

Processing'. It's what we're doin'

A tutorial by Zoe F

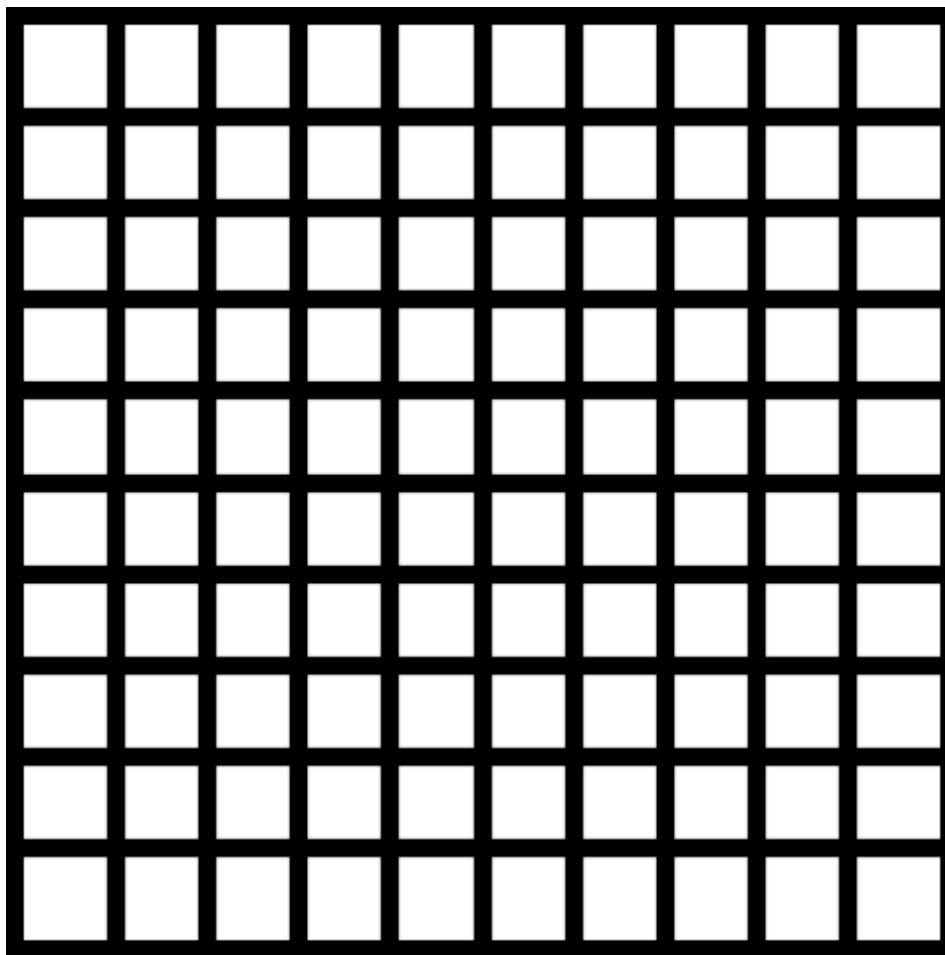
Things you didn't know about processing

- It's a Java-based-language
- It is a compiled language (not interpreted)
- Each Processing program is called a 'sketch'
- The GUI that lets us pretend this is all easy is called the 'Processing sketchbook'

Get it from here:

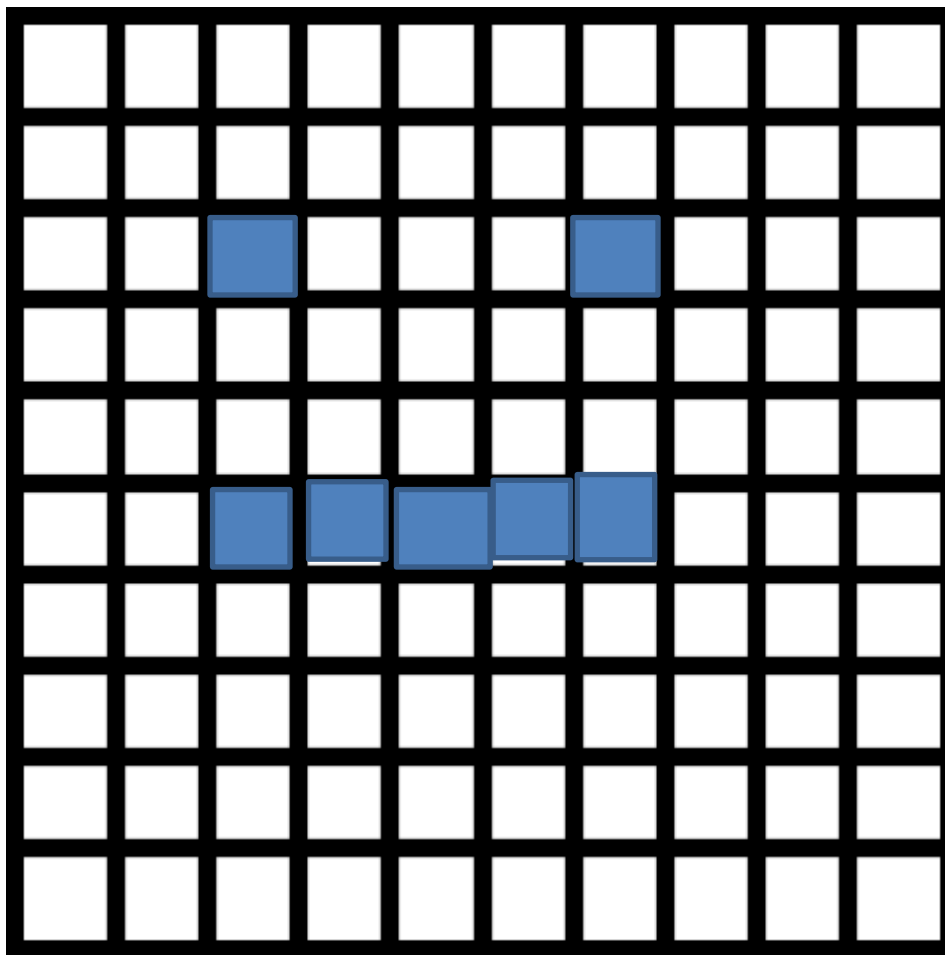
<http://processing.org/download/>

The processing framework



$x=0, y=0$

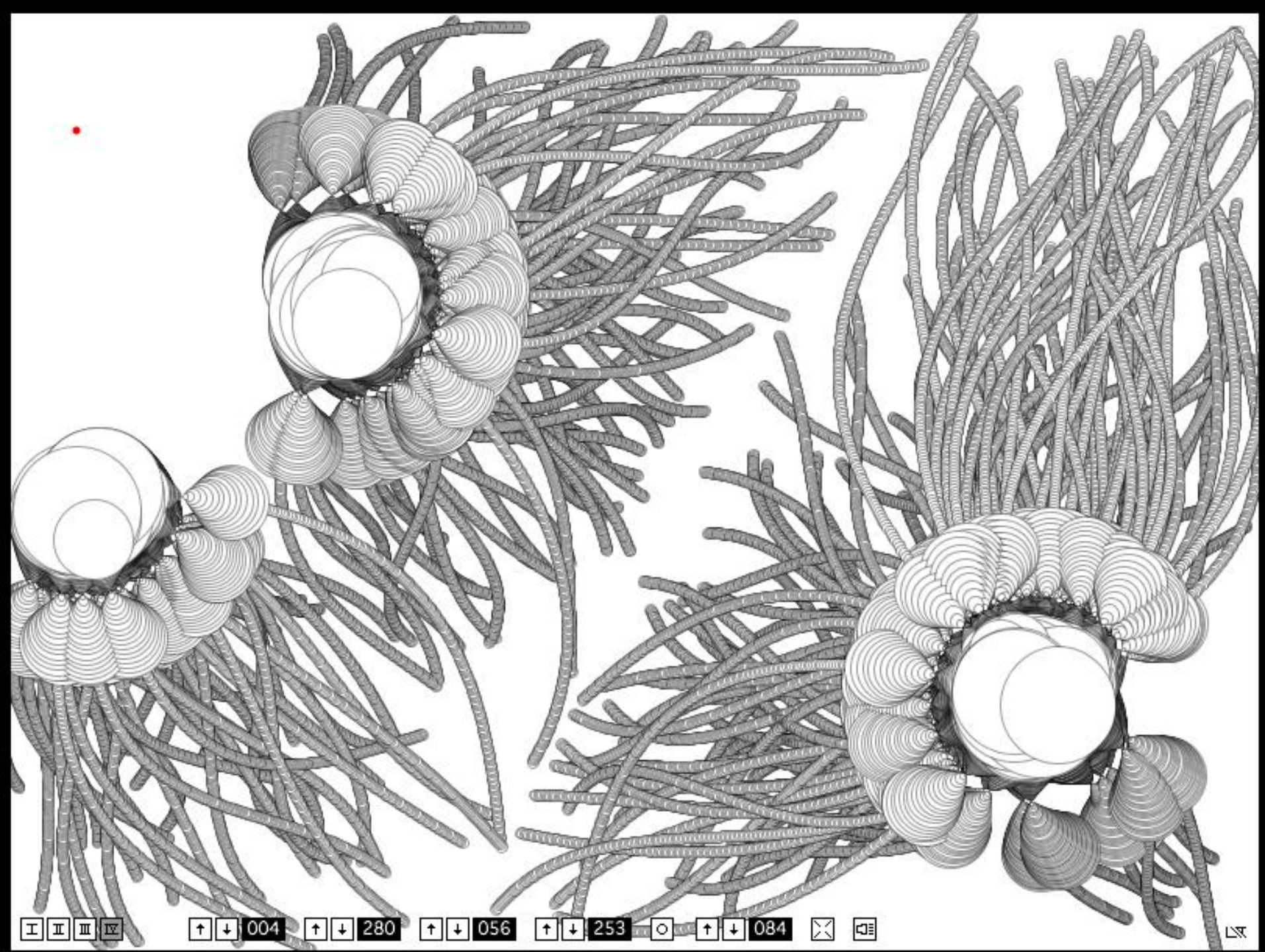
$X=10, y=0$



$X=0, y=10$

$X=10, y=10$





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↑ ↓ 280

↑ ↓ 056

↑ ↓ 253



↑ ↓ 084



Internationaler Datenaustausch

01.03.2008

im Netz der Deutschen Telekom

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Eye candy!

www.Openprocessing.org

Our tutorial:

[http://www.binaryspark.com/classes/
processing_rocks/tutorial.html](http://www.binaryspark.com/classes/processing_rocks/tutorial.html)

(<http://bit.ly/dN4WxP>)

Debugging plan for today

There will be bugs! Oh yes, there will be bugs

- **Step 1!** Check the Processing reference for the function or variable that isn't working
- **Step 2!** Check the order and capitalization of your code!
- **Step 3!** Use the 1-minute rule. Chances are, it's a typo you can't see!

Starter functions

`size(canvas width, canvas height);`

`ellipse(x-coordinate, y-coordinate, width, height);`

`line(start x, start y, end x, end y);`

`rect(top left x, top-left y, width, height);`

Making it look pretty

`Smooth();`

`noStroke();`

`strokeWeight(border width);`

`Stroke(red value, green value, blue value);`

`noFill();`

`fill(red value, green value, blue value);`

Bringing it together to make a sketch

```
void setup() {
```

The instructions for starting the program

```
}
```

```
void draw() {
```

The instructions for running the program

```
}
```

```
void setup() {  
    size(600, 200); //create the canvas here!  
}
```

```
void draw() {  
    stroke(0);  
    fill(150);  
    ellipse(50, 150, 10, 10)  
  
    fill(100);  
    ellipse(300, 150, 10, 10);  
}
```

More built-in functions!

`background(red value, green value, blue value);`

`random(lowest range, highest range)`

`println(whatever you want to print)`

`int(number you want to round)`

Variable variables!

System Variables:

width – width of the canvas

height – height of the canvas

mouseX – the mouse's X coordinate at all times

mouseY – the mouse's Y coordinate at all times

Variable Variables

User-defined Variables

```
int hiThere = 5;
```

```
float imGreat = 5.2;
```

```
string whatsup = "hello";
```

```
boolean imaboolean = true
```