

WoofJS: A Transition Path from Scratch to JavaScript

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What'll we learn!

- What is WoofJS
- How to use WoofJS for weaning off of Scratch
- Its strengths and weaknesses
- Useful idioms

Why leave Scratch?

Scratch is a fantastic environment for learning programming

But it's a closed ecosystem with inherent limitations

Why can leaving Scratch be *hard*?

Programming in Scratch is *very different* than anything else

What's WoofJS

<https://woofjs.com>

```
// Hey there, welcome to WoofJS! WoofJS is a Scratch-inspired JavaScript library for
making games.

// Want to code something together? :-)
every(.001, 'seconds', () => {
  var circle = new Circle()

  // Go, little circles, go!
  forever(() => {
    circle.move(5)
  })

  // Let's randomize size
  circle.radius = random(5, 20)

  // Colors are fun!
  circle.color = randomColor()

  // I say scatter!
  circle.angle = random(0, 360)

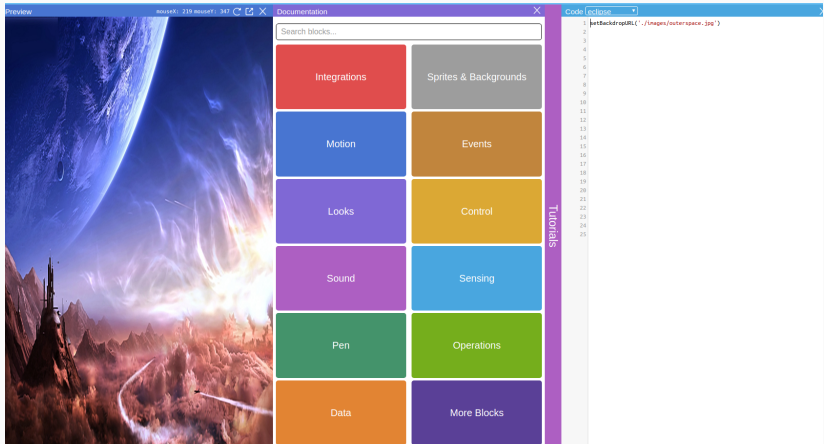
  // Now it's your turn. Play with this code by changing any of the numbers above.
})
```

Start Coding

For Educators

How is it a path out of Scratch?

WoofJS is built to *feel* like Scratch, but be JavaScript



A brief overview of coding differences

sprites	⇒	objects
clones	⇒	constructors & arrays
code split apart	⇒	code in one place

A brief overview of coding differences

WoofJS games will have

- more functions
- more arrays/lists
- more loops

than an equivalent Scratch game

What's missing in WoofJS?

- No art editing tools
- No sound editing tools
- Limited ability to upload images
- Limited social media features

Let's switch gears now...

`https:
//github.com/clarissalittler/woofjs-materials`

How to integrate WoofJS into the classroom

WoofJS would make a great term-long unit for kids bored with Scratch

Where to go next?

For games programming

TIC-80 A Lua based system for retro-games

PyGame An easy to use game writing library for Python

Phaser A popular JavaScript based game writing library

Questions, comments, curses
upon mine ancestry?