

Learning Portfolio 5/1 - Yejin Kim

Link to the generative pattern sketches :

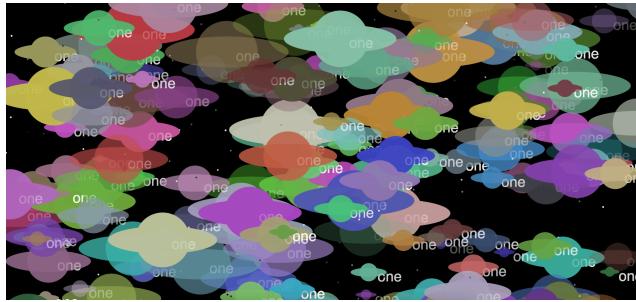
1. <https://yejinkime.github.io/SP21-PUFY1225-DIGITAL-CRAFT/homework/v2p5jssketch1.html>
2. <https://yejinkime.github.io/SP21-PUFY1225-DIGITAL-CRAFT/homework/v2p5jssketch2.html>
3. <https://yejinkime.github.io/SP21-PUFY1225-DIGITAL-CRAFT/homework/v2p5jssketch3.html>

Link to SVG file :

4. <https://yejinkime.github.io/SP21-PUFY1225-DIGITAL-CRAFT/p5jssketch2.svg>

After learning about Loop, I wanted to make diverse interactions with random values, while dramatically reducing the length of the code with functions. Below are the updated sketches.

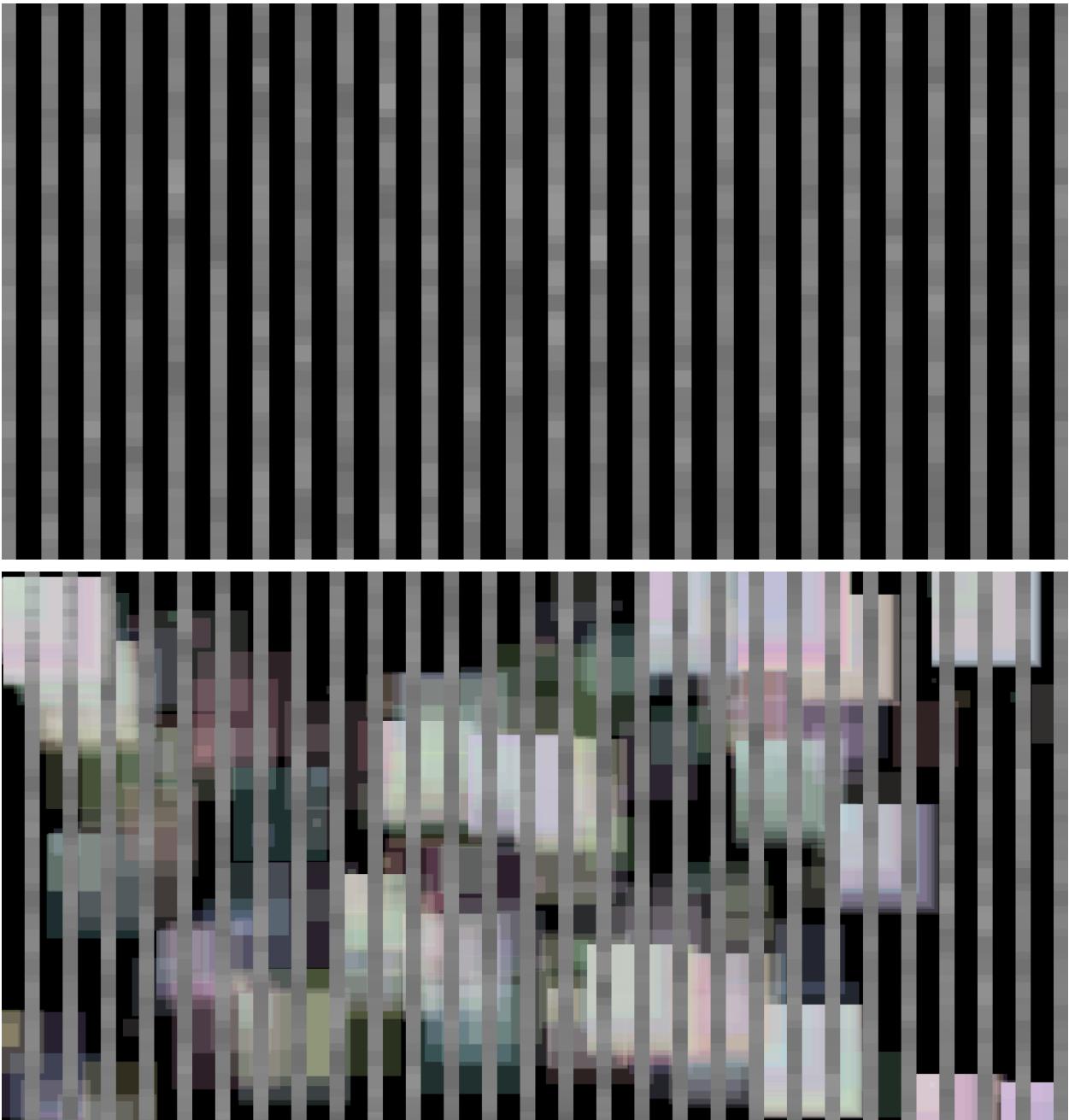
Updated Generative Sketch 1.



I found yours!

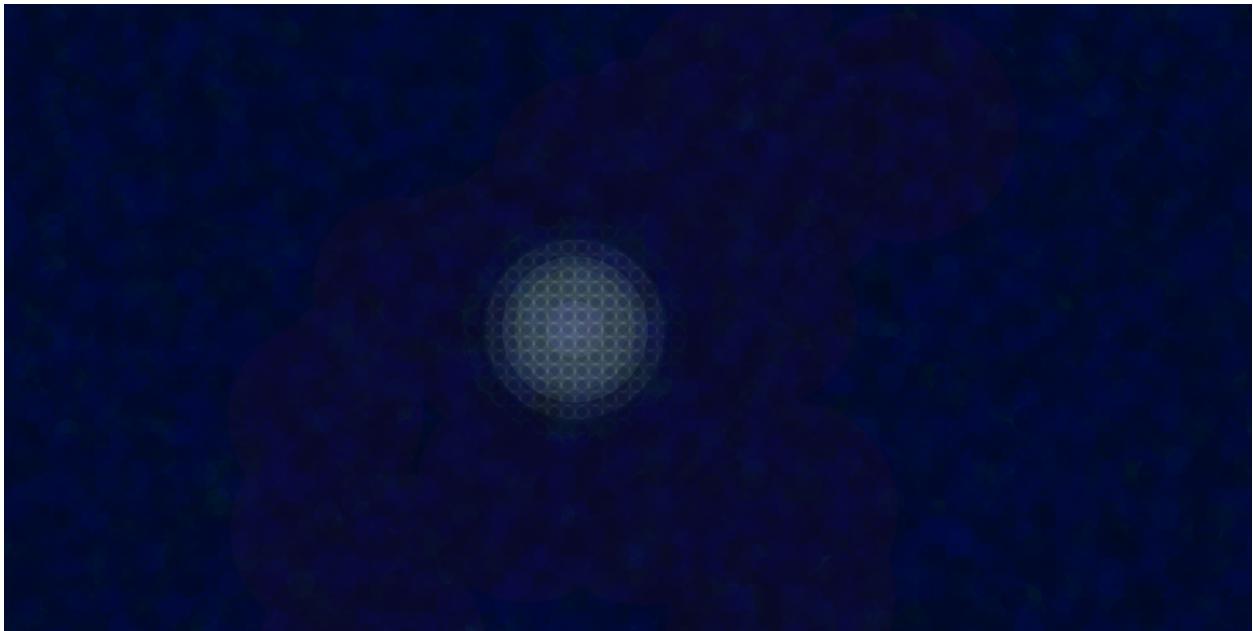
The first sketch is finding my own planet among many in the universe. In the sketch, the planets are filling up quickly, and users can click on a canvas following the description to find their own planet. The most important thing I considered in this sketch was that the interactive contents that users can play with the sketch. I used random values of color and size to make planets, and used an array with logic "if" for texts to show the short description.

Updated Generative Sketch 2.



In this sketch, I tried to make users create their own universe beyond the boundaries. Similar to the sketch above, it was intended to make users enjoy the code interactively. In order to create a slightly moving rectangle stretched vertically, I used a small rectangle repeatedly with "for", and on the black part over the rectangle, I created squares with random color and size which is drawn along the mouse.

Updated Generative Sketch 3.



The last sketch was inspired by people looking up at the dark night sky to find their own stars. The random dark blue squares at the background make the universe and the sky, and the circle moving along the mouse expresses the light that illuminates the universe. As the mouse moves, the part looks bright. I used “for” to make blurry space-like background, and used circle with random color and size to make the light.

As you can see in the sketches I made, I tried to explore many different sketches to make it more interactive. Thanks to the loop, logic, array and random value, I think it improved more than last week. For the final, I'll keep try to make an interactive sketch rule set that is related to “the universe”.

Rule Set

First of all, the rule set I found through making sketch 2, 3 is that creating a background with the “for” logic in repeat. This allows the shapes to move the softly or dynamically.

And then there are the shapes that move along the mouse with random shapes and colors. As you can see on the right side, two sketches have a similar code, but the result is completely different.

```
let opa=50;
function setup() {
  createCanvas(windowWidth, windowHeight);
  noStroke();
  background("black");
}

function draw() {
  for (let i = 0; i < width; i+=50) {
    for (let j = 0; j < height; j+=30){
      rect(i, j, 20, 40);
      fill(random(50, 200),15);
    }
  }

  let r=random(150,250);
  let g=random(150,250);
  let b=random(150,250);

  let xPos=random(0>windowWidth);
  let yPos=random(0>windowHeight);
  rectSize=random(0,150);

  noStroke();
  fill(r,g,b,opa);
  rect(mouseX,mouseY,rectSize);
}

function mousePressed() {
  background(random(0,255));
  opa = random(20,100);
}
```



```
let opa=30;
function setup() {
  createCanvas(windowWidth, windowHeight);
  noStroke();
  background("black");
  noLoop();
}

function draw() {
  // make blurry space-like background
  for (let i = 0; i < width; i+=15) {
    for (let j = 0; j < height; j+=15){
      ellipse(i, j, 30, 30);
      fill(0, random(0, 30), random(0, 100), 15);
    }
  }

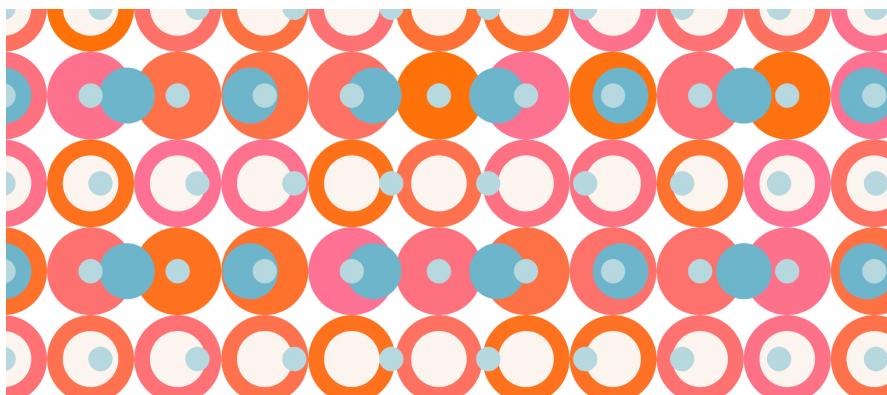
  // make a light following the mouse position
  let r=random(150,250);
  let g=random(150,250);
  let b=random(150,250);

  let xPos=random(0>windowWidth);
  let yPos=random(0>windowHeight);
  circleSize=random(0,250);

  noStroke();
  fill(r,g,b,opa);
  circle(mouseX,mouseY, circleSize);
}

function mousePressed() {
  background(random(0,255),0,0);
  opa = random(20,100);
}
```

SVG Export



To export the sketch to an SVG file, I used the one I created last week, because sketches that I made this week are very interactive and all moving in loops, so it kept showing errors.