



Front End Development

Session 9

Let's Play a *Guessing Game!*



Learning Goals

In today's session, we will:

01

Discuss the use of functions in JavaScript

02

Demonstrate how to call functions in our code

03

Practice collaboration in Github



04

Apply our JavaScript skills to create a functioning game!



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 `<div>` 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**?

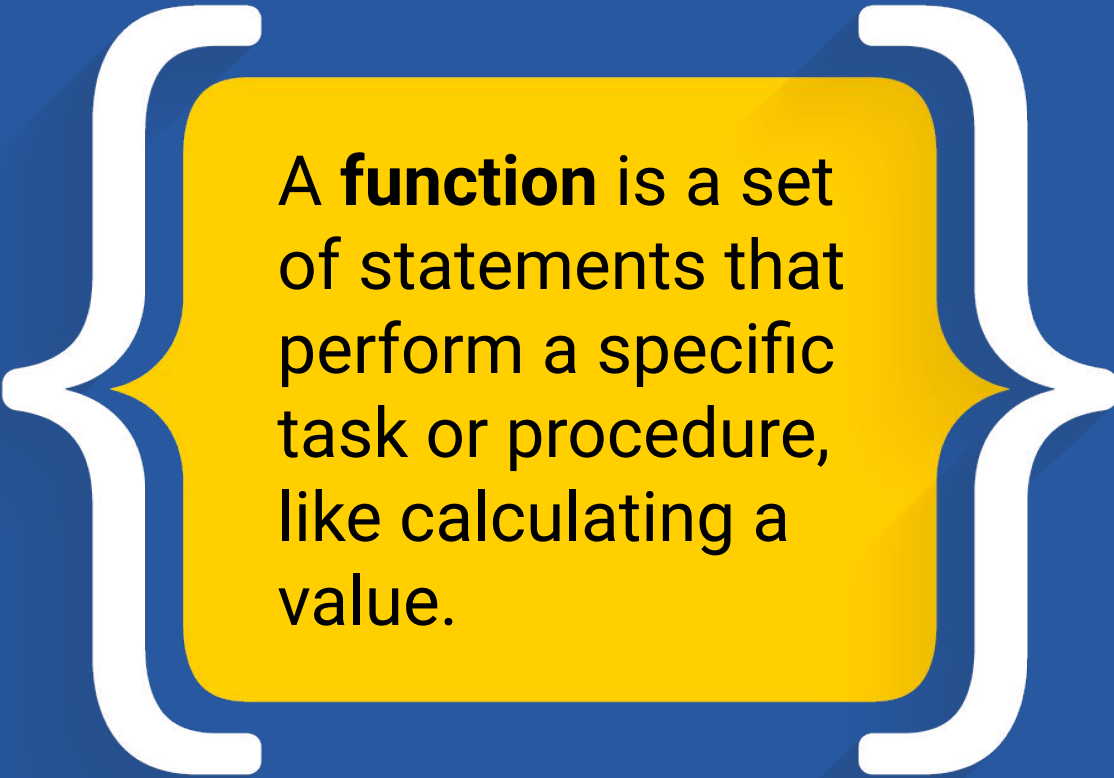
What does **control flow** refer to?

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

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



Introducing: Functions!



A **function** is a set of statements that perform a specific task or procedure, like calculating a value.



Instructor Demonstration: Loop Logging

Suggested Time:
5 minutes




Functions in JavaScript

Function Name: An identifier by which the function is called

```
function name (parameter1, parameter2, parameter3) {  
    // code to be executed  
}
```

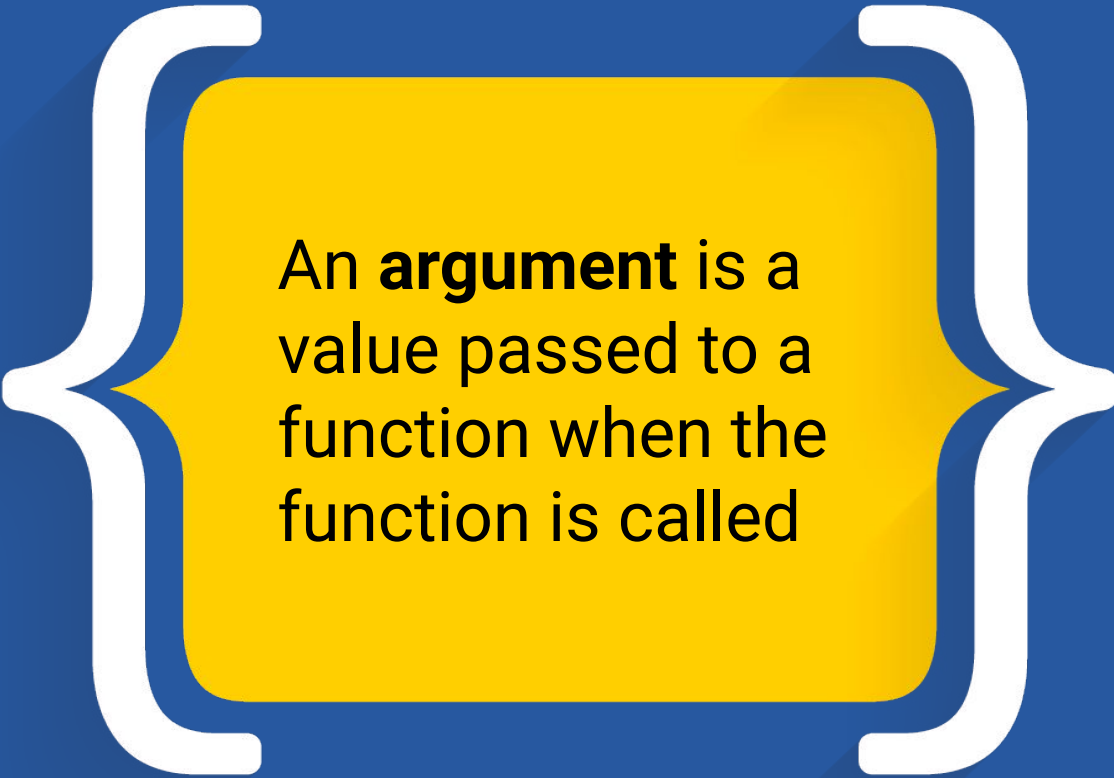
Functions in JavaScript

“Invoking” Functions: To call your function, include the parentheses



The diagram illustrates the function syntax with two magenta arrows. One arrow points from the word 'Invoking' in the text above to the opening parenthesis '(' of the function signature. The other arrow points from the word 'parentheses' in the text above to the closing parenthesis ')' of the function signature.

```
function name (parameter1, parameter2, parameter3) {  
    // code to be executed  
}
```



An **argument** is a value passed to a function when the function is called

Functions in JavaScript

Returning Functions: The “return” statement stops a function and returns a value

```
function name (parameter1, parameter2, parameter3) {  
    // code to be executed  
    Return parameter1 + parameter2;  
}
```

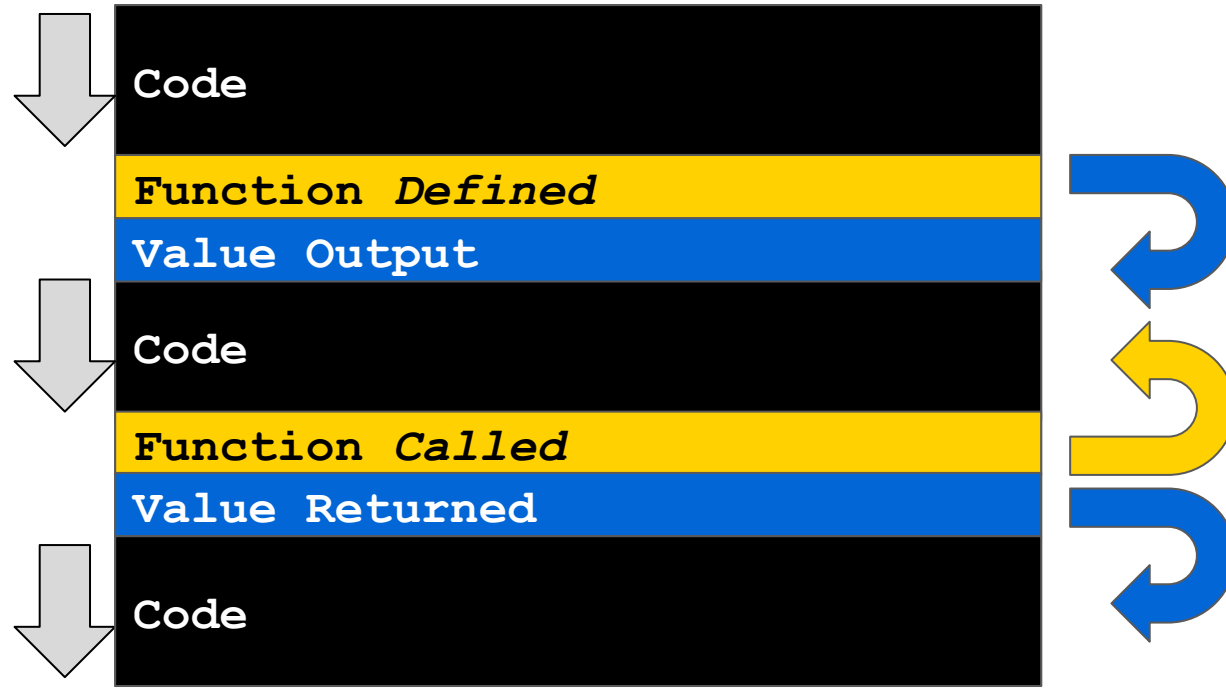


Predefined functions (and their outputs) can be “invoked” or *called* throughout your code.



Functions in JavaScript

Calling an earlier function pauses execution to run and return a value before resuming

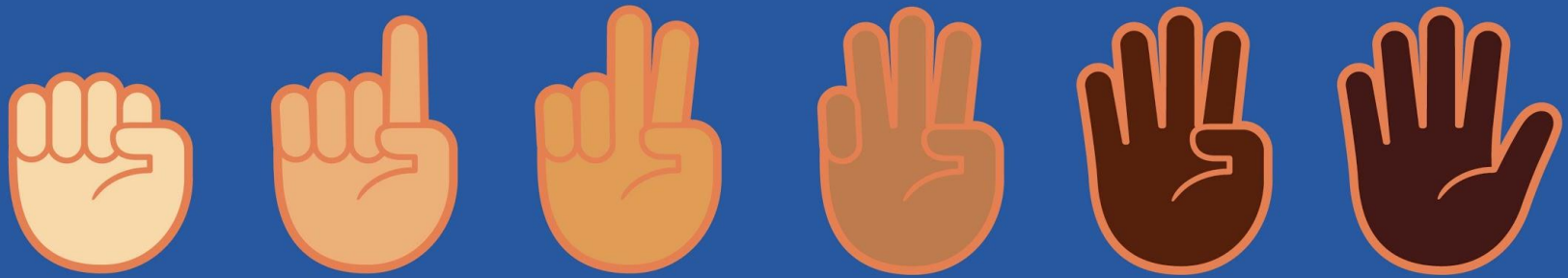




Instructor Demonstration: Passing an Argument into a Function

Suggested Time:
5 minutes

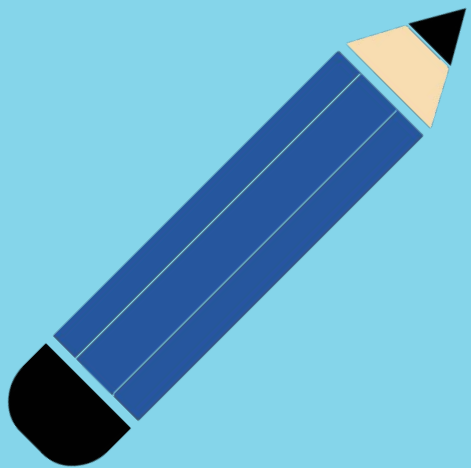




Fist to five

Let's





Activity: My First Functions

1. Pair up and open the `my-first-functions-unsolved.html` file.
2. Switch off and fill in the missing functions and function calls. There are four functions to work on.
3. As you go, try to explain to each other what each one does.

Suggested Time:
25 minutes





Let's review



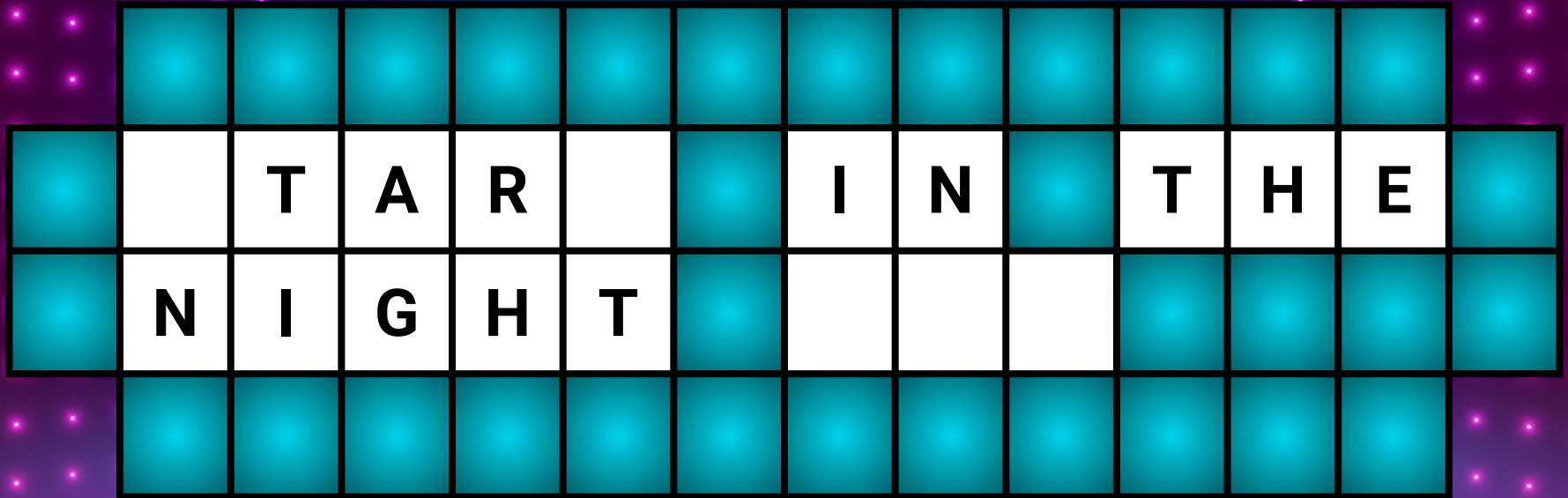
Questions?





Activity Intro

Guess Word



Staging, Saving, and Sharing Your Work

Memorize these three Git & Github Commands!

01

ADD

02

COMMIT

03

PUSH

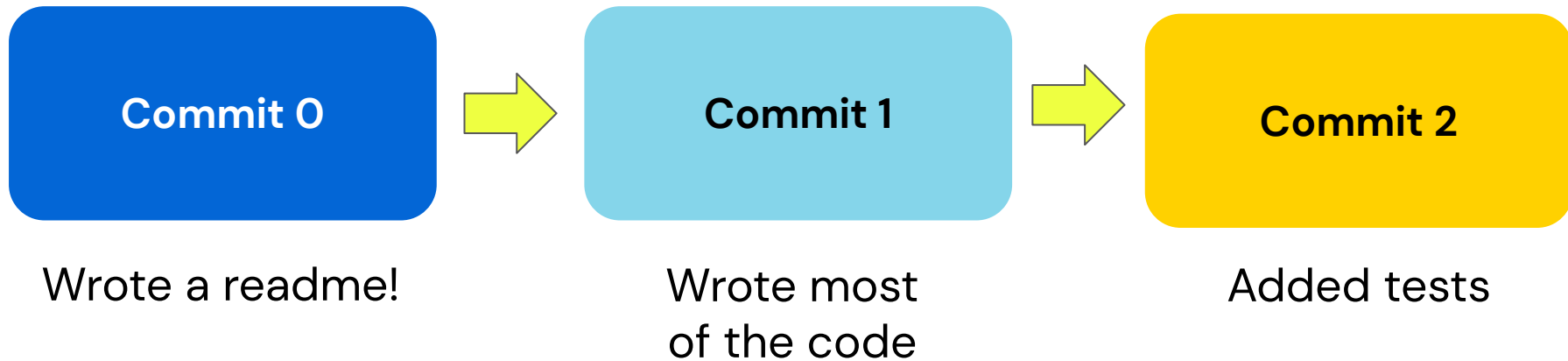
Git Commit -M

Don't forget to add a commit message!



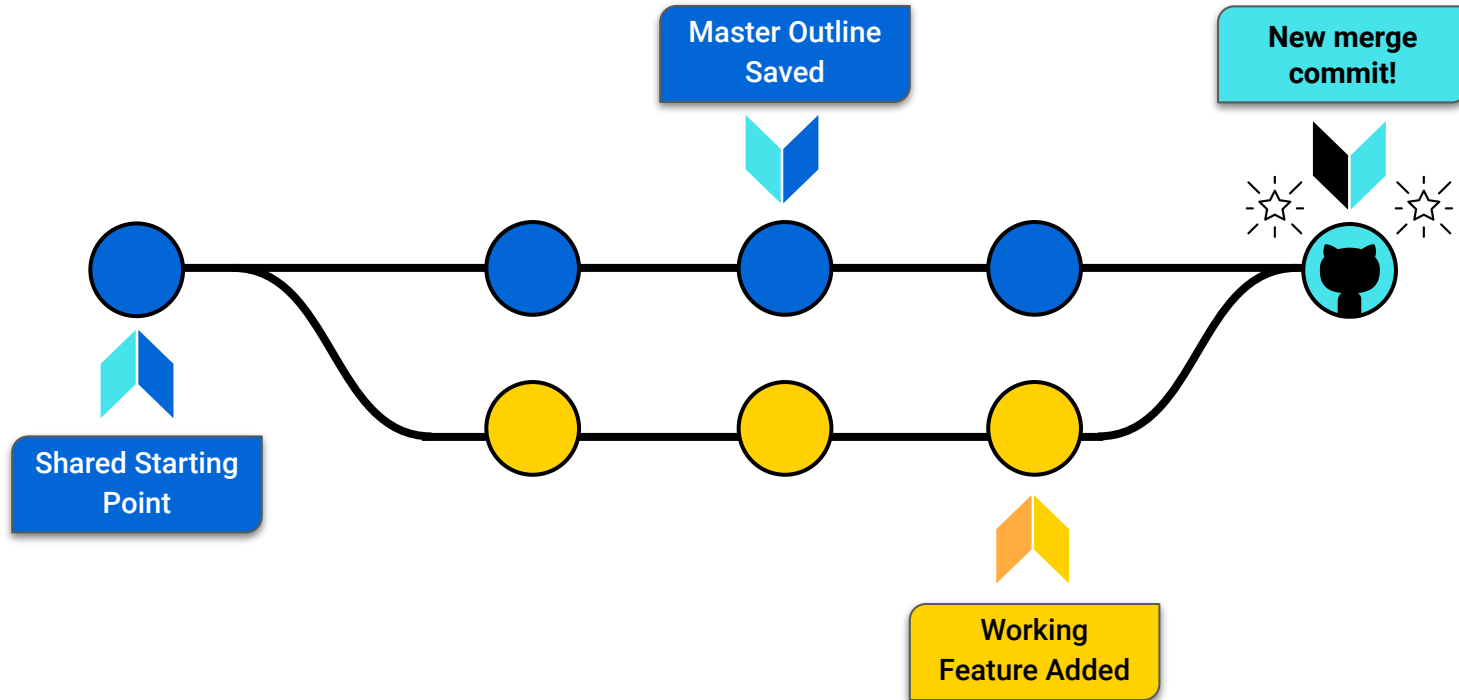
GitHub Commits

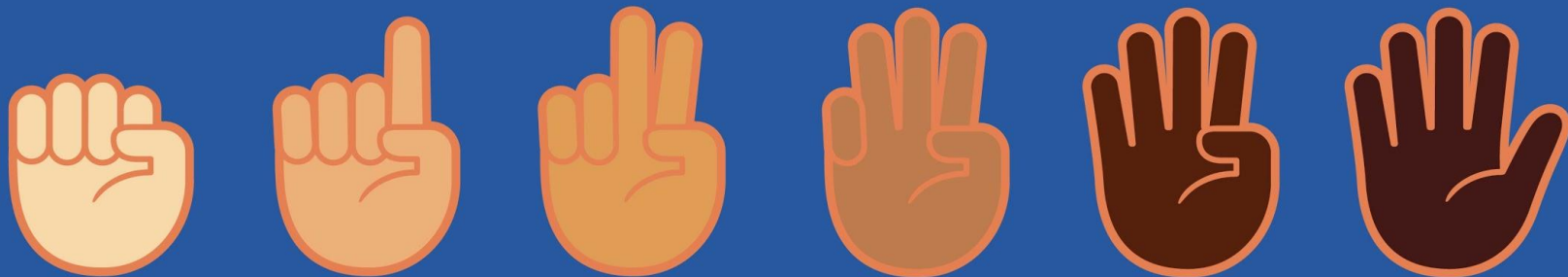
Your code is a series of commits



Checking The Log

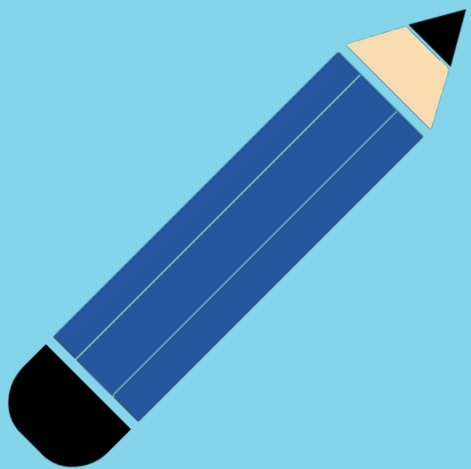
Running `git log` shows new commit added to the *master branch*





Fist to five

Workshop

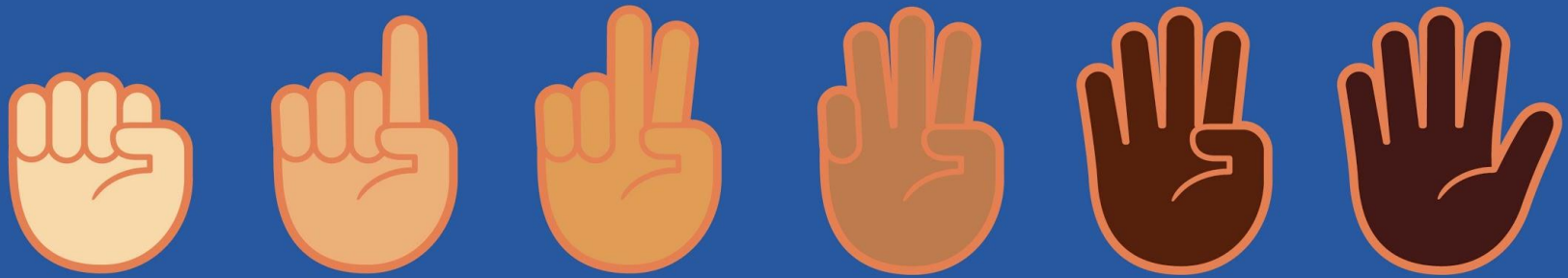


Activity: Guess Word

1. Get into groups
2. Create your game!
3. Don't be afraid to ask for help.

Suggested Time:
100 minutes





Fist to five



Let's review



Questions?





Time to
Recap

Learning Goals

Our objectives for today's session:

01

Discuss the use of functions in JavaScript

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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?





Sneak Preview

Tomorrow, we'll be looking at all of the JavaScript we've learned this week and pulling it all together with a new framework called jQuery!

Questions?



*The
End*