World Wide Web and Mobile Applications CSC 130 - Lab B01 and B02

Teaching Team

Department of Computer Science University of Victoria

Lab 06 and Lab 07



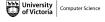
Admin

Lab 06 - Reading and Writing JavaScript!

- Part 00 Setup
- Part 01 Interpreting JavaScript Objects
- Part 02 Create A New Course Object
- Bonus Single Feature Wireframe

Lab 07 - Reading and Writing JavaScript!

- Part 01 Add A Course with Input Fields
- Part 02 Loop Over An Array of Courses and Display Results
- Bonus Upload Lab to UVic Student Web Hosting



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Lab 07 - Reading and Writing JavaScript!

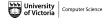
- Part 01 Add A Course with Input Fields
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All CSC 130 TA Lab Notes:

https://notes.dominiquecharlebois.com/ta/csc130.html



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- Lab 06 and Lab 07 are due at the end of the lab today.
- Lab Material: Brightspace CSC 130 Course Content Day 7: Lab 6 and 7!
- Checkpoints are *optional*, thus feel free to work at your own pace and demonstrate your work at the end.
- Ask Questions! Answer Questions! Collaborate with Peers!
- **Resource**: https://developer.mozilla.org/en-US/

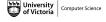


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Credit is awarded by demonstrating your work at the end of each lab:

- Students who complete all required material will obtain 3/4.
- Students who complete bonus material *AND* collaborate with peers will obtain 4/4.

You are expected to collaborate with peers by asking and answering questions.



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Lab 06 - Overview

Objectives

- Get more practice using JavaScript to interact with HTML.
- Read and write JavaScript code with variables, if-statements, loops, and objects.

Lab 06 - Resources

Resources

- https://developer.mozilla.org/en-US/docs/Web/ JavaScript/Guide/Working_with_Objects
- https://developer.mozilla.org/en-us/docs/Web/API/
 Document_Object_Model
- https://www.w3schools.com/jquery/jquery_get_started.asp
- https://www.w3schools.com/js/js_jquery_selectors.asp

Lab 06 - Part 00

Check Point 00

- Go to the JSFiddle site: https://jsfiddle.net/ycoady/1yjaLx8o/6/
- Explore the HTML, CSS, and JavaScript (JS) sections.
- Notice the Run button in the top-left corner.

Lab 06 - Part 01

Check Point 01

We will be reading JavaScript code, and writing HTML code.

- Notice the myClasses array in the JavaScript file.
- Read through the array of course objects (subject, num, title).
- Manually fill in the HTML table (by editing the HTML) with the course object data (i.e., add the appropriate course number and title).
- Re-run the JSFiddle.



Lab 06 - Part 02

Check Point 02

We will be adding JavaScript code and using existing JavaScript code.

- In the HTML code, Part 2, there is a button named "Add course" that calls a function called addCourse().
- The button adds a course to the **myClasses** array of course objects.
- In the JS code, Part 2, there is a function called addCourse().
- The variable named **newCourse** should be modified to be a static course object (i.e., subject: CSC, num: 464, and title: Concurrency).
- The function called addToArray will add the course to the myClasses array of course objects.
- The button named "Add course" should now add a course to the HTML table.



Lab 06 - Bonus Check Point

Bonus Check Point

- Write a single feature that could be implemented in your project that uses a function similar to "addCourse()".
- Draw a low-fidelity wireframe that implements the single feature in your project.

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Lab 07 - Overview

Objectives

- Get more practice using JavaScript to interact with HTML.
- Read and write JavaScript code with variables, if-statements, loops, and objects.

Lab 07 - Part 01

Check Point 01

We will be adding JavaScript code and using existing JavaScript code.

- In the HTML code, Part 3, there is a button named "Add course" that calls a function called addCourse2().
- The button adds a course to the **myClasses** array of course objects.
- In the JS code, Part 3, there is a function called addCourse2().
- The variable named **newCourse** should be modified to be a dynamic course object.
- You will need to get the values from the input fields to populate the variable named **newCourse**.



Lab 07 - Part 02

Check Point 02

We will be adding JavaScript code and using existing JavaScript code.

- In the HTML code, Part 4, there are buttons named "List classes", "List 400-level classes", and "List Math classes" that call functions.
- In the JS code, Part 4, there is a function called allClasses(). The function loops over **myClasses**, adds them to a string, and then display the string in the web page.
- Modify the fourthYearClasses() and mathClasses() to show all the fourth year classes and all the math classes respectively.

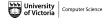
Hint: You will need to use conditional statements in your loop to determine which classes to add to the string.



Lab 07 - Bonus Check Point

Bonus Check Point

Upload Lab 06 and Lab 07 to UVic Student Web Hosting.



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Lab 06 and Lab 07

Lab 06 and Lab 07 are Finished!

Final Steps

- Upload files to Brightspace.
- Add link to text field in Brightspace submission.