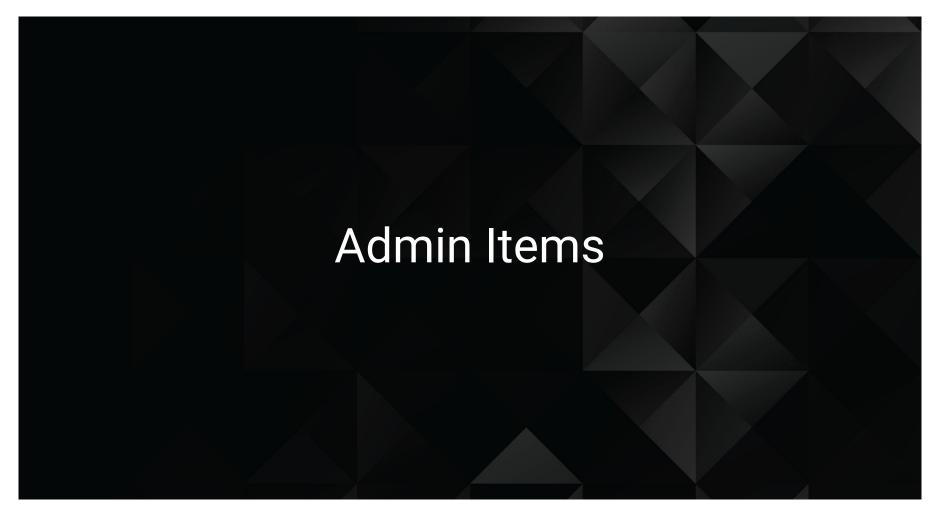


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# Death by PowerPoint: Not the Way to Learn Coding

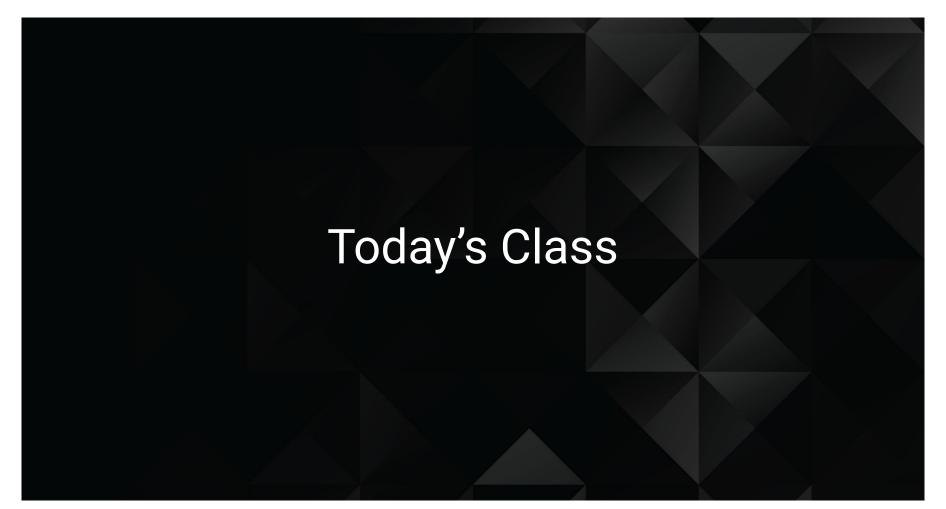






Be prepared to have classes that are increasingly "just code."

(You will appreciate it in the long run.)



## Agenda

In today's class we'll be covering:



DOM manipulation using plain JavaScript



DOM manipulation using jQuery



Responding to click events

#### What is the DOM?

"The Document Object Model (DOM) is a cross-platform and language-independent interface that treats an XML or HTML document as a tree structure wherein each node is an object representing a part of the document. The DOM represents a document with a logical tree."

- Wikipedia

CSS-Tricks.com: What is the DOM?

8



## **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.



## **Activity:**

Generating HTML with Plain JavaScript



## **Activity:** Generating HTML with Plain JavaScript



Using the starter files from Activity #, 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.





#### 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-
laXWtGydpwqJ8JA+X9x2miwmaiKhn8tVmOVEigRNtP4=" crossorigin="anonymous"></script>
```

02

Utilize the jQuery specific (\$) selector.

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

03

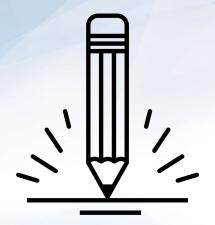
Apply jQuery methods on the selected elements.

```
$("#clickMe").on("click", function(){

   // Trigger an alert.
   alert("I've been clicked!");
})
```



Instructor Demonstration DOM Manipulation with jQuery



## **Activity:**

Generating HTML with jQuery



## **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 (load it from a CDN).



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





Instructor Demonstration On-Click Basic



## **Partner Activity:**

Sandwich Clicking



## 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.





## **Partner Activity:**

Trigger Random



### 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.





## **Partner Activity:**

Lottery Generator



## 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.





# Challenge:

Number Checker



## 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.



