

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



Computer Science

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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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All CSC 130 TA Lab Notes:

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

- 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/>

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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Finished



Objectives

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

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

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.

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.

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.

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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Objectives

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

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**.

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.

Bonus Check Point

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

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Finished



Lab 06 and Lab 07 are Finished!

Final Steps

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