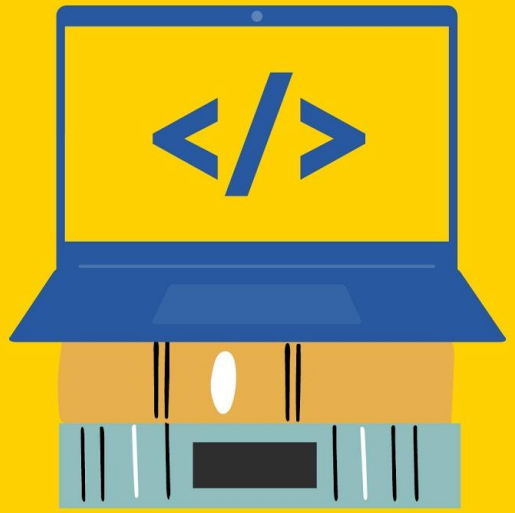


Front End Development

Session 10

Pulling It All Together With *jQuery*


WELCOME

Learning Goals

In today's session, we will:

01 Survey the uses and applications of the jQuery library.

02 Practice using the jQuery library to manipulate the DOM.

03 Explain how to use event listeners in our code.

04 Combine concepts into a fully-functioning web app!

Let’s review

Q. What kind of code are we learning in this course?

Q. Can you name a role, job, or industry that uses this kind of code?

Q. What three “languages” do we use to create websites?

Q. What does "HTML" stand for?

Q. How can we examine website code on our computers?

Q. In HTML, what's the difference between the <head> and the <body>?

What is the difference between Git and Github?

What does the CLI stand for? What would we use it for?

How do you format a link in HTML?

How do we save our work with Git and Github?

What does a tag do?

What does CSS stand for? Why do we use CSS?

What is the difference between *block* and *inline*?

What does “float” do?

What are the five positioning properties?

What is the difference between *block* and *inline*?

What does “float” do?

What are the five positioning properties?

What is a framework?

What does “open-source” mean?

What is responsive design?

What is a variable? How do we declare a variable in JS?

What is a data type? What JS data types have we learned so far?

What does state refer to? Why is this useful?

What’s the difference between alerts, console.log, and document.write()?

What is a browser event?

How do we generate a random number in Javascript?

What function do we append to round up or round down?

What is pseudocode and why is it useful?

What is a **FOR Loop**?

What does **control flow** refer to?

What is the **DOM** and *why is it useful*?

How might we describe the *relationship between objects* in our HTML?

What is a ***function*** in Javascript?

What does it mean to *invoke* a function?

What is an **argument** and *where* are they used?

What are the three most important Git & Github commands?

Introducing: jQuery

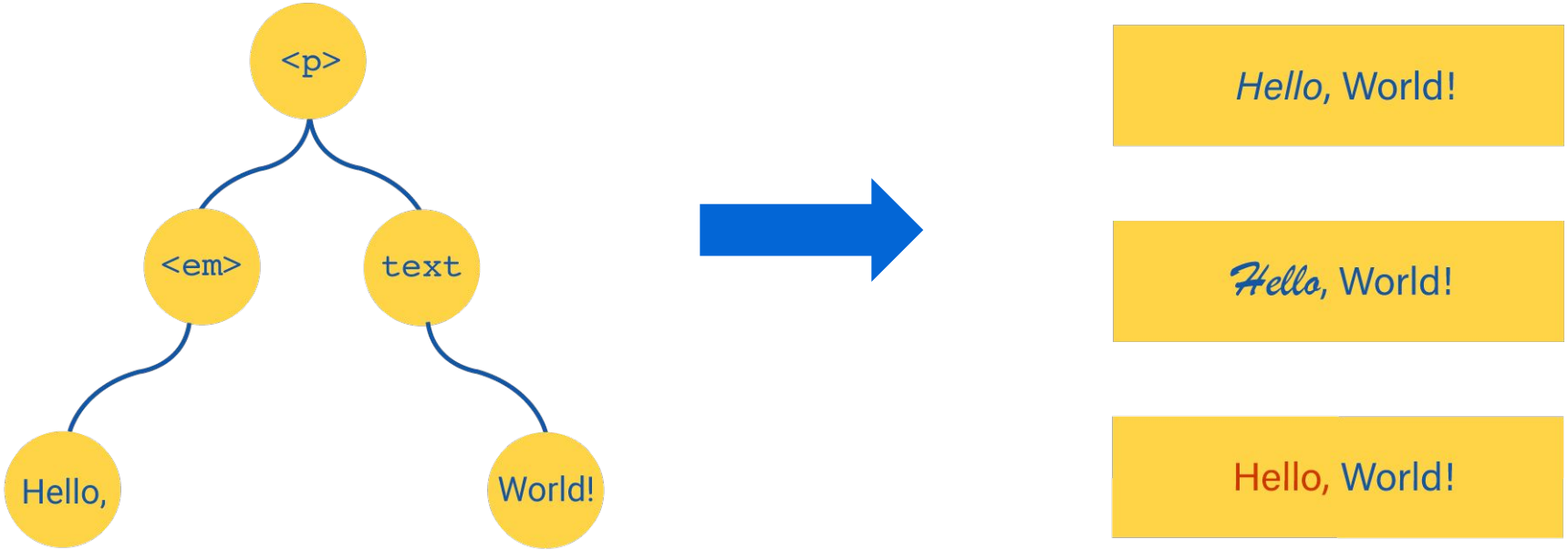
A **library** is a pre-built set of (in this case, JavaScript) methods that allow you to more easily perform functions.

JavaScript Library

A JavaScript library is a set of **pre-written JavaScript** that makes it easier for us to develop JavaScript-based sites and applications!

Libraries + Frameworks

Libraries and frameworks provide pre-written code to help solve and simplify common problems!




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

jQuery

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

jQuery Buttons: onClick Actions!

```
$(".growButton").on("click", function() {
  $(".captainplanet").animate({ width: "500px" });
});
```

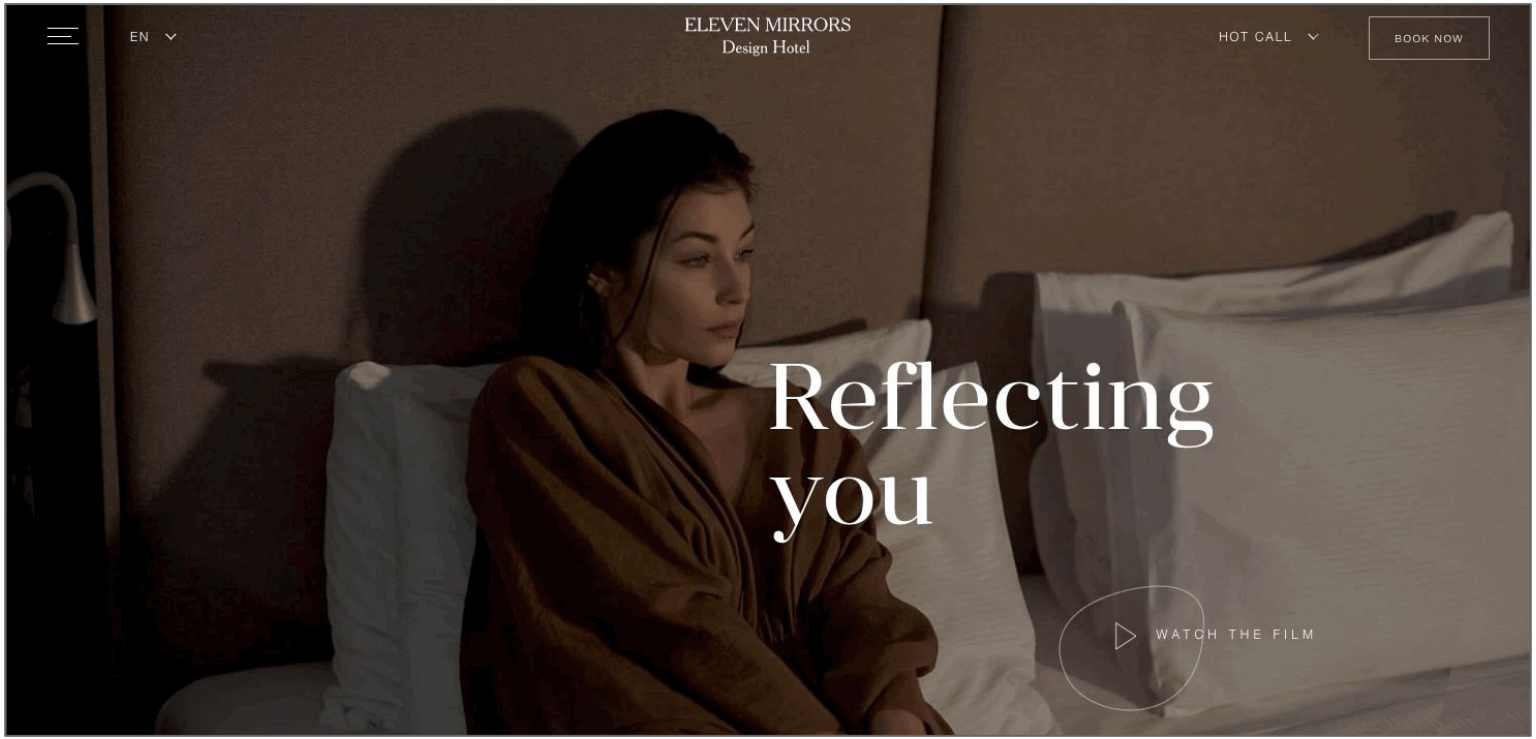
01 Click the Grow button.

02 Make Captain Planet grow.

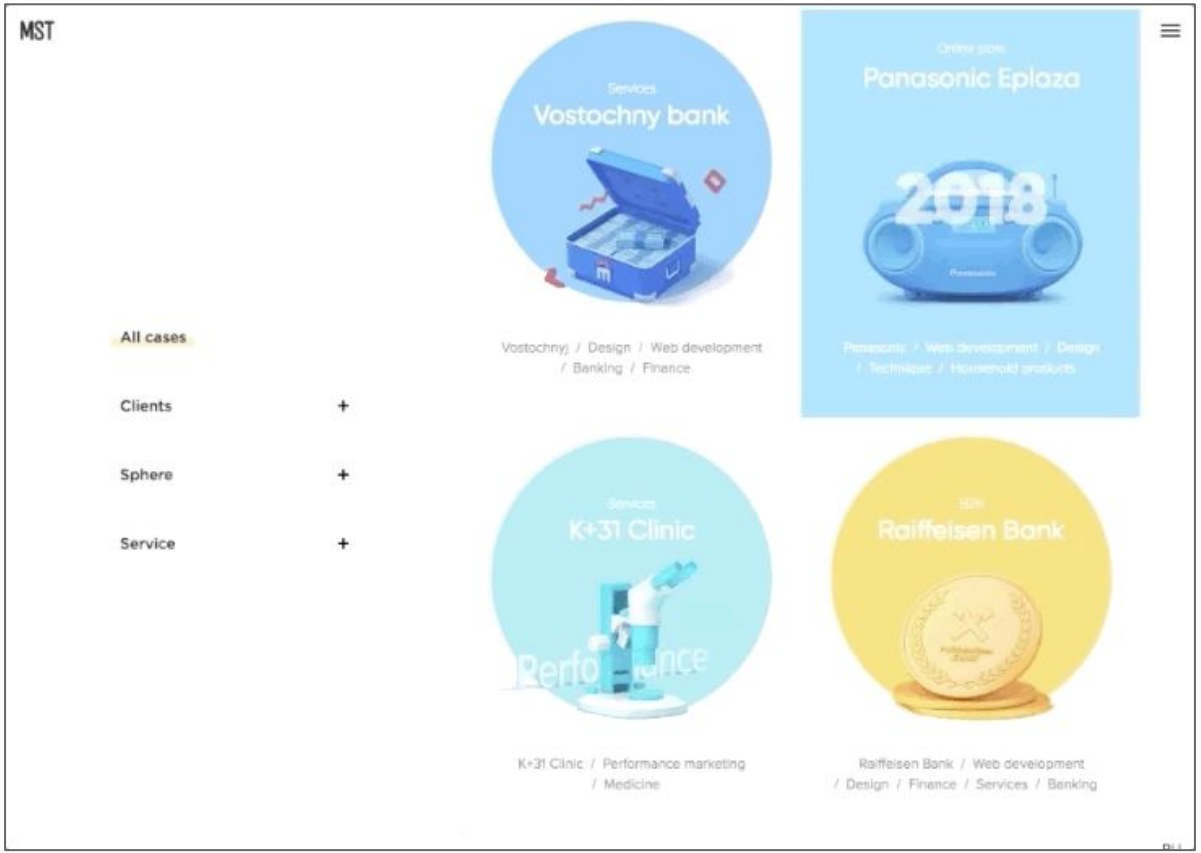
Superpowers: Change Sizes!

Normal | Grow | Shrink

jQuery Animation: Animated Menus



jQuery Animation: Navigation

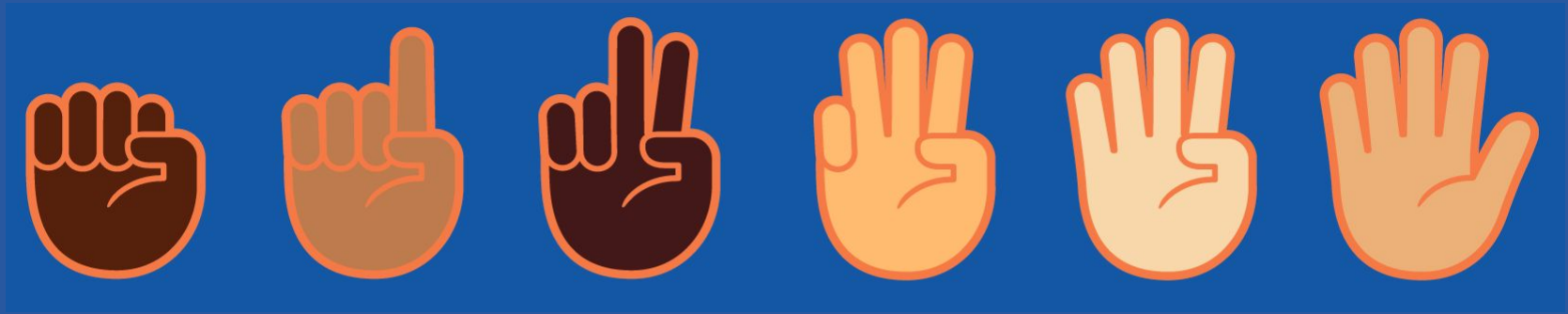


jQuery is easy, repeatable and looks good everywhere!

Instructor Demonstration:

DOM Manipulation With jQuery

Suggested Time:
15 minutes



Fist to five

Let’s

Activity: jQuery Coffeehouse Drink List

1. Open instructions in Canvas
2. Rewrite the code for this activity
3. Pair with a partner and share!

Hint: Don’t forget to “incorporate” jQuery into your code before you begin!

Suggested Time:
15 minutes

Let’s review

Questions?

The Main “Event”

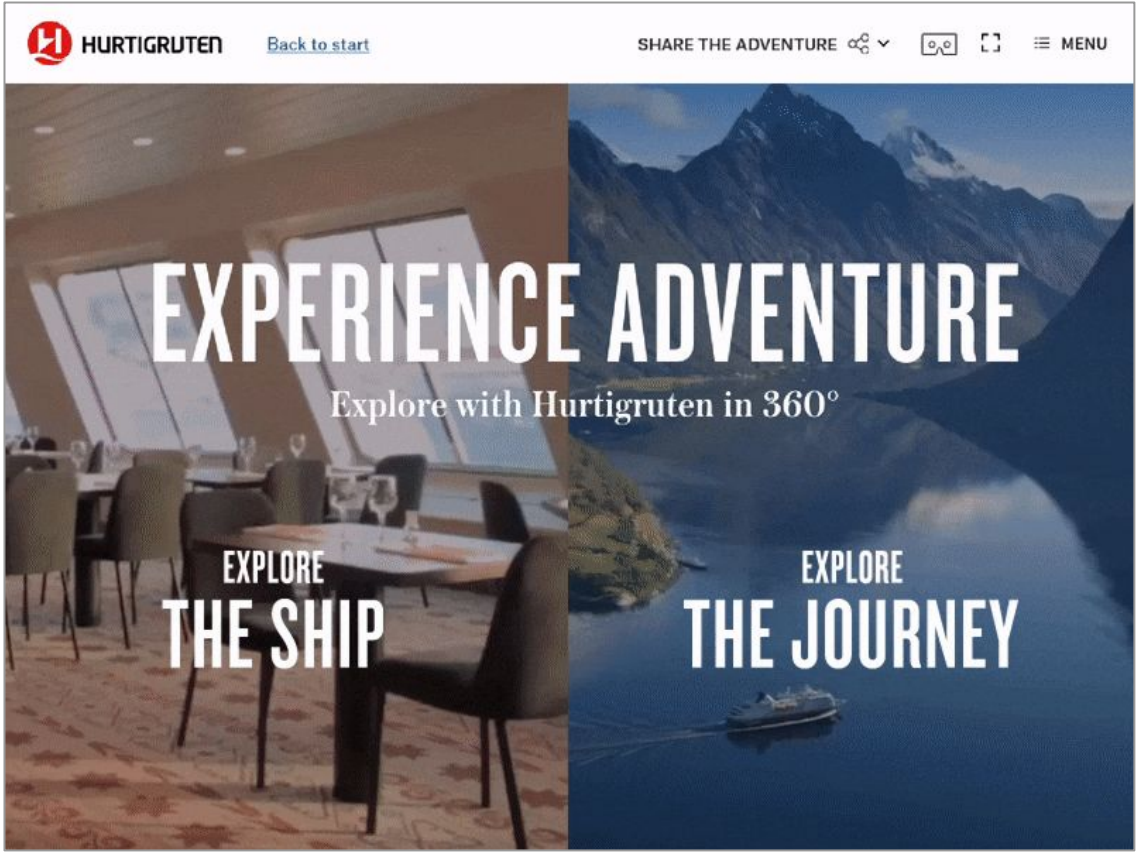
jQuery Event Listeners

giphy.com

An **event listener** is a function that waits for a trigger or a specific event to occur before taking action.

jQuery Event Listeners

Many UI animations and interactions are triggered when a **specific action is taken**, thanks to event listeners!



jQuery Event Listener code

Let's break this down piece by piece:

```
$(".button").on("click", function() {
  console.log("Hey a click occurred!");
});
```

jQuery Event Listener code

The dollar sign is an **alias** or *shorthand* for jQuery. Without a `$` or `jQuery` before your statement, we can't use jQuery functions in our code.

```
$(".button").on("click", function() {
  console.log("Hey a click occurred!");
});
```

jQuery Event Listener code

We can also write out `jQuery` in place of `$` and this works the same!

```
jQuery(".button").on("click", function() {
  console.log("Hey a click occurred!");
});
```

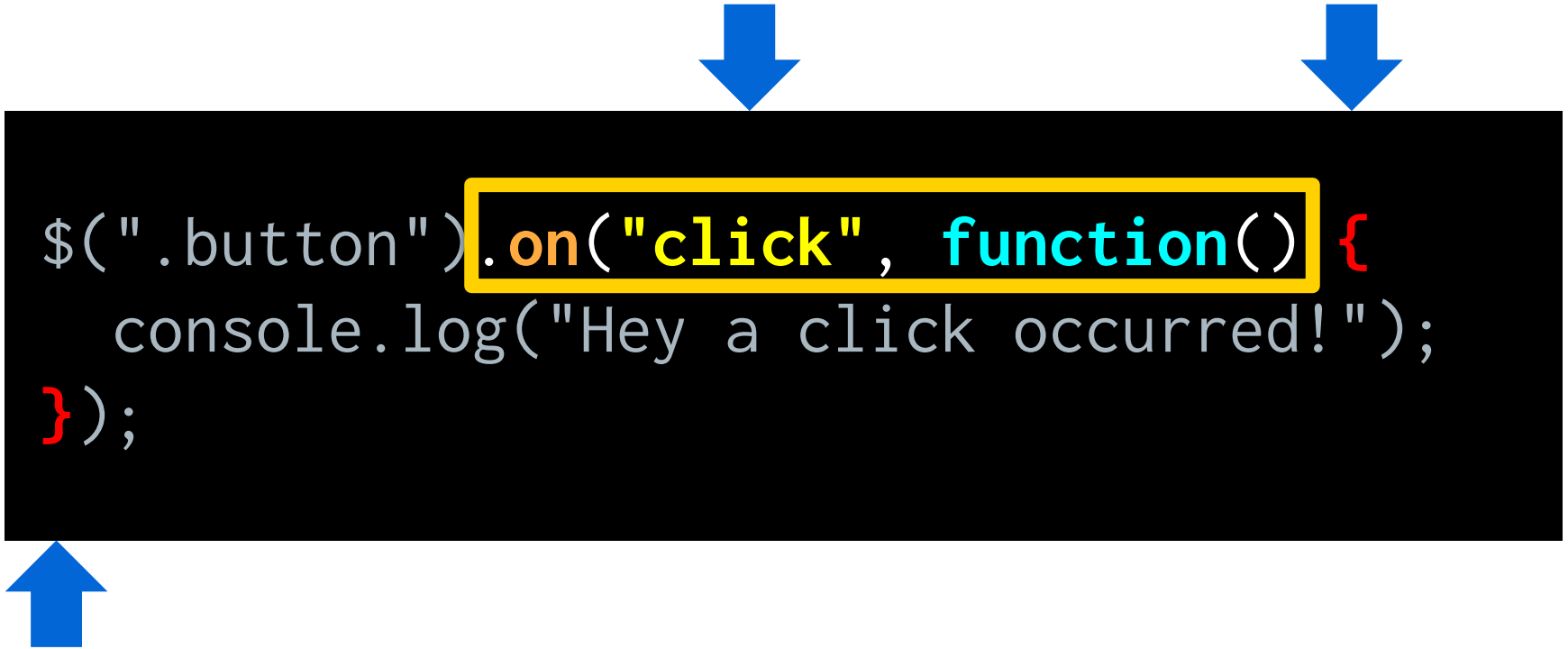
jQuery Event Listener code

`(".button")` This is jQuery's way of **selecting** an element.

```
$(".button").on("click", function() {
  console.log("Hey a click occurred!");
});
```

jQuery Event Listener code

`.on( "click", function() {` This runs a **function** when a user *clicks* the element we selected, causing code between the curly braces `{}` to execute.



jQuery Event Listener code

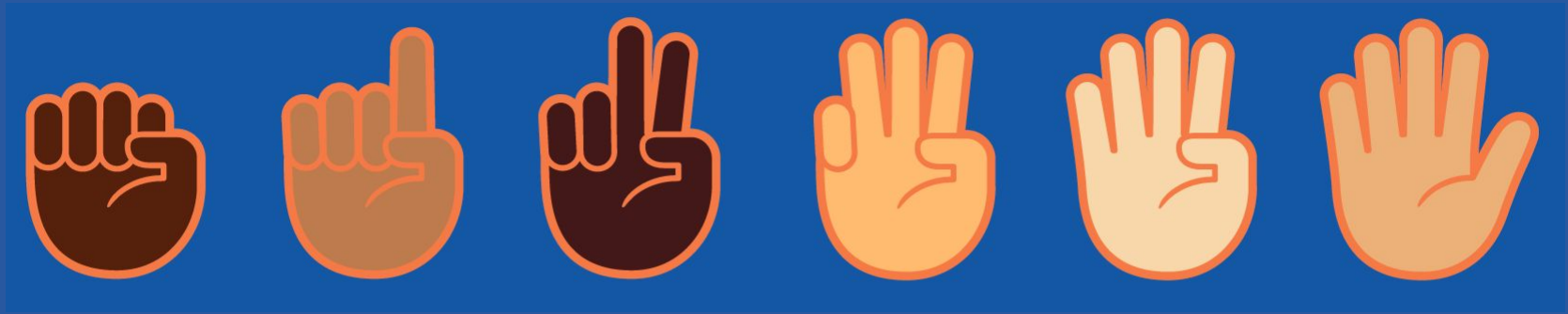
```
console.log("Hey a click occurred!");
```

Thanks to jQuery, a click will be logged when someone clicks the specified button.

Instructor Demonstration:

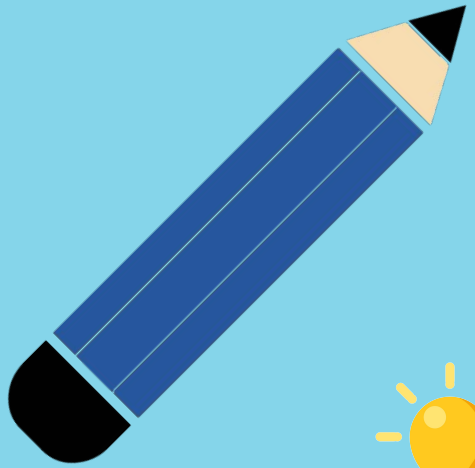
On Click Basics

Suggested Time:
10 minutes



Fist to five

Let’s



Activity: Sandwich Clicks

1. Open instructions in Canvas
2. Draft the code for this activity
3. Pair with a partner and share!

Hint: You will likely need to use **counter variables**; a variable used in a loop that counts the number of times something happened.

Suggested Time:
30 minutes

Let’s review

Questions?

Practice Makes Perfect!

Let’s

Activity: Number Checker

1. Open instructions in Canvas
2. Pair up with a partner
3. Follow instructions
4. Try to complete as much as possible!

Suggested Time:
30 minutes

Let’s review

Questions?


jQuery
Superpowers

Let’s

Activity: Superpowers!

1. Open instructions in Canvas
2. Pair up with a partner
3. Follow instructions
4. Try to complete as much as possible!

Suggested Time:
30 minutes

Let’s review

Questions?

Time to Recap

Learning Goals

Our objectives for today's session:

01 Survey the uses and applications of the jQuery library.

02 Practice using the jQuery library to manipulate the DOM.

03 Explain how to use event listeners in our code.

04 Combine concepts into a fully-functioning web app!

Reflection

What was your favorite part of today's session?

What was the most interesting thing we covered today?

What do you still have questions about?

WEEKEND REVIEW

Take a few minutes this weekend and think about:

01

What topic did you like best so far?

02

What resource has been the most helpful so far?

03

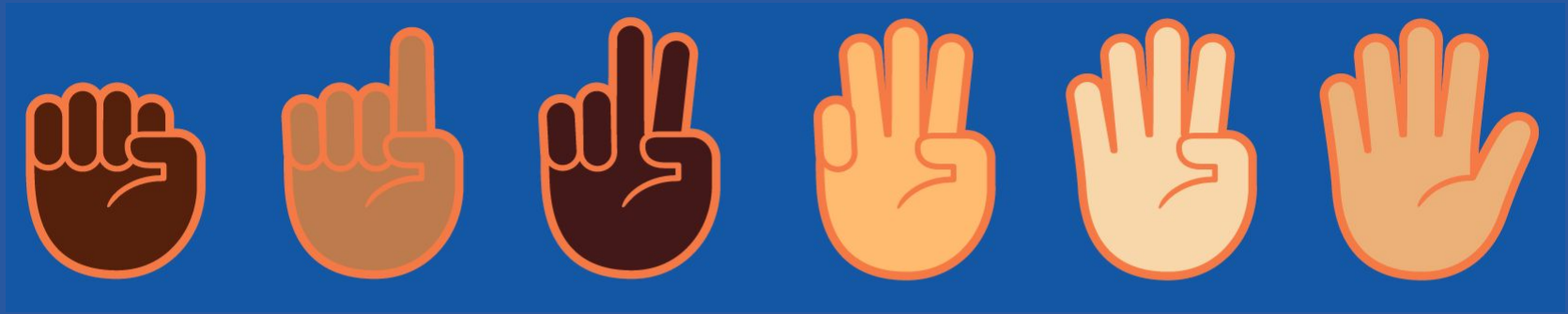
What will you add to your portfolio site next?

Sneak Preview

- Next week, we'll spend a little time recapping all of our amazing progress.
- You'll also get a chance to learn some new collaboration skills with Github
- Finally, you'll be spending the rest of next week working on a group hackathon project!

Questions?


the End



Fist to five