

ART384 Creative Coding

Exercise 2

P5.js – create a minimalist game



Cory Archangel: “Super Mario Clouds is an old Mario Brothers cartridge which I modified to erase everything but the clouds. Check below for the ROM & a link to the source code. When this wz first posted 2 the net in 02 is wz as a DIY tutorial. As I kept on updating CMS’s on my website, eventually this tutorial got mangled. None the less, 4 those interested, here iz the [2002](#) & [2006](#) posts (thx web recorder!). FYI: I still need 2 get around 2 cleaning up all the different versions of this code (all so unorganised & with so many bugs!), and making an official The Source zine. Coming soon, I promise.”

Source: <https://coryarcangel.com/things-i-made/2002-001-super-mario-clouds>

This second assignment asks you to modify an existing game in “an interesting way”. Interesting means different things to different people. Cory Archangel shows how a minimalist approach to game intervention can lead to amazing results.

Your assignment is to create a minimalist game by changing elements of an existing game to suit your intentions.

Here is the base code of a simple game in P5.js, with usual functions setup, draw and one addition (removeAndScore).

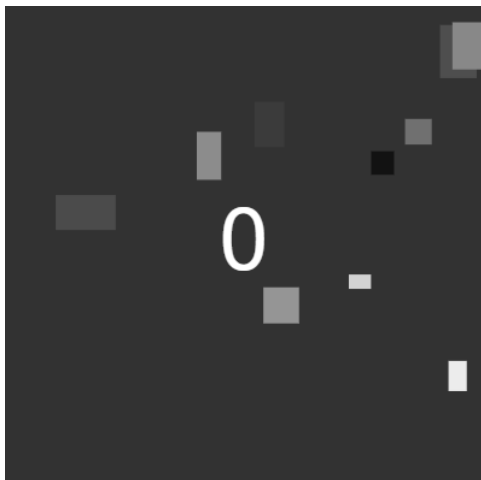
```
var score = 0;

function setup() {
  createCanvas(400, 400);
  for (let i = 0; i < 10; i++) {
    var spr = createSprite(
      random(width), random(height),
      random(10, 50), random(10, 50));
    spr.shapeColor = random(255);
    spr.onMouseOver = removeAndScore;
  }
}

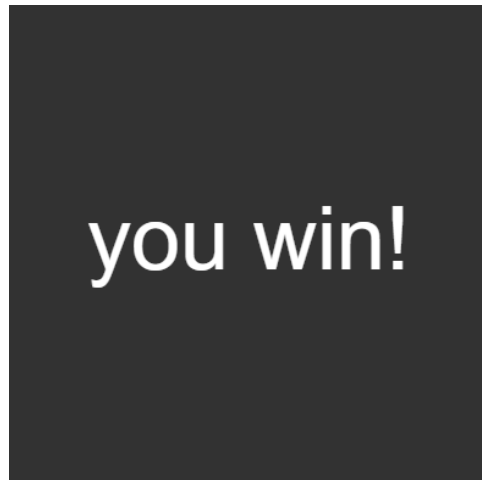
function draw() {
  background(50);
  drawSprites();
  fill(255);
  noStroke();
  textSize(72);
  textAlign(CENTER, CENTER);
  if (score < 10) {
    text(score, width/2, height/2);
  }
  else {
    text("you win!", width/2, height/2);
  }
}

function removeAndScore() {
  score += 1;
  this.remove();
}
```

Screen at game begin.



Screen at game end.



You will notice that the function `drawSprites()` is not defined.

In order to integrate the function definition of `drawSprites` into this project, one must include an external library that in fact includes the function definition.

That library is called 'p5.play.js', and you can get the file from this site:
<https://creative-coding.decontextualize.com/making-games-with-p5-play>

Download the compressed file `p5.play-master` and extract the file 'p5.play.js' from the 'lib' folder. Add this file to your Sketch Files folder following the same process you used to add audio and or font assets previously.

This site give you some background information on libraries in P5.js in general:
<https://p5js.org/libraries/>

The site <https://creative-coding.decontextualize.com/making-games-with-p5-play> also has a few rudimentary and maybe useful gaming features you might want to consider for your project. Feel free to integrate elements we previously used in our P5.js experiments.

Below some additional resources and examples.

Here is a link to a p5.js version of John Conway's Game of Life CA:
<https://p5js.org/examples/simulate-game-of-life.html>

This site lists some more ambitious games designed with p5.js:
<https://itch.io/games/made-with-p5js>

DELIVERABLE

A P5.js program that creates a minimalist game with some clever features.

POINTS 15 points. See syllabus.

DEADLINE Thursday, October 21st, noon

FORMAT and DELIVERY

- Demonstrate the code in class.
- Place copies of the sketch.js (and any other files you used) into UBBox, and send the instructor a link to the folder before the deadline.