given some notes on this topic as well that you can study.

Practice test items for Test 3 are in the *Test info and practice* module. Also practice the Quick Checks which are the questions that appear at the end of each of the three sessions in Tutorial 9 and 10 in the textbook. Refer to the **Quick Checks to Try** document so that you are only practicing things that will be on the test. Check your answers with the **Quick Check answers** which are also in the *Test info and practice* module.

Some announcements:

1. If you are interested in taking a retest of either Test 1 or Test 2, please email me at [perel@ecc.edu](mailto:perel@ecc.edu). You will need to come to my office in K154 at North campus (Williamsville) to take it. Contact me to schedule a time between now & Wed Dec 20.
2. Let me remind you that my **grades are due Fri Dec 29** 4pm. And I will accept late homework up to **Fri Dec 22** (last day of the semester plus one day). PLEASE READ the document enclosed called **End of semester info, grades, etc Fa23**. (If you need a day or two after the semester ends to get work done, let me know and I will try to work with you.)
3. There will be one more activity folder after this one covering 3 topics in Tutorial 10: comparison and logical operators, if and if-else statements, and loops.

Activities:

Do the following activities and study the notes contained in this activities folder. Simultaneously work on your graded homework assignment, **Homework #9**. Complete the following activities in the order specified. Use Komodo Edit or other editor for coding.

1. Familiarize yourself with the contents of this Activities folder, referring to the outline at the top of this document. The outline lists the notes and exercises in the same order as their corresponding topics appear in the textbook in Tutorial 9.
2. Complete **Homework #9**. (LAST GRADED HW.) Find it here and in the *Homeworks* module in Brightspace. Submit the completed zip file to its drop box. Due: **Fri Dec 22 11:59pm**.
3. Read the notes and try the exercises in this activities folder to better learn Tutorial 9, an introduction to JavaScript. Several of the documents below will refer you to sample code. The code is in folders labeled cut-n-paste JS 1, cut-n-paste JS 2, sample code (demo), sample code - functions, sample code - Math Objects and tracing code tips.

- a. JavaScript basics - Read and study the notes **JavaScript notes** that cover an intro to the language. [mostly 9.1 and 9.2 with variables on p693-695, and session 9-11 in the MindTap reader.]
- b. Debugging - Read **Debugging your code** to get a brief idea about how to debug your code and save time in the process. Get tips in finding and fixing program code that is not working properly. (*You may want to read this again later after learning more about JavaScript.*) [9.1, ONLY pp677 required, 3 types of errors, session 3-5 in the MindTap reader]
- c. Tracing code - Read and study the notes in the folder **Tracing code - tips** to get some tips on tracing your code. (*You may want to read this again later after learning more about JavaScript.*)
- d. Objects - Read and study the notes that point out some of the common features of JavaScript in terms of object-based programming called **Objects-based programming notes**. [*You may want to read about objects in the book first, in 9.2, pp 684-696 and session 9-8 through 9-12 in the MindTap reader*].
- e. Read with care about the document objects in the textbook, p684-691 (and section 9-8 through 9-10 in the MindTap reader.) Then read the document **DOM, naming objects**. Find it in the folder called *DOM*. [9.2]
- f. Date Object - Read and study the notes called **Date Objects Notes**. [9.2, pp695-701 and session 9-12 in the MindTap reader]
- g. Math operators - Read and study the notes called **math oprs notes** about JavaScript math operators such as +, -, \* and / and others. Then try the exercise called **math oprs exerc.** [9.3, p704-705 and session 9-15 in the MindTap reader]
- h. Math object - Read and study the notes called **Math\_obj\_notes fa12** about the Math object, called [9.3, p707-713, and to.Fixed is on p721 and session 9-16 in the MindTap reader]
- i. Functions and input, output statements - Read and study the notes called **Output\_Input\_Functions Notes** about functions. Also included are some input and output statements. [9.3, p714-717 and session 9-17 in the MindTap reader]