



Web Development Boot Camp  
Lesson 4.1



# Admin Items

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



A close-up photograph of a person's hands typing on a silver laptop keyboard. The laptop screen is open, displaying a code editor with CSS code. A yellow arrow-shaped banner is overlaid on the top left of the image, containing the text "True Way to Learn Coding". The background is slightly blurred, showing a desk and some papers. The overall scene suggests a focus on learning to code through practical application.

# True Way to Learn Coding

A close-up photograph of a person's hands typing on a silver laptop keyboard. The laptop screen is open, displaying a code editor with CSS code. A yellow arrow-shaped banner is overlaid on the top left of the image, containing the text "True Way to Learn Coding". The background is slightly blurred, showing a desk and some papers. The overall scene suggests a focus on learning to code through practical application.

# True 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

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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

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Basic Example: [todomvc.com](http://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

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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

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[jquery.com](http://jquery.com)

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



# Query Helper Library

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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:**  
12 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:** 12 minutes





# Instructor Demonstration

## On-Click Basic



## **Activity:** Sandwich Clicking

**Suggested Time:**  
20 minutes



# 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





## **Activity:** Trigger Random

**Suggested Time:**  
12 minutes



## Activity: Trigger Random

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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







## **Activity:** Lottery Generator

**Suggested Time:**  
20 minutes



# 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?