



Web Development Boot Camp

Lesson 4.1



Admin Items

Death by PowerPoint: **Not the Way to Learn Coding**





Be prepared to have classes that are increasingly “**just code.**”

(You will appreciate it in the long run.)

Today's Class

Agenda

In today's class we'll be covering:



DOM manipulation using plain JavaScript



DOM manipulation using jQuery



Responding to click events

DOM Manipulation

Understanding the DOM

Basic Example: todomvc.com



Every HTML page begins as static content.



However, with Javascript/jQuery, we can **modify the DOM** and change this static content in real time.



This allows us to build dynamic sites.



Instructor Demonstration

DOM Manipulation with Plain JavaScript



Activity:

Generating HTML with Plain JavaScript

Suggested Time:
15 minutes



Activity: Generating HTML with Plain JavaScript



Using the file sent to you as a starting point, add the missing code so that your JavaScript generates HTML content that displays all drink options.



Hint: You will need a for loop. Inside the for loop, you will need to use each of the following methods: `createElement`, `innerHTML`, and `appendChild`.

Suggested Time: 15 minutes



Intro to jQuery

Intro to jQuery

jquery.com

jQuery is a cross-platform **JavaScript library** designed to simplify client-side HTML scripting.



Query Helper Library

jQuery can be useful for tasks such as:



Dynamically inserting, updating, or removing HTML



Registering click or other change events



Animating HTML elements



Downloading data from databases



And much more!

Working with jQuery

01

Include a CDN (Content Delivery Network) link to the jQuery script.

```
<!-- Added Link to the jQuery Library -->  
<script src="https://code.jquery.com/jquery-2.2.3.js" integrity="sha256-  
1aXWtGydpwqJ8JA+X9x2miwmaiKhn8tVmOVEigRNtP4=" crossorigin="anonymous"></script>
```

02

Utilize the jQuery specific (\$) selector.

```
$("#clickMe")
```

03

Apply jQuery methods on the selected elements.

```
$("#clickMe").on("click", function(){  
  
    // Trigger an alert.  
    alert("I've been clicked!");  
})
```




Instructor Demonstration

DOM Manipulation with jQuery



Activity:

Generating HTML with jQuery

Suggested Time:
15 minutes



Activity: Generating HTML with jQuery



Refactor (rewrite) your previous `drinkList` code from earlier, but this time use jQuery to complete all of the same tasks.



Your final code should NOT have any of the following methods: `createElement`, `innerHTML`, or `appendChild`.



Hint: Don't forget to “incorporate” jQuery before you begin.



Bonus: Instead of using a for loop, look up how to use the jQuery `.each` method.

Suggested Time: 15 minutes





Instructor Demonstration

On-Click Basic



Partner Activity: Sandwich Clicking

Suggested Time:
20 minutes



Partner Activity: Sandwich Clicking

Add the missing code so that clicking any of the sandwiches causes:



An alert message that says something snarky about the sandwich type.



An alert message that displays how many of a specific sandwich the user has eaten.



Hint: You will need counter variables.



Bonus: Add an image to the `image-div` on the click event.

Suggested Time: 20 minutes





Partner Activity:

Trigger Random

Suggested Time:
12 minutes



Partner Activity: Trigger Random

Add the missing code so that clicking the big blue button triggers a random number (between 1 and 1,000) to be selected and prominently displayed in the `randomNumber` div.

Suggested Time: 12 minutes





Partner Activity:

Lottery Generator

Suggested Time:
20 minutes



Partner Activity: Lottery Generator

Use the code from the previous random number generator to create a lottery generator.



The lottery generator should select 9 random numbers (and always 9 numbers).
Example: 886563264



Display this number in the `randomNumber` div.



When the user clicks again, create a new row with the most recent number at the top.

Suggested Time: 20 minutes





Challenge:

Number Checker

Suggested Time:
20 minutes



Challenge: Number Checker

Based on the demonstration, create an application in which:



A computer selects a random number between 1 and 4.



The user clicks buttons numbered 1 to 4.



If the user's number matches the computer's number, display text informing them of this in the Result panel. Otherwise, display text informing them that they lost.



Bonus: If you finish early, try to improve the aesthetics of your app.

Suggested Time: 20 minutes





Questions?