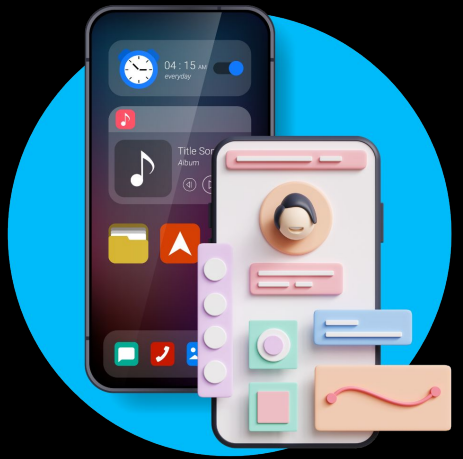
CODE FIRST GIRLS

JS

KICKSTARTER:

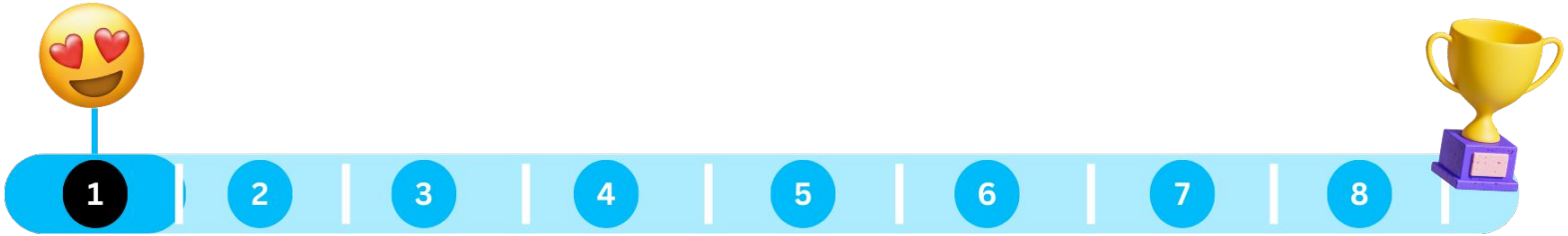
JAVASCRIPT

Used for for creating dynamic and interactive web applications

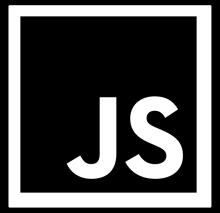


YOUR JAVASCRIPT JOURNEY

INTRODUCTION TO JAVASCRIPT



1. *Hello world!*
2. *Making decisions*
3. *Working with data*
4. *DOM part one*
5. *DOM part two*
6. *Project intro*
7. *Projects & presenting skills*
8. *Project presentations*



CODE FIRST GIRLS

LESSON ONE:
INTRODUCTION TO JAVASCRIPT

LESSON ONE: INTRO TO JAVASCRIPT

SESSION OVERVIEW

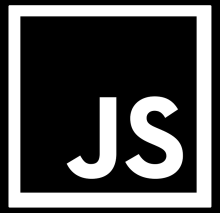
+ Strings & Output
+ Constants & Debugging
+ Joining Strings
+ Data Types
+ Numbers & Input
+ Recap

WE LOVE JAVASCRIPT

Javascript is known as **the language of the web**. It's one of the most powerful languages in the world.

- A very popular programming language
- Used to make websites interactive
- Lots of job opportunities
- Super fun to work with!
- JS = JavaScript
- JavaScript is not Java

DAY IN THE LIFE OF A JAVASCRIPT DEVELOPER



TOPIC 1: STRINGS & OUTPUTS

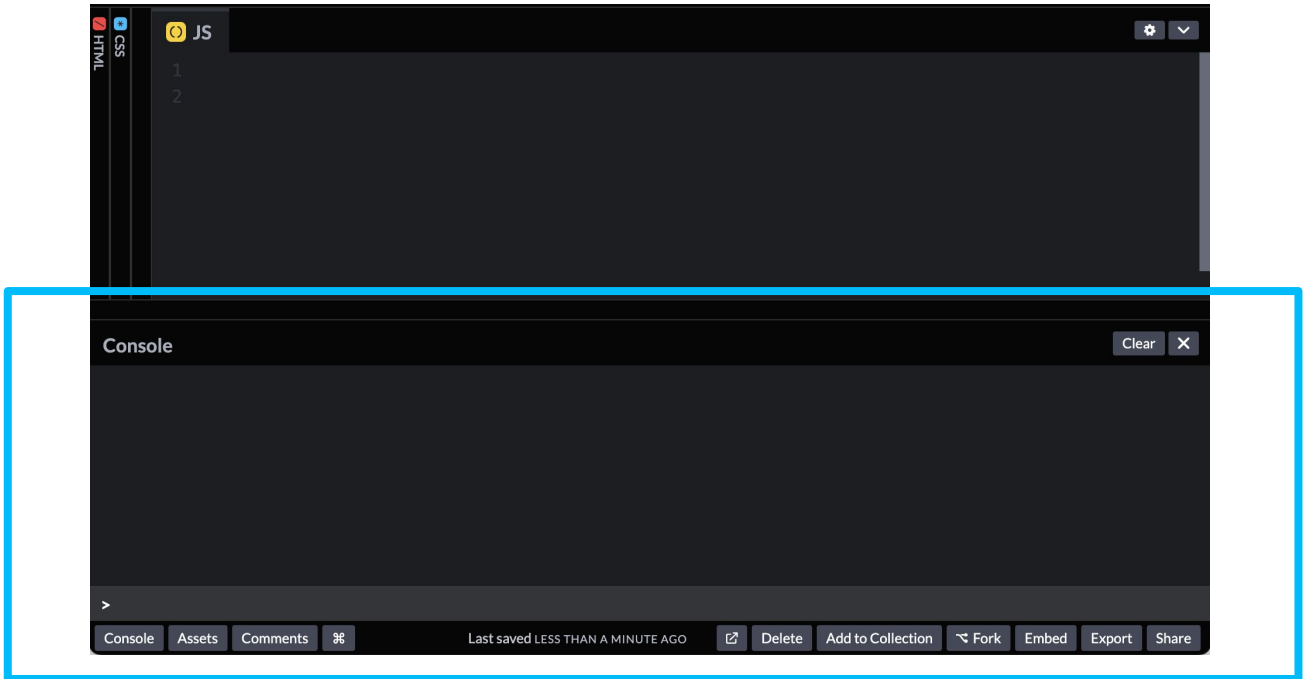
TOPIC OVERVIEW // STRINGS & OUTPUTS

1. What is the console?
2. What is console.log()?
3. What is a string?
4. What are comments and why do we use them?
5. What is debugging?
6. How can I use error messages to help me debug?

WHAT IS THE CONSOLE?

LEARNING SESSION

Where we see the output of our code.

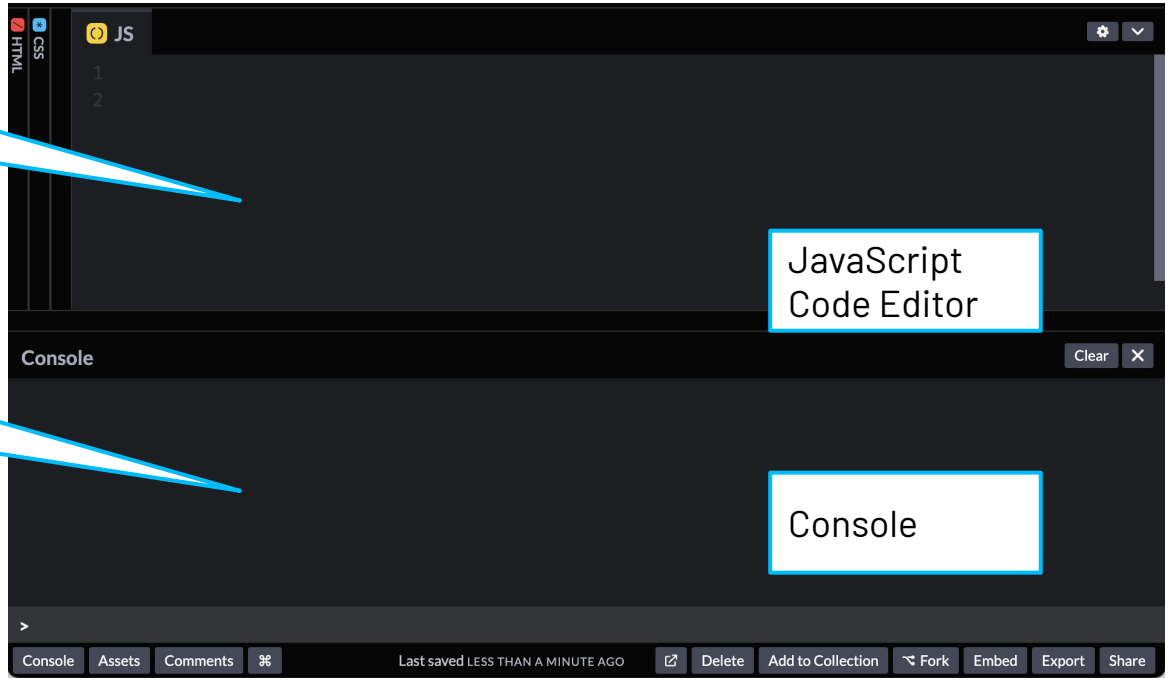


TEXT OUTPUT

LEARNING SESSION

We want to write code here ...

... to output text here



CONSOLE.LOG

LEARNING SESSION

The command we use to print a section of our code to the console.

STRINGS

LEARNING SESSION

The name we give to text / textual data. You can identify a string through the use of quotation marks.

JS

```
1
2  // Output a greeting to the console
3  console.log("Hello 👋")
```

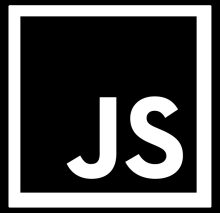
COMMENTS

LEARNING SESSION

Notes we can leave for ourselves throughout the code; they don't affect the code itself.

JS

```
1
2 // Output a greeting to the console
3 console.log("Hello 👋")
```



CODE FIRST GIRLS

TOPIC 2: DEBUGGING AND CONSTANTS

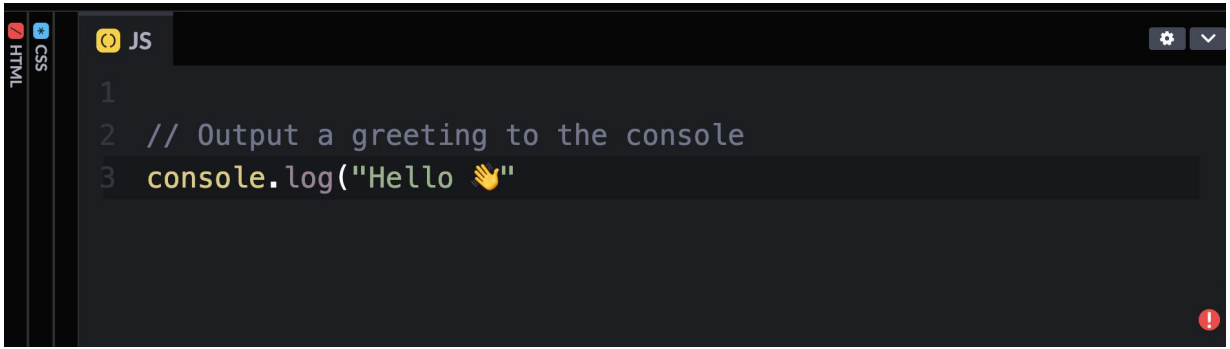
TOPIC OVERVIEW // CONSTANTS

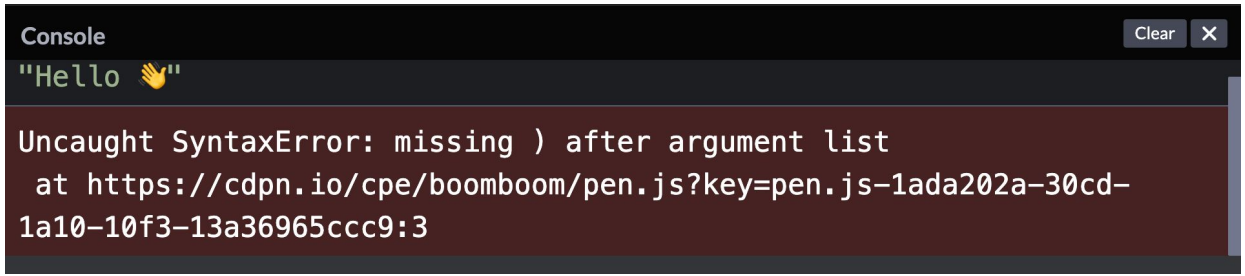
1. What are constants?
2. Constants Vs. Strings
3. Declaring constants
4. Using constants

WHAT IS DEBUGGING?

LEARNING SESSION

The process for fixing errors in code.

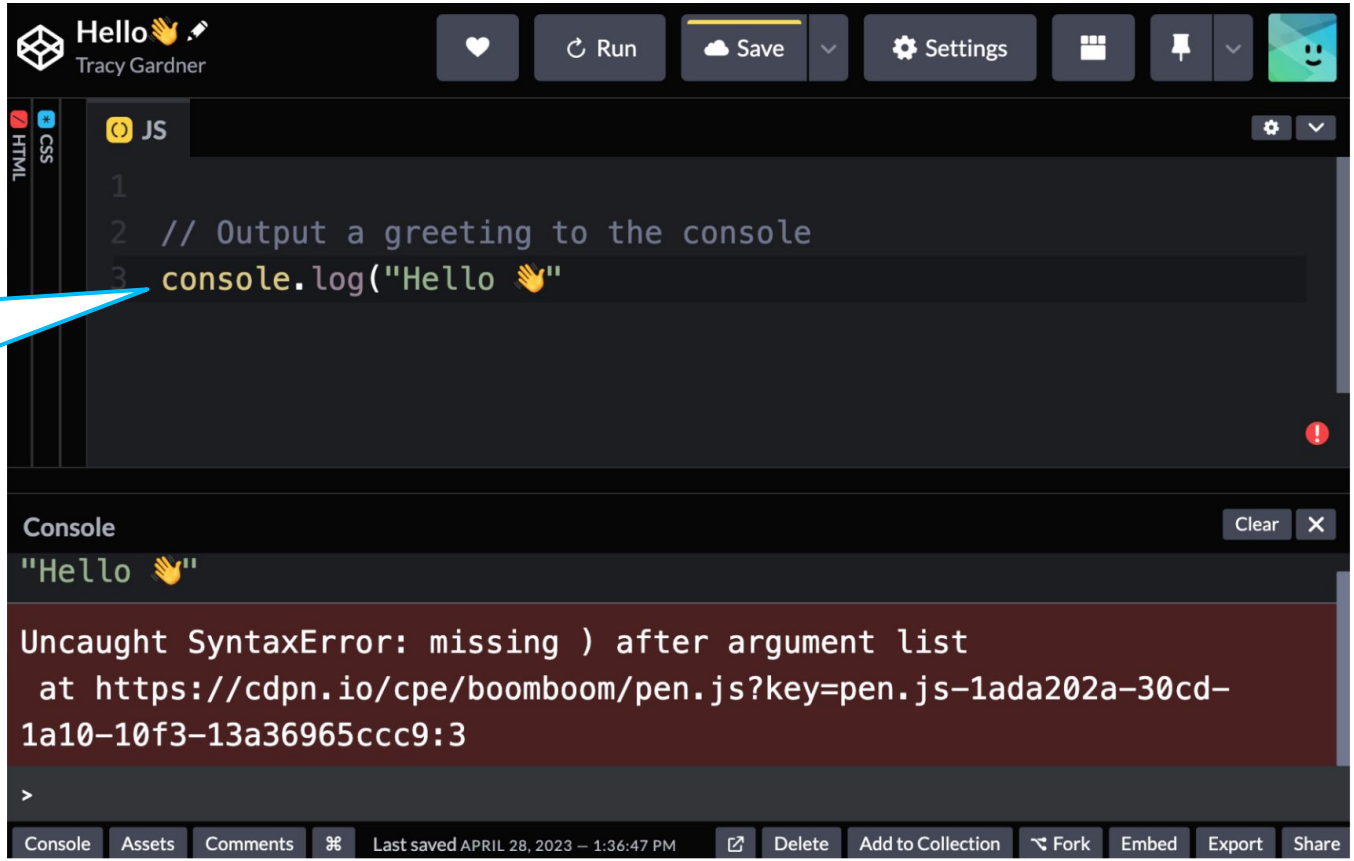




DEBUGGING

LEARNING SESSION: WE MAKE MISTAKES! WE DEBUG THEM!

Can you spot the error we've made?



CONSTANTS

LEARNING SESSION: GIVING REUSABLE DATA A NAME

Constants are kind of variable - a way to give a name to data that we want to label to reuse

+ Imagine the “Hello” greeting message was really long - your console.log() code would get hard to read

+ Wouldn’t it be nice if we could just say console.log(greeting)

+ The meeting of your code would be much clearer.

CONSTANTS VS STRINGS

LEARNING SESSION: DEBUGGING

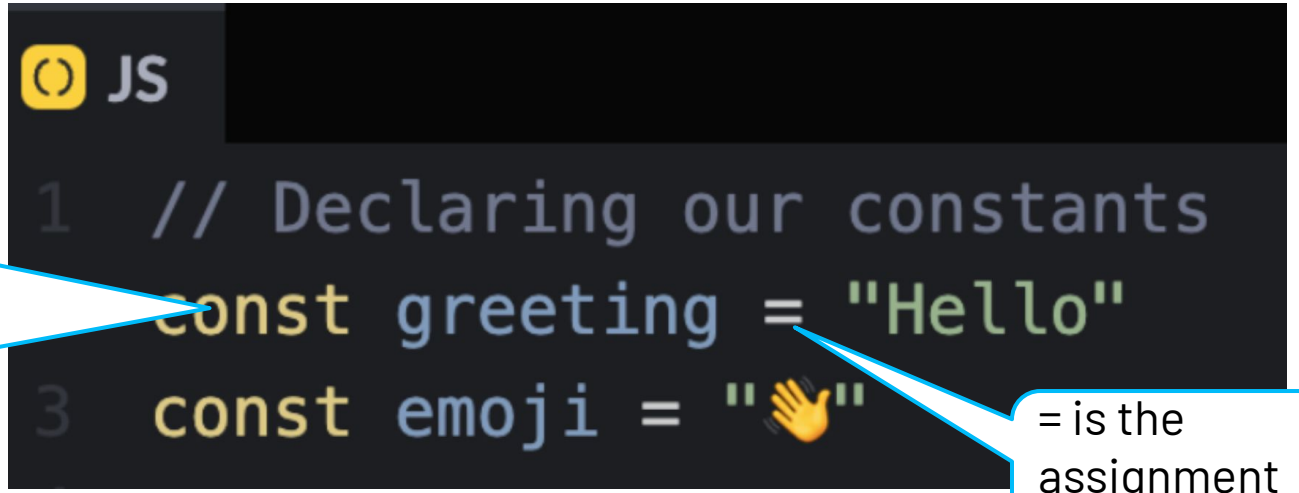
Can you spot the error we've made?

DECLARING CONSTANTS

LEARNING SESSION

Constants are kind of variable - a way to give a name to data that we want to label to reuse

Const is the keyword used to declare a constant. You can only assign a value once.



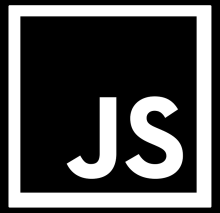
= is the assignment operator

USING CONSTANTS

LEARNING SESSION

After being declared, constants can then be used where needed.

The logged output is then the **value** of the variable



CODE FIRST GIRLS

TOPIC 3: JOINING STRINGS - CONCATENATION AND INTERPOLATION

TOPIC OVERVIEW // CONCATENATION

1. What is concatenation?

2. What is interpolation?

CONCATENATION

LEARNING SESSION: JOINING STRINGS TOGETHER

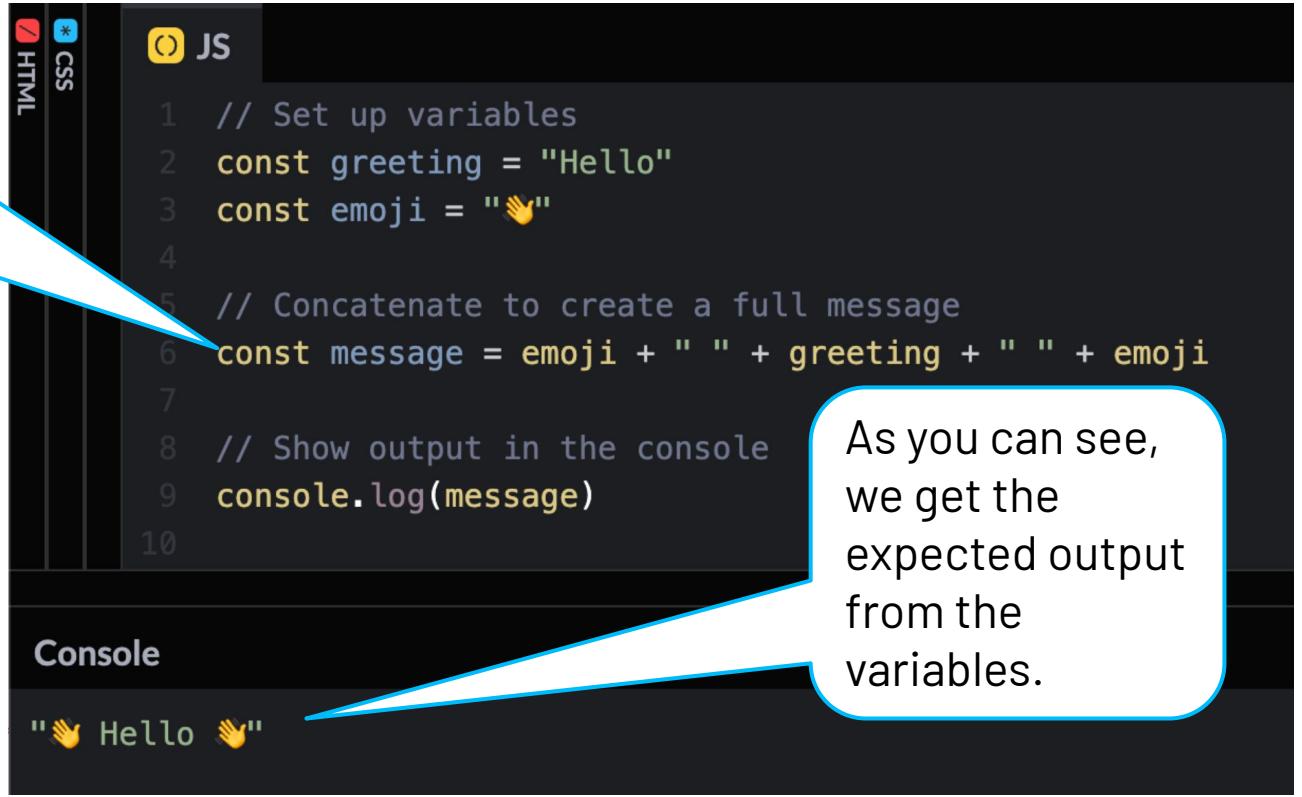
Concatenation is used to join together two or more strings of text to create a longer string of text.

+ What if we want to print more than one thing to the console?
+ We can join strings together using **concatenation**
+ We can combine text strings “`Hello`” and variable containing strings

JOINING STRINGS

LEARNING SESSION: CONCATENATION

Concatenation uses **the + sign** to join string values together



As you can see, we get the expected output from the variables.

INTERPOLATION

LEARNING SESSION: JOINING STRINGS TOGETHER

Interpolation helps you combine text and variables more smoothly

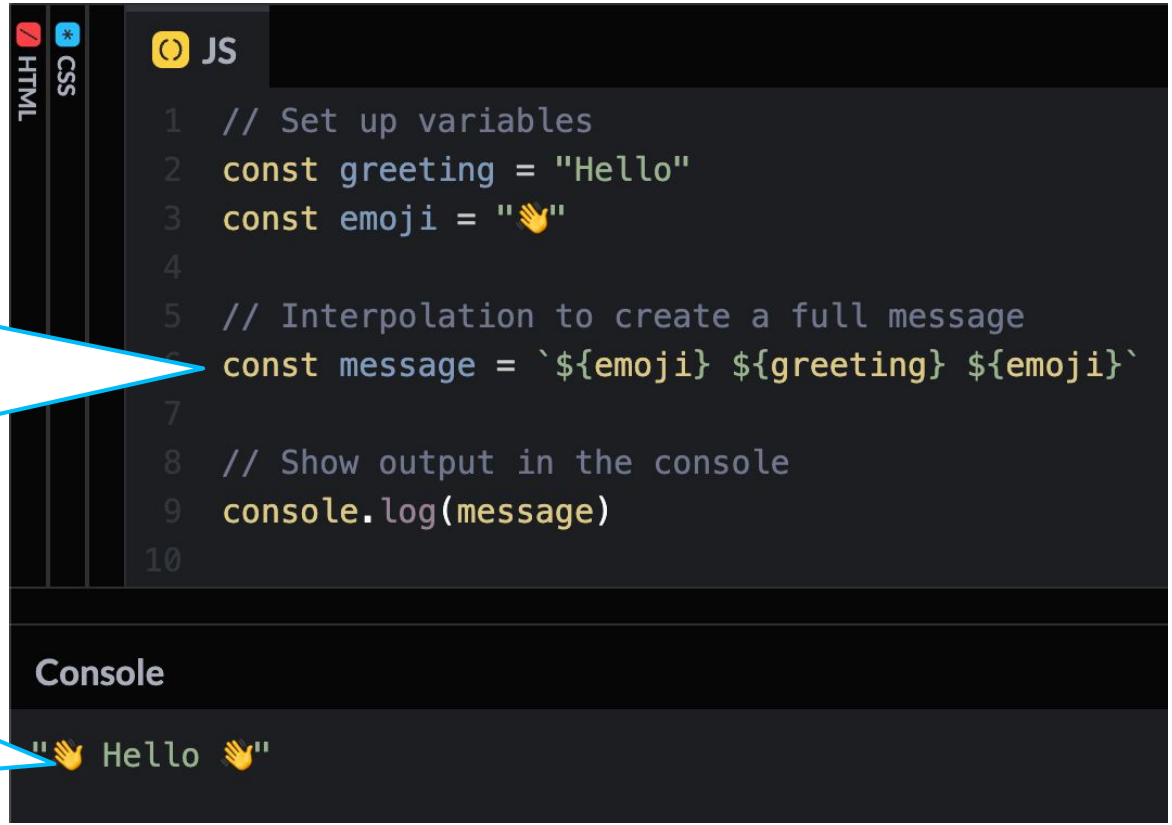
+ Concatenation can get a bit messy when you want to combine text and multiple variables - you need lots of quotes (" ")
+ It's tricky to include some punctuation
+ Sometimes you want to create longer multi-line strings
+ **Interpolation** solves this

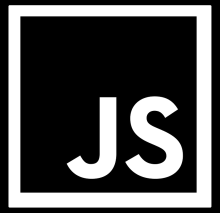
JOINING STRINGS

LEARNING SESSION: INTERPOLATION

Interpolation can be recognised by **the backticks `** and **the $ sign** followed by variable name in **curly brackets {}**

The output is the same as when we used concatenation





CODE FIRST GIRLS

TOPIC 4: DATA TYPES

TOPIC OVERVIEW // DATA TYPES

1. What are data types?
2. What are strings?
3. What are numbers?
4. What are operators?

DATA TYPES

LEARNING SESSION

There are different data types in Javascript. The types can be divided into two categories; primitive and reference types.

E.g.

Strings e.g “Hello”

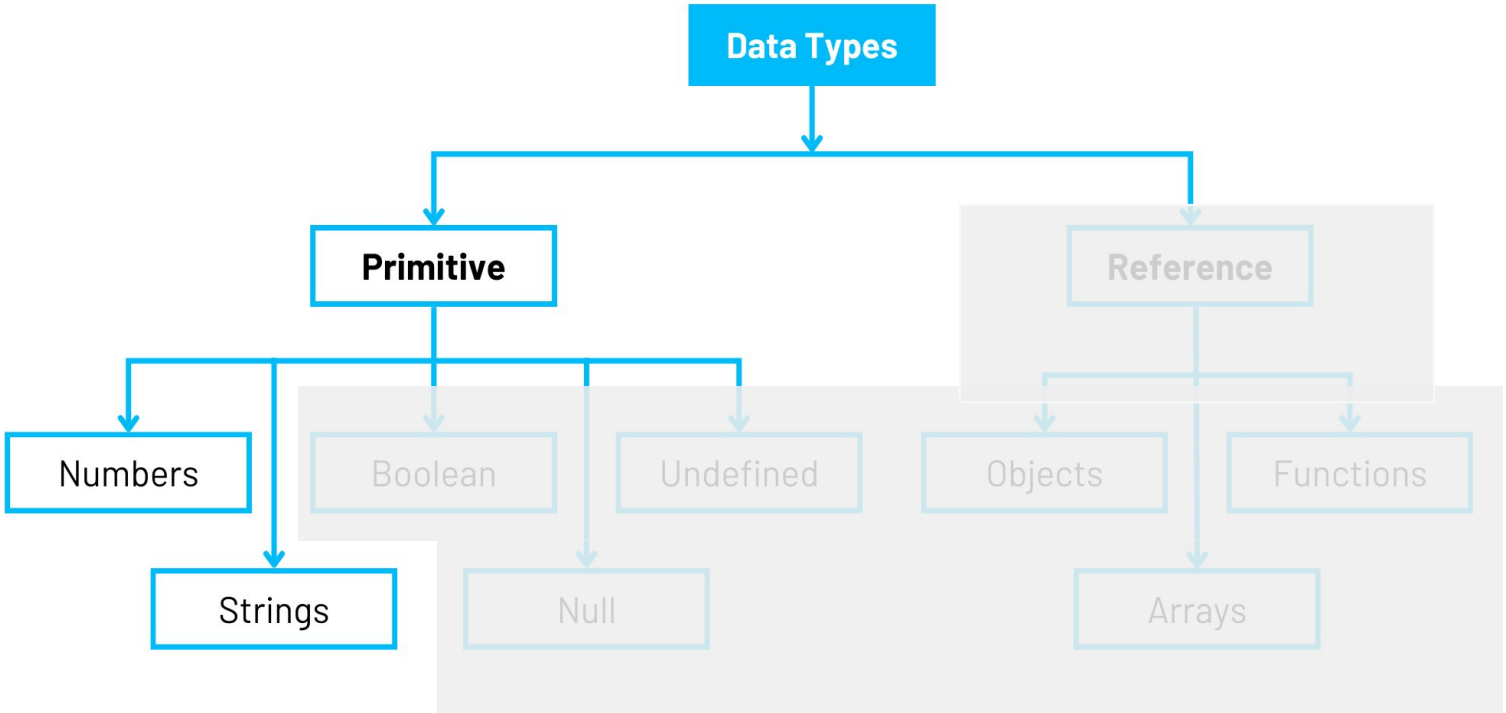
Strings are used to store text, including emoji 👋🏾

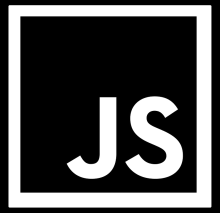
Numbers is another datatype in JavaScript

-These are both examples of primitive data types.

DATA TYPES

LEARNING SESSION





CODE FIRST GIRLS

TOPIC 5: NUMBERS & INPUTS

TOPIC OVERVIEW // NUMBERS & INPUTS

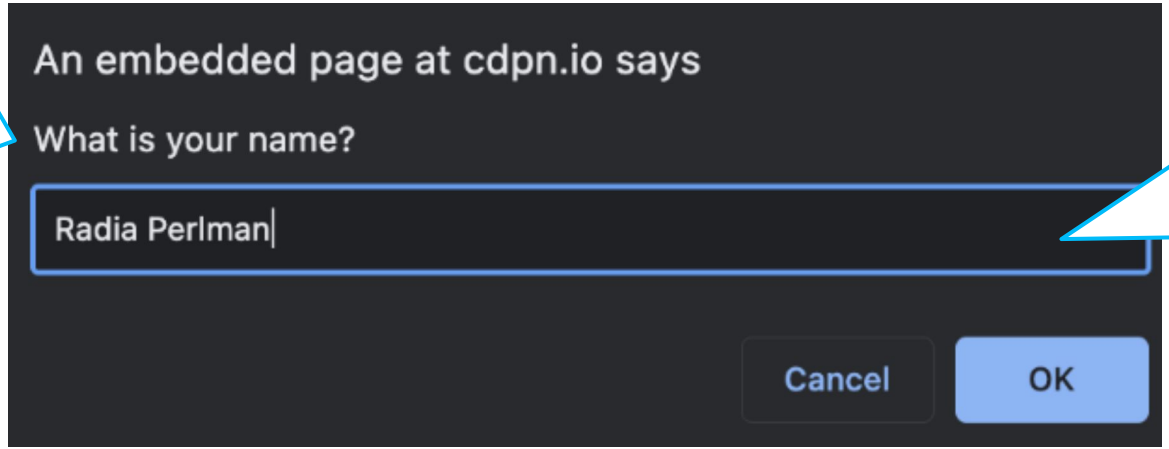
1. What are prompts?
2. How to do math operations?

PROMPTS

LEARNING SESSION: USER INPUT

A method used to display information to prompt the user to input text

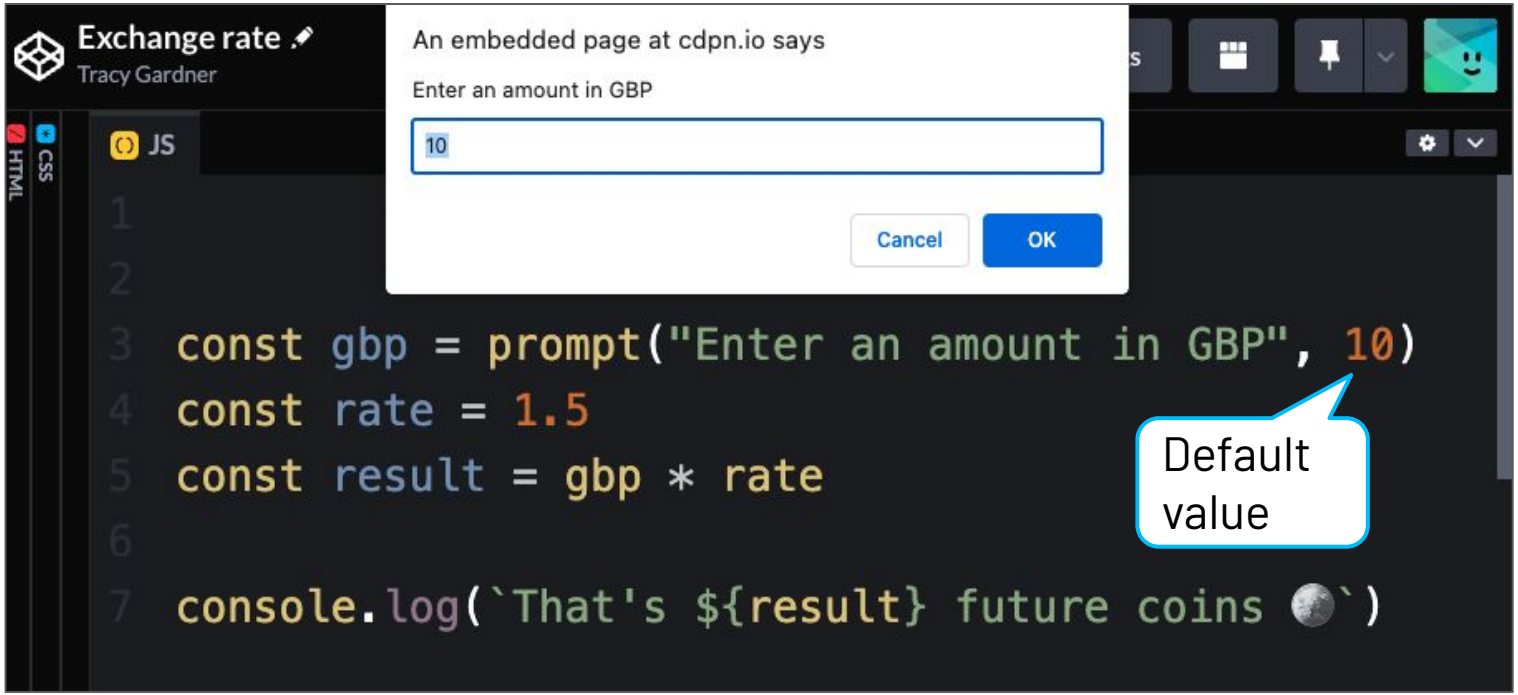
You can add some guidance here



The user types some input here

PROMPTS

LEARNING SESSION: USER INPUT



MATH OPERATIONS

LEARNING SESSION

We can use **maths operators** to do **calculations**.

Addition	`+`	`1 + 0.5`	
Subtraction	`-`	`55`	
Multiply	`*`	`30`	
Divide	`/`	`1.5`	
Exponent	`**`	`8`	To the power
Modulo	`%`	`2`	Remainder

★ **Remember to complete the quizzes for each topic this week to help build knowledge and understanding!**

★ **Live Lab sessions:**

- Elevate your learning experience by joining us in the live lab session.
- You'll get to put into practice what you have learned by completing exercises and working with your fellow students and instructors!
- You'll also have the chance to be put in a group of students to support each other through the class and work together on your final project!
- You can communicate through LearnDash and look out for the details of the live lab session taking place this week