



Hack Club

November 1, 2022



Where Did We Leave Off?



Agenda

- **Last week, we:**
 - Learned about HTML, CSS, and JavaScript
 - Started creating our own website
- **Today, we'll:**
 - Start learning about JavaScript



What is JavaScript?

It's a lot nowadays.

- JavaScript is used to power:
 - Websites
 - Mobile Apps
 - Desktop Apps
 - Games
 - Microcomputers
 - ..and more

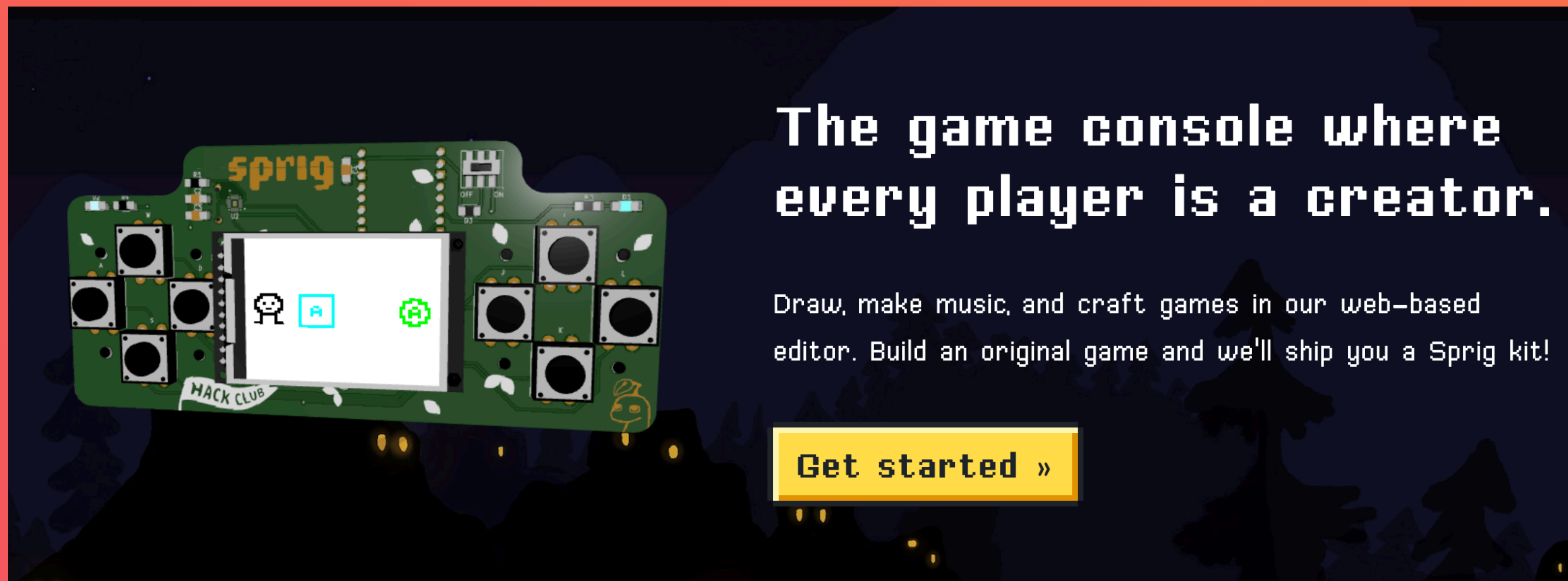


How are we going to learn it?

Hack Club has this really cool thing called Sprig.

- Sprig is a tool developed by Hack Club to help people quickly get started making interesting tile-games.
- If you build a game in Sprig and share it in the community gallery you can get a Sprig Console!

[LINK](#)



**Wait..but how do you code in
JavaScript?**



Printing things out

Can't forget good 'ol "Hello World"

- There's only one function you need to know to be able to print something out.

```
console.log("Hello World");
```



Types

JavaScript needs a way to know what type of thing it's storing.

- **Strings**
 - Characters/words/phrases
- **Booleans**
 - True/False
- **Numbers**
 - I think we can figure this one out from the name
- **Arrays**
 - Storing multiple things in a single thing, as an **array** of things

"Hello World"

true

5



Variables

Variables my beloved

- Variables in math store a number ($x=5$)
- Variables in code store data (strings, numbers, booleans, arrays, etc.)

```
var myString = "Hello World"; // string
var myNumber = 5; // number
var myBoolean = true; // boolean
var myArray = ["first", "second", "third"] // array of strings
```



Functions

Hey, code and math are actually pretty similar

- We can use **functions** to take in an **input**, do things with it, and **return** an **output**.
- To actually use that function, we need to **call** it by using the function name.
- We call any input variables **parameters**.

```
function myFunction(input) {  
  // do things here  
  return output;  
}
```

```
myFunction("hello");
```

Let's move on to Sprig!



The Toolkit

Sprig has some built-in functions to make creating games a little easier.

- Open the Sprig Editor link in Google Classroom
- Press “Open Help” in the top right
- Check out all of the functions available to you

Be Free!

**Work with each other to complete the
Sprig tutorial.**