



# Processing & P5.js

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# Introduction to Processing





# History of Processing

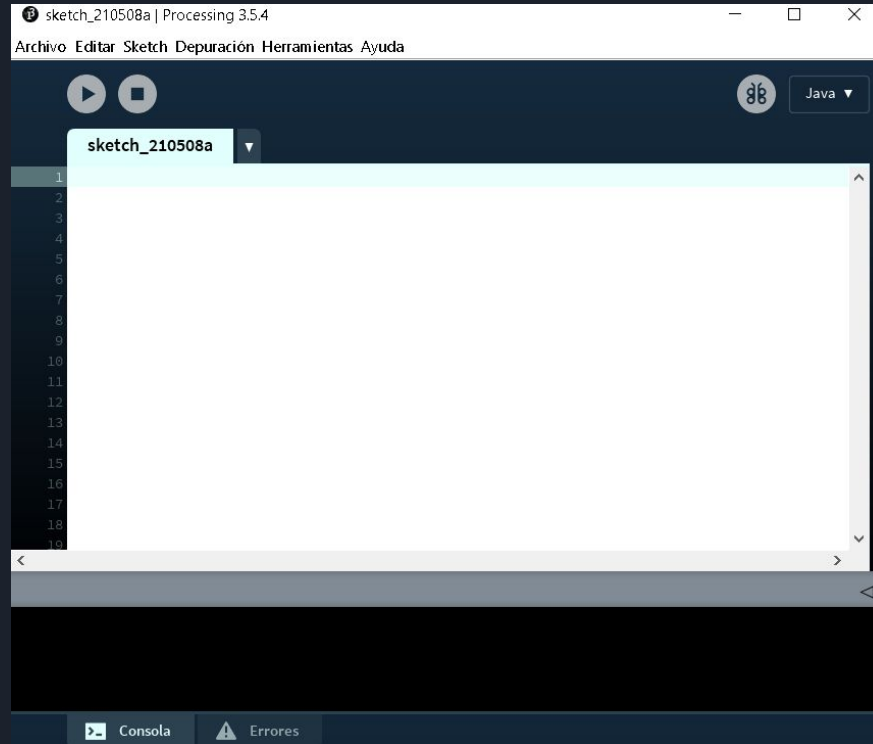


Ben Fry



Casey Reas

# Processing IDE





# Processing code example

```
void setup() {  
  size(640, 360);  
  noStroke();  
  rectMode(CENTER);  
}  
  
void draw() {  
  background(51);  
  fill(0, 204);  
  rect(mouseX, height/2, mouseY/2+10, mouseY/2+10);  
  fill(255, 204);  
  int inverseX = width-mouseX;  
  int inverseY = height-mouseY;  
  rect(inverseX, height/2, (inverseY/2)+10, (inverseY/2)+10);  
}
```

# Projects made with Processing



House of Card - Radiohead



# Introduction to P5.js



p5.js: 2013



Lauren McCarthy

# P5.js Website

p5.js

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## Hello!

p5.js is a JavaScript library for creative coding, with a focus on making coding accessible and inclusive for artists, designers, educators, beginners, and anyone else! p5.js is free and open-source because we believe software, and the tools to learn it, should be accessible to everyone.

Using the metaphor of a sketch, p5.js has a full set of drawing functionality. However, you're not limited to your drawing canvas. You can think of your whole browser page as your sketch, including HTML5 objects for text, input, video, webcam, and sound.

[Check out the new p5.js 2020 showcase!](#)

## Community

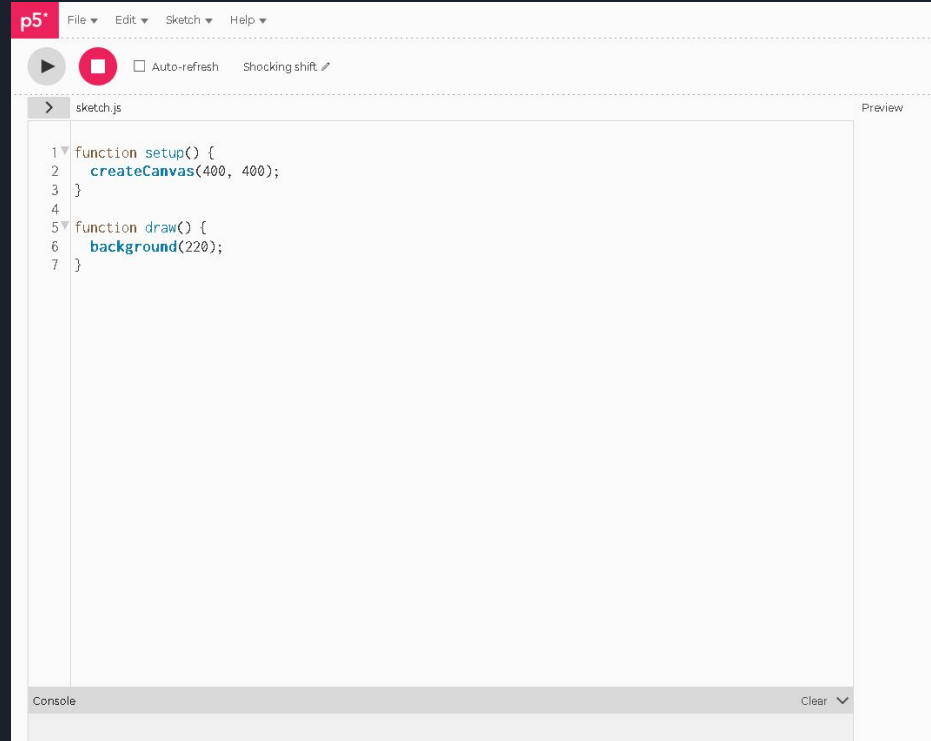
We are a community of, and in solidarity with, people from every gender identity and expression, sexual orientation, race, ethnicity, language,

# P5.js Youtube tutorials



<https://www.youtube.com/watch?v=8j0UDiN7my4&list=PLglp04UYZK PrN6xWo nJ-8kzyXDyFUwi>


# P5.js Editor





# First Steps - VSCode Packages

- **p5canvas - Garrit Schaap**
  - Greater abstraction level
  - Everything in one interface
- **p5.vscode - Sam Lavigne**
  - Template skeleton files
  - Uses Live Server package
  - Facilitates third party p5.js libraries installation



# First Steps - Reference

- Main control functions
  - `preload()`
  - `setup()`
  - `draw()`
- Reference
  - <https://p5js.org/es/reference/>



# Code examples

- Basic drawing
  - Shapes
  - Movement
- OOP and ES6 with p5.js
  - Recursive tree
  - Particles
- Image Processing
  - Image drawn with particles
- DOM modification
  - HTML Dancing Elements
- WebGL - 3D
  - Sin and Cos waves

...



# Important Resources

- Learn Site - Testing and Socket.io
  - <https://p5js.org/es/learn/>
- Contributors Libraries
  - <https://p5js.org/es/libraries/>





# Projects made with P5.js



Open processing: <https://openprocessing.org/>

Game example: <https://openprocessing.org/sketch/453716>



# 2020 Community Showcase

- [Justice in COVID-19](#)
- [36 Days of Type x](#)
- [Album Motion Art](#)
- [Electrostatic Field](#)

[Showcase website](#)



# Conclusions