## Code and Generativity

### Generativity

- Rules
- Repetition, but with variation
- Emergence

### Example:

https://rawgit.com/RaggedyAnn/OldMinis/master/5th%20weekly%20mini%20exercise/treeGenerator/index.html

## Winnie's code

https://auap.github.io/AP2017/class07/sketch07/index.html

```
1 //credit: http://www.openprocessing.org/sketch/228000
    //sketch07
    var r = 0;
    var status = "up";
    function setup() {
     createCanvas(windowWidth, windowHeight); //create a drawing canvas
     noFill();
     //frameRate(5);
11
    function draw() {
      background(255);
13
      for (var xcor = 0; xcor < width-50; xcor += 50){</pre>
14
15
        for (var ycor = 0; ycor < height-50; ycor += 50){</pre>
           drawSomething(xcor, ycor);
16
17
18
19
```

```
//to keep increasing or decreasing the ellipses
21
      if (status == "up") {
            r+=0.01; //increase the size at a time
24
      }else{
            r=0.01;
26
27
      //if it reaches certain size, change the direction
29
      if (r > 40){ //until r reaches a certain number, reset the status
       status = "down";
      }else if (r < 0) {
31
       status = "up";
34
       console.log(r);
     function drawSomething(x, y) { // total horizontal ellipses (x axis = width/50); total vertical ellipses 19 (y axis = height/50) ) x2 ell
      ellipse(x+50, y+25, 50*r, 50*r); //try to change with rect to see the effect
      ellipse(x+25, y+50, 50*r, 50*r);
40
```

# Sæt jer i Studiegrupper!

Kig på hinandens sidste miniExes

Præsentér, stil spørgsmål og giv feedback til hinanden

Tag noter!

45 minutter

### 3, 2, 1—CODE!

#### Mini ex:

Generative program with at least 3 basic rules.

#### **README:**

Give a title to your piece and describe your program with a screenshot.

What are the rules that you have employed in your program?

What constitutes generativity?

What is the aesthetics of generativity?