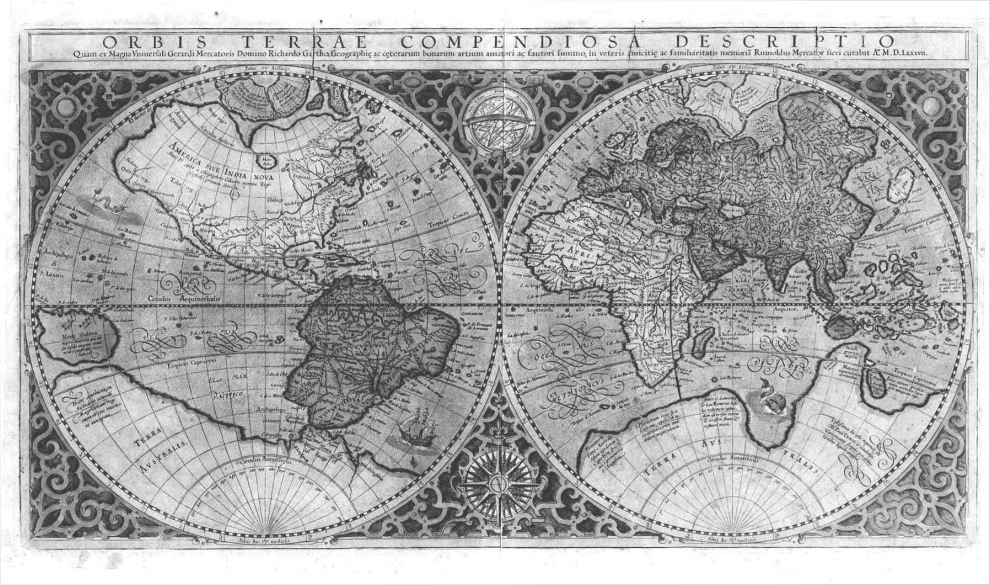
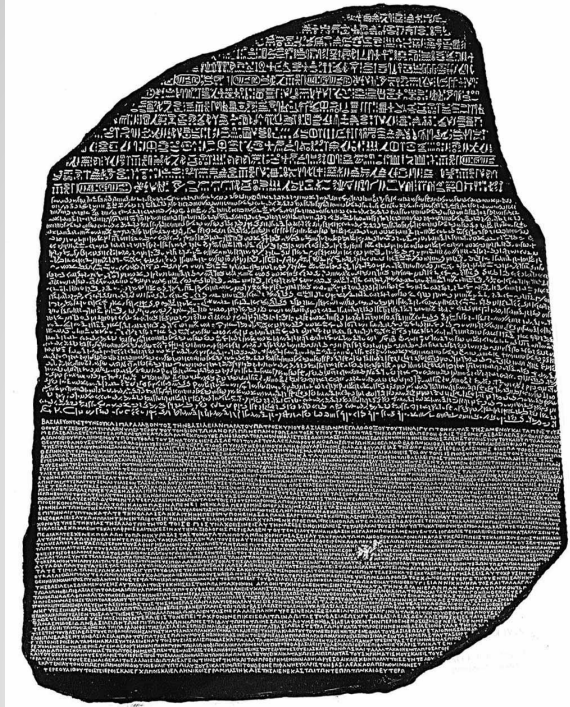
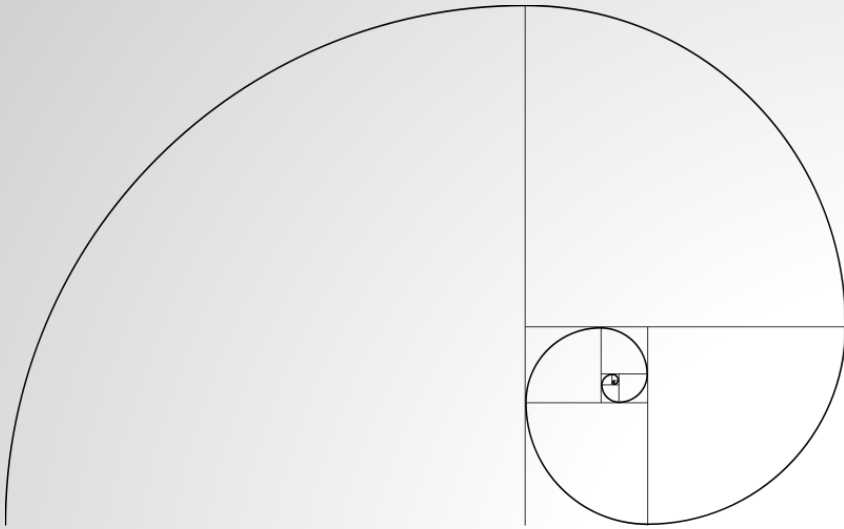
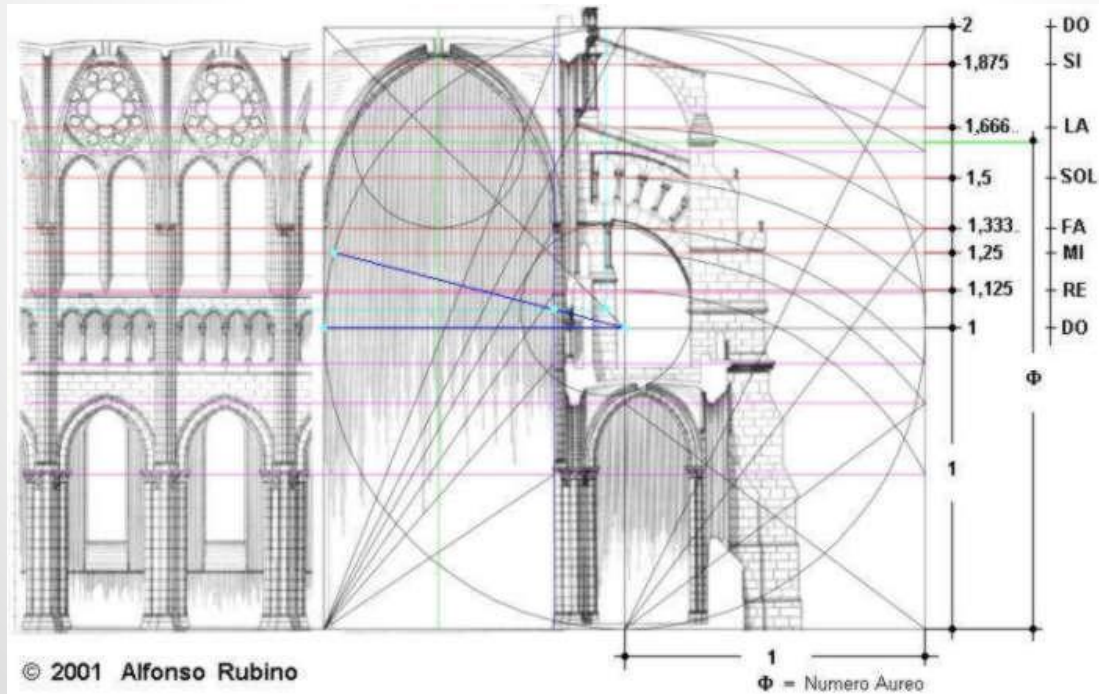


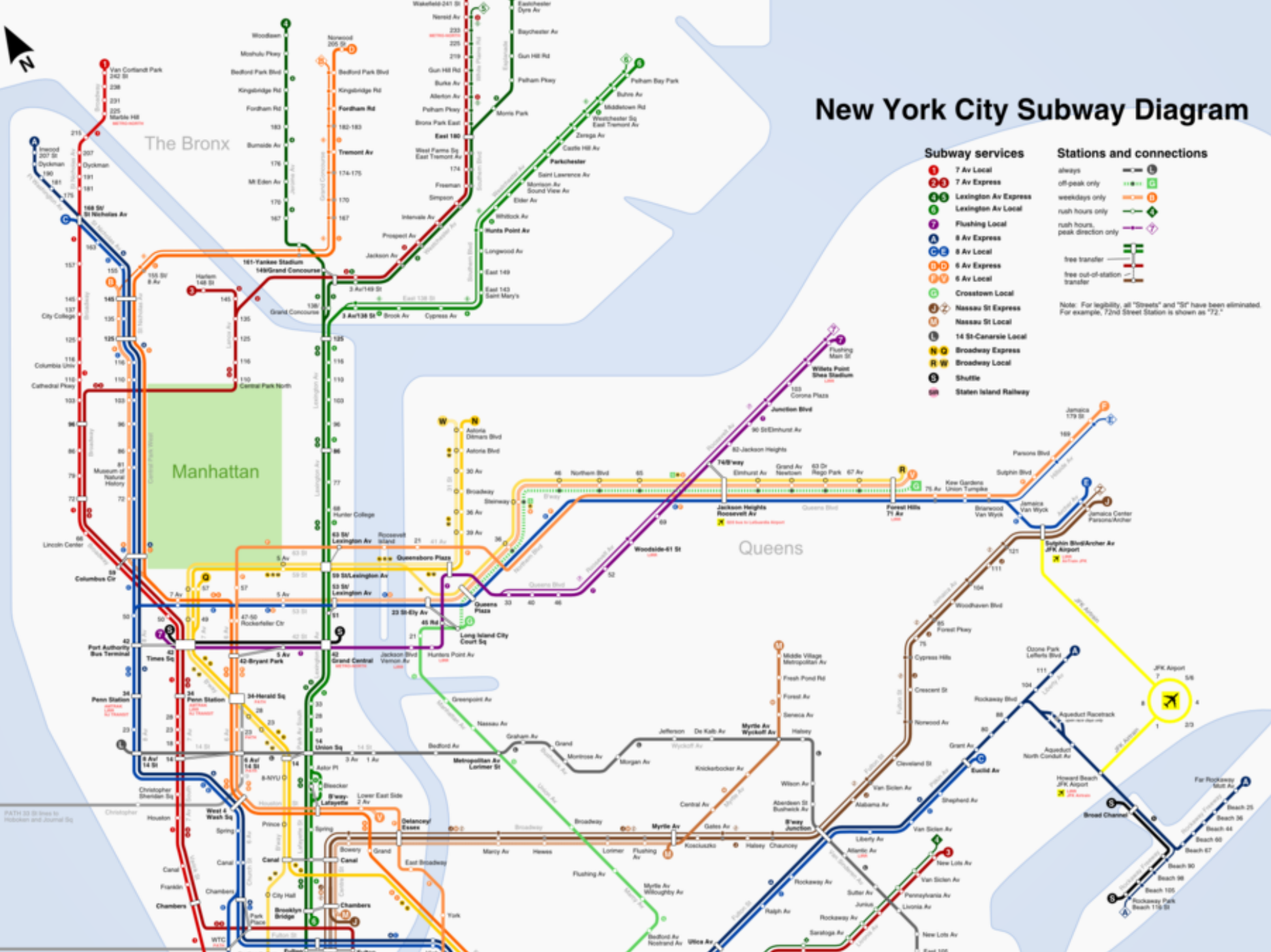
CODE

Bootcamp Day 1



New York City Subway Diagram



Subway services

- 7 Av Local
- 7 Av Express
- Lexington Av Express
- Lexington Av Local
- Flushing Local
- 8 Av Express
- 8 Av Local
- 6 Av Express
- 6 Av Local
- Crosstown Local
- Nassau St Express
- Nassau St Local
- 14 St-Canarsie Local
- Broadway Express
- Broadway Local
- Shuttle
- Staten Island Railway

Stations and connections

- always ● ○ ● ○ ● ● ○ ● ○ ○ ● ○ ● ○ ● ○ ● ■
- off-peak only ○ ○ ○ ○ ○ ○ ○ ○ ○ ○
- weekdays only ○ ○ ○ ○ ○ ○ ○ ○ ○ ○
- rush hours only ○ ○ ○ ○ ○ ○ ○ ○ ○ ○
- rush hours peak direction only ○ ○ ○ ○ ○ ○ ○ ○ ○ ○
- free transfer ○ ○ ○ ○ ○ ○ ○ ○ ○ ○
- free out-of-station transfer ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

Note: For legibility, all "Streets" and "St" have been eliminated. For example, 72nd Street Station is shown as "72."

PATH 23 St Line to Hudson and Newark

PATH WTC line to Hudson and Newark



Google



Google Search

I'm Feeling Lucky



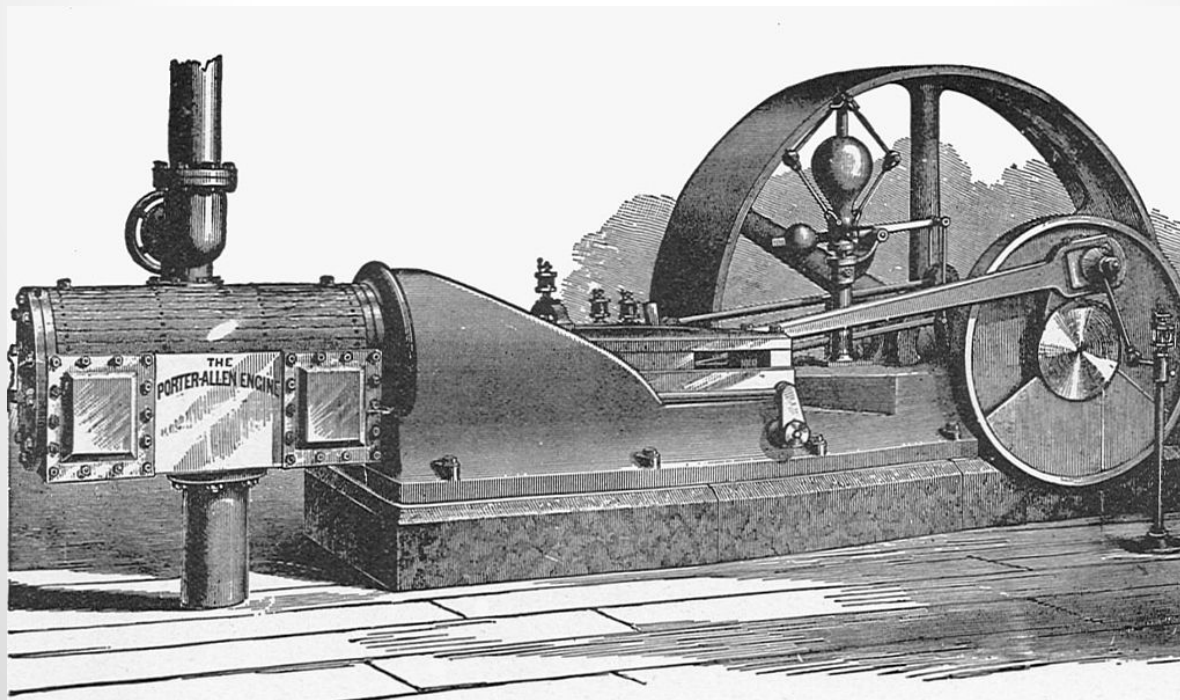
Golan Levin, Free Universal Construction Kit



Theo Watson & Emily Gobeille, Funky Forest

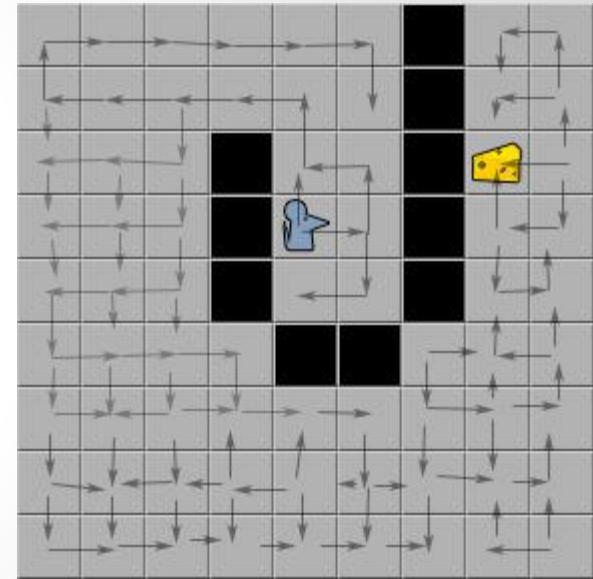
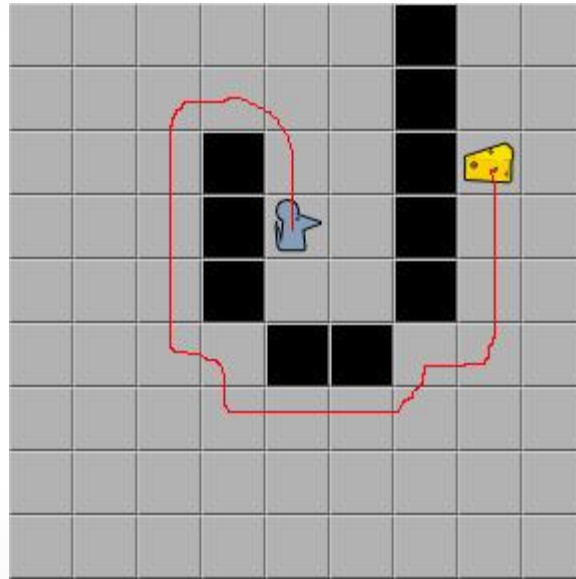
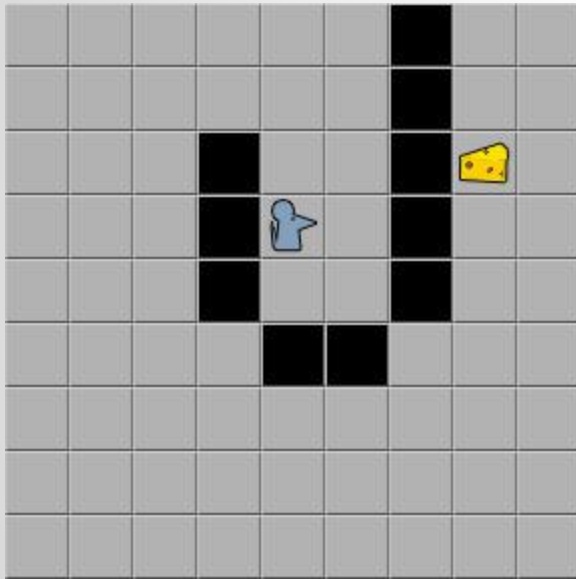


Rafael Lozano-Hemmer, Almacen de Corazonadas



Now Let's Code

Program Your Classmates











open source
initiative



open hardware

 **creative
commons**

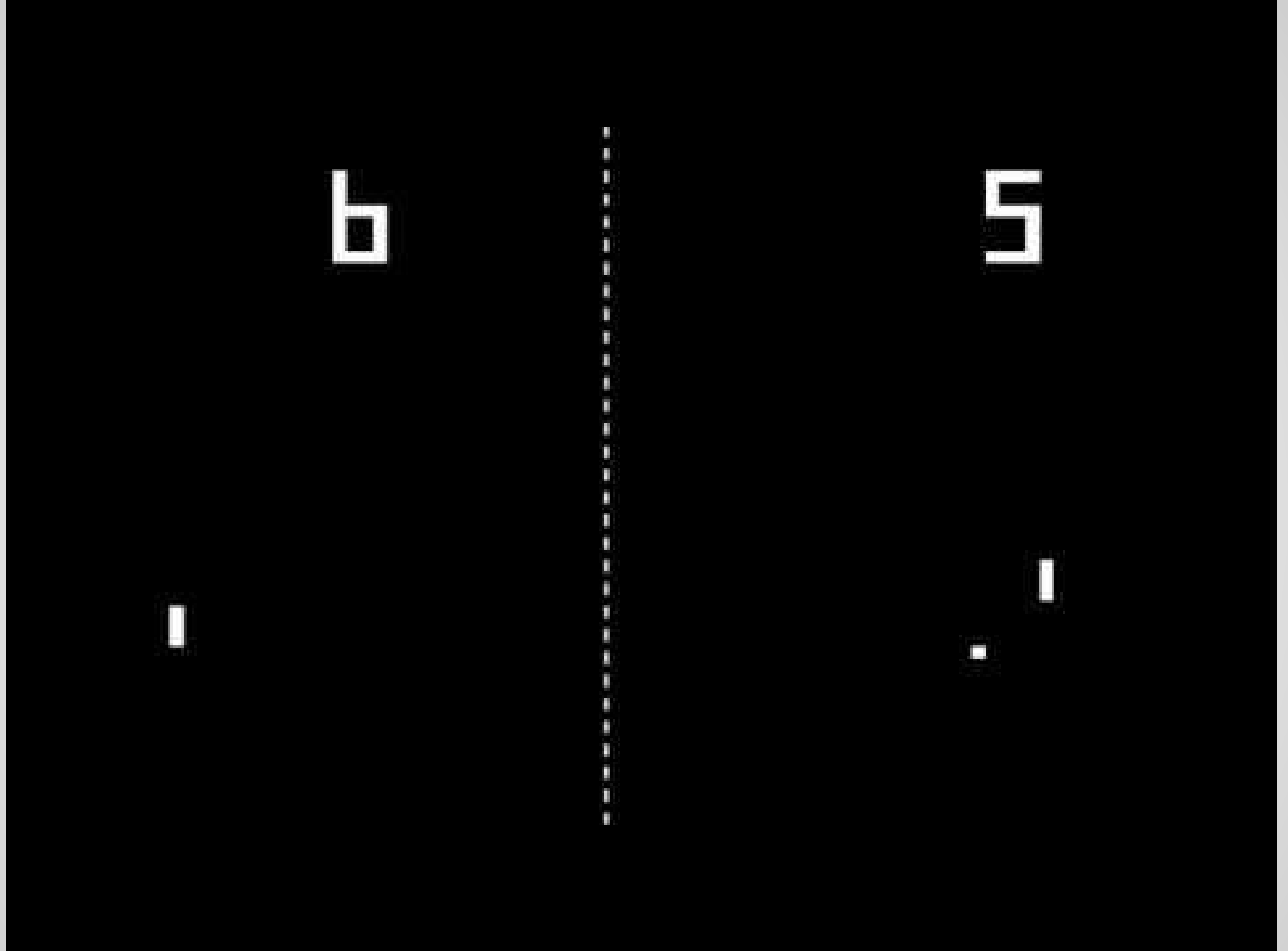


← Processing

Exhibition.

A curated collection of projects created with Processing.
New software is added each month.

Games

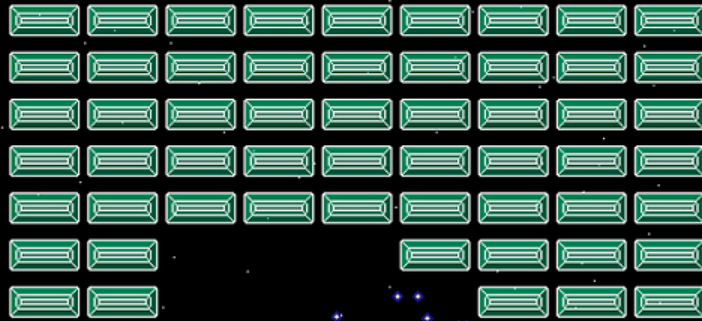


bootcamp 13 basic ping pong by alec (<http://www.openprocessing.org/sketch/105783>)

TIME LEFT: 55

SCORE: 687

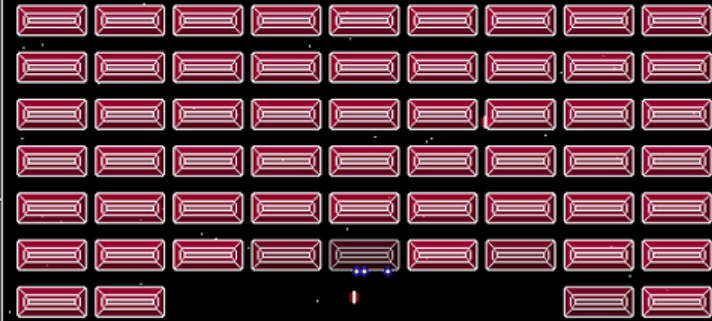
LEVEL: 3

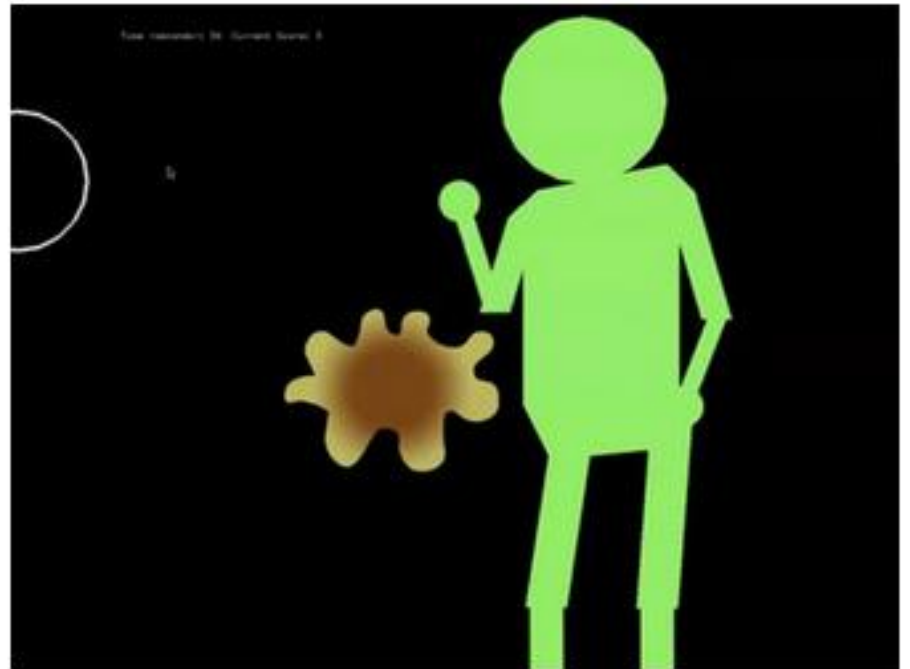
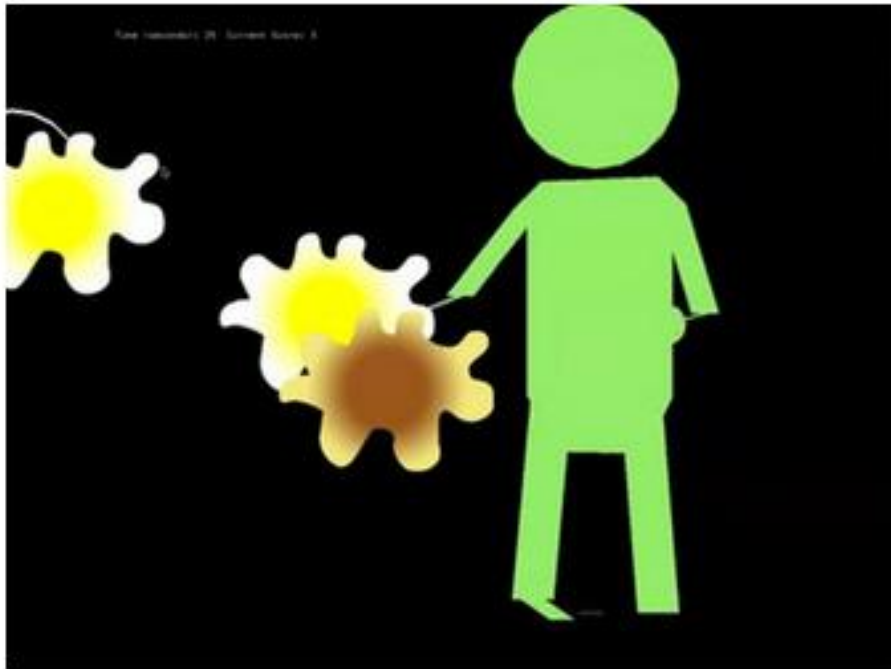
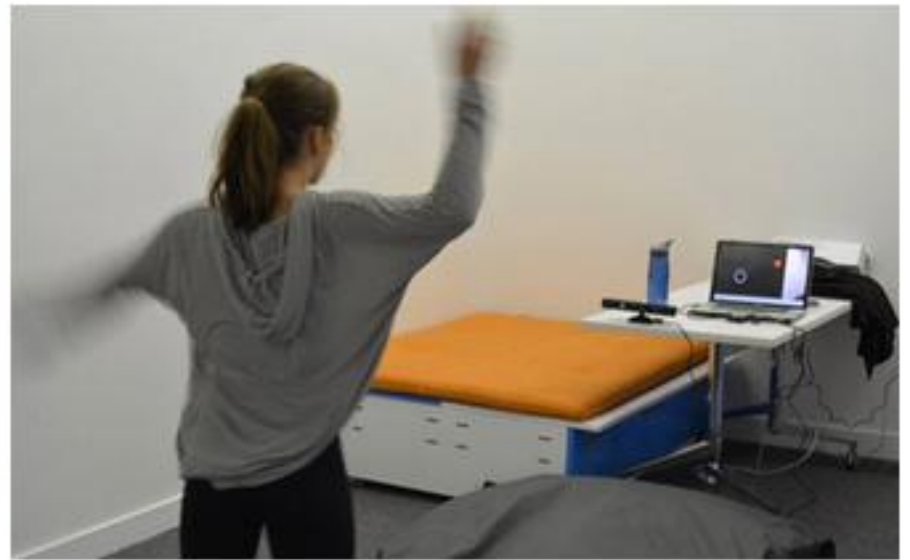
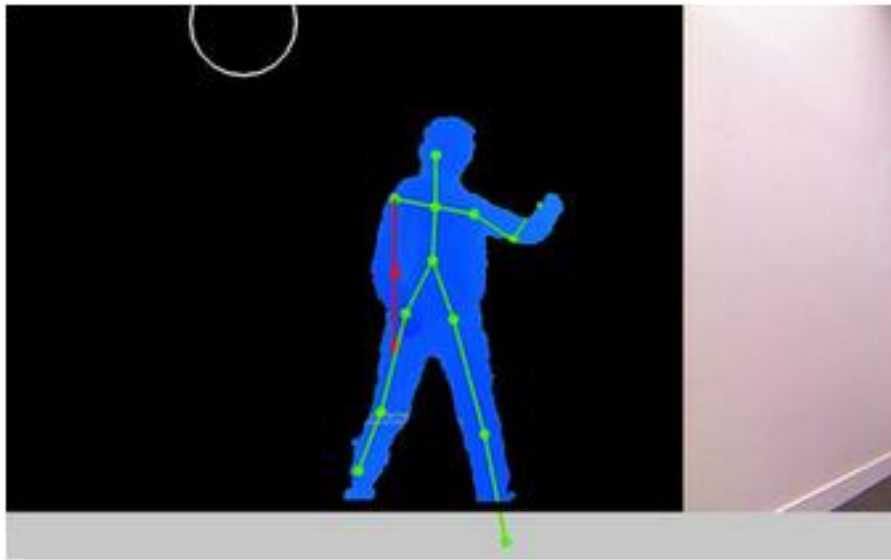


TIME LEFT: 36

SCORE: 20

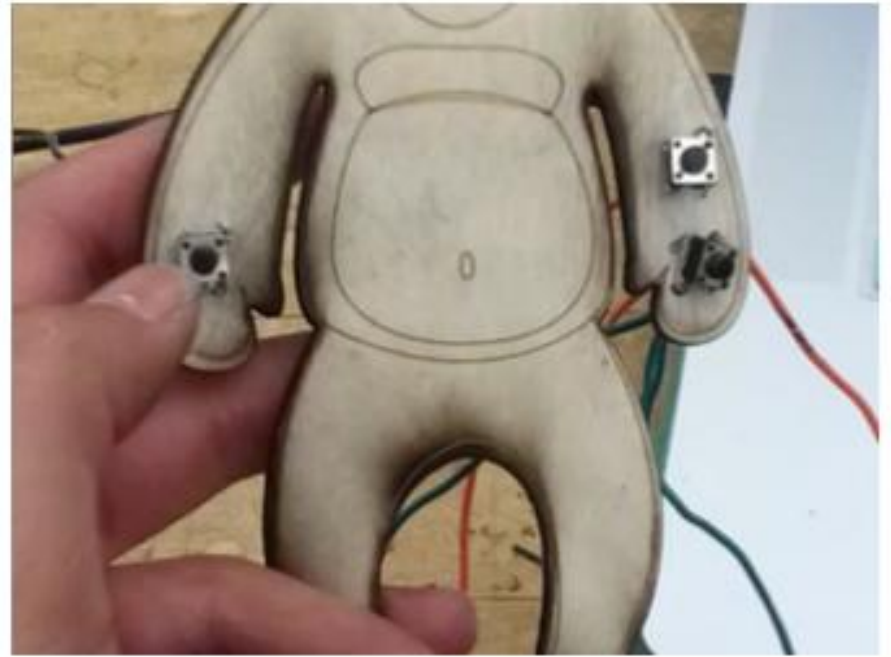
LEVEL: 4



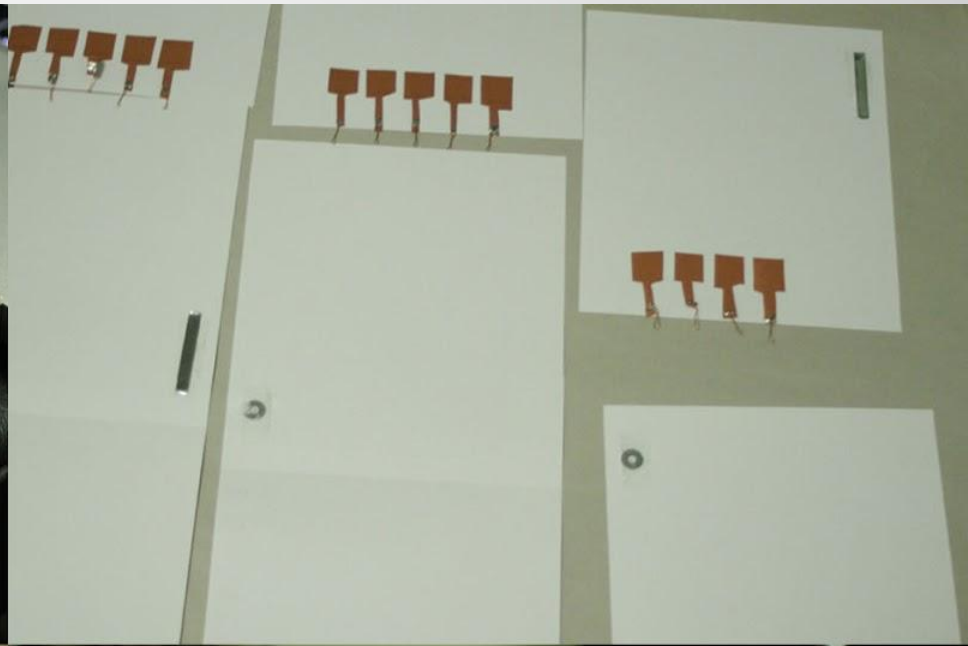


Physical Computing

(HUH???)



<https://www.youtube.com/watch?v=34FwuOnvjK0>
Office Monkey stress doll by Kamille Rodriguez





<http://vimeo.com/81977499>

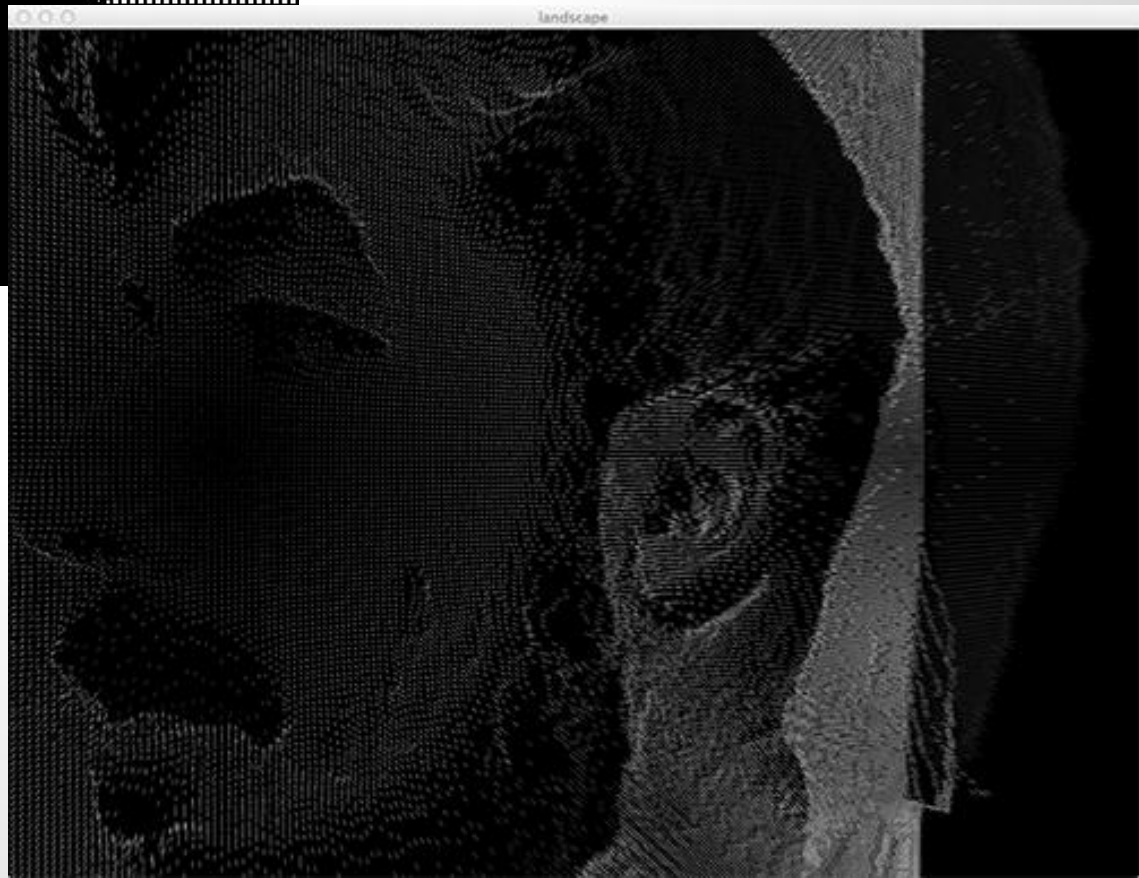
Interactive storytelling baby blanket by Feng Yuan

Video & Visualization



<http://www.openprocessing.org/sketch/105621> Interactive

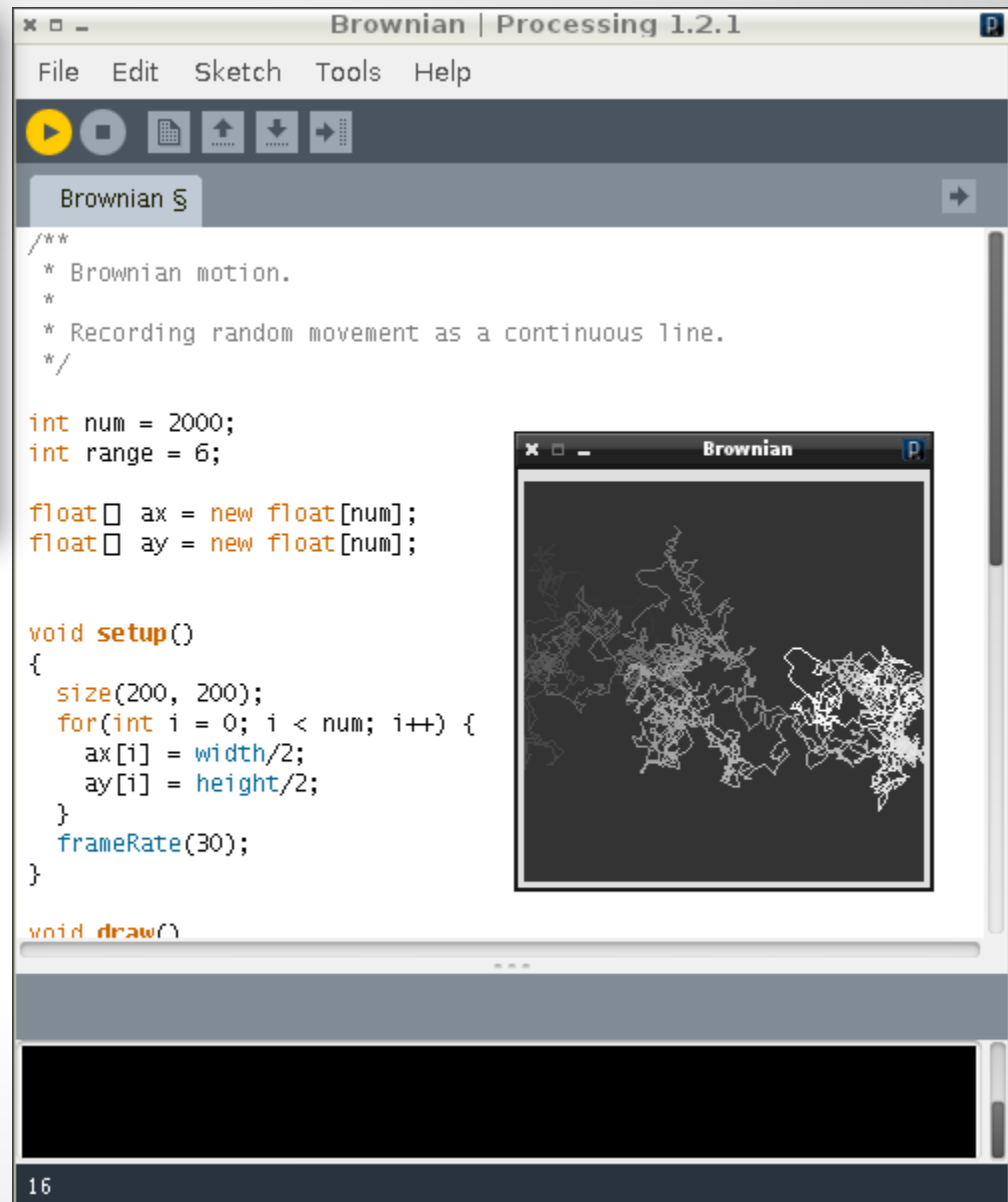
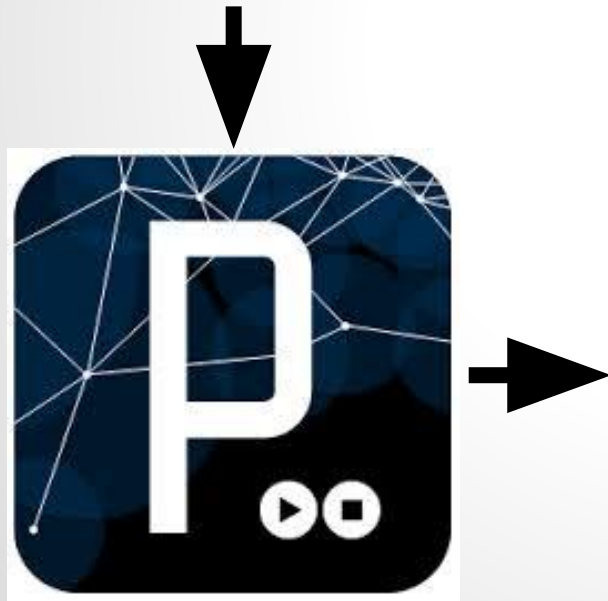
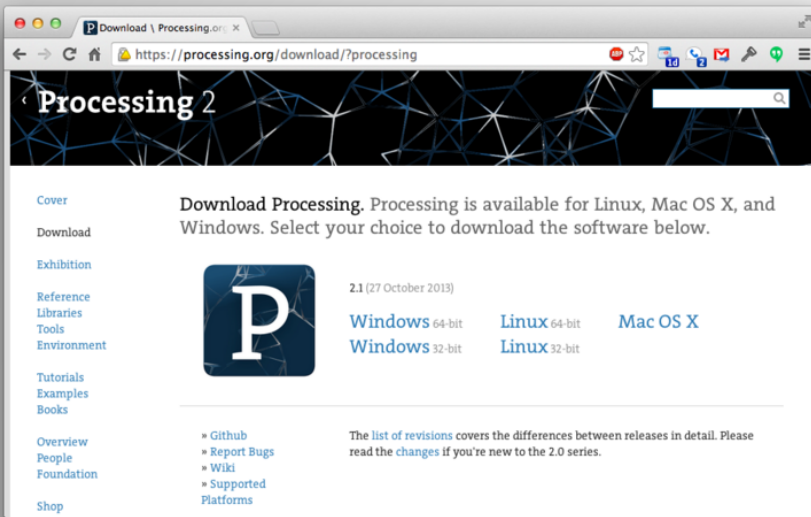
Poster by Gabriel

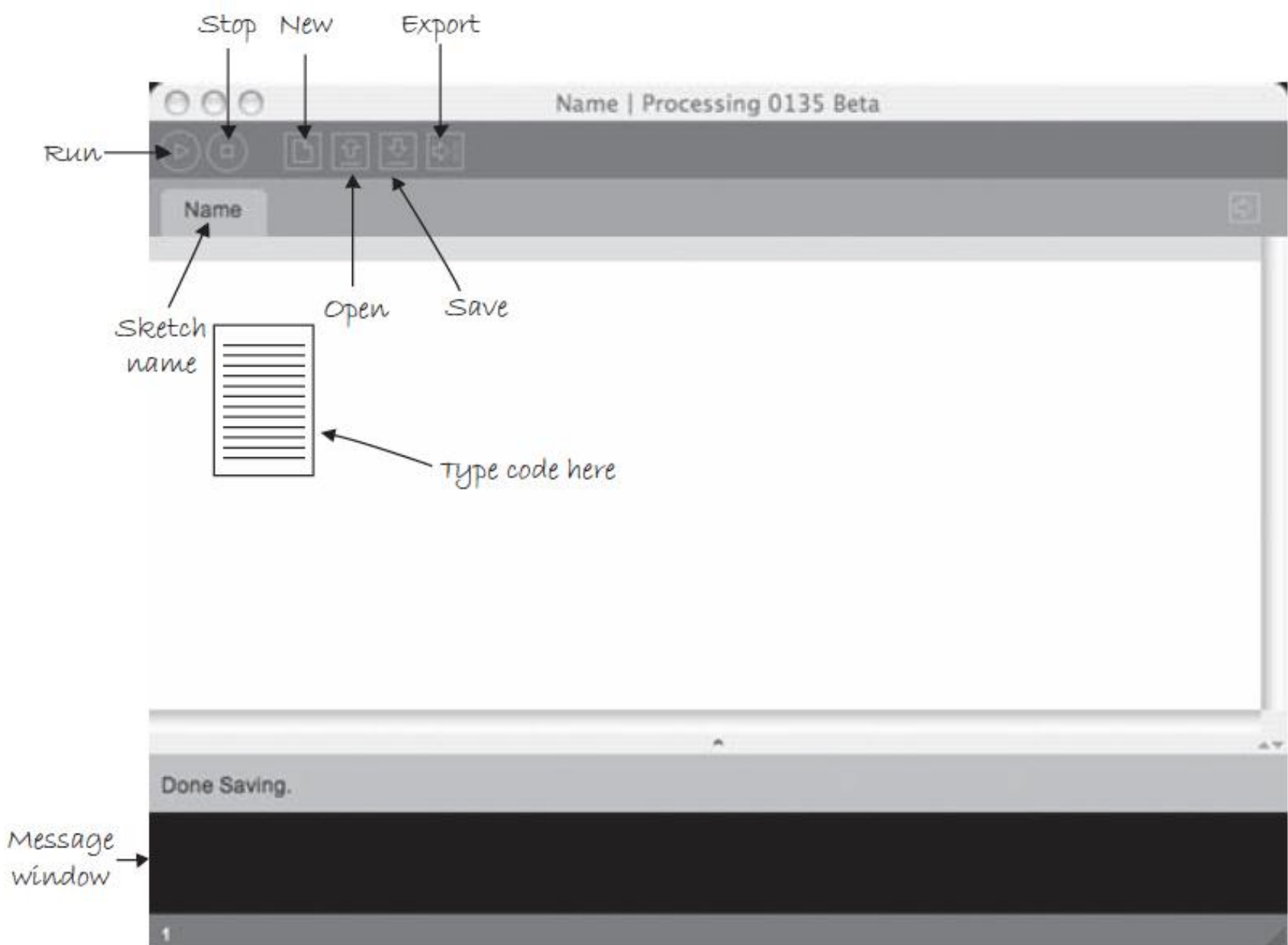


VideoPixel Processing / Landscape by Bryan
(see misc. CODE folder for examples)

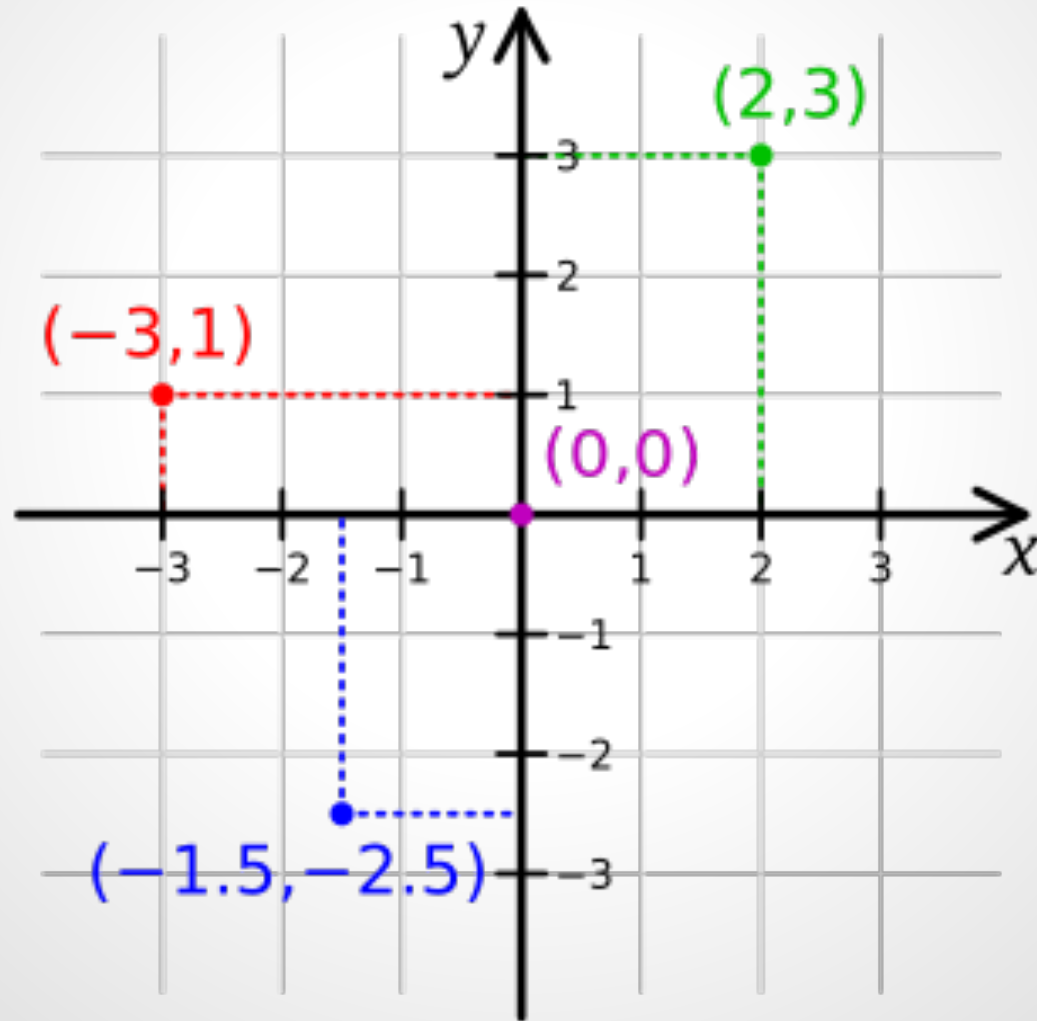


www.processing.org

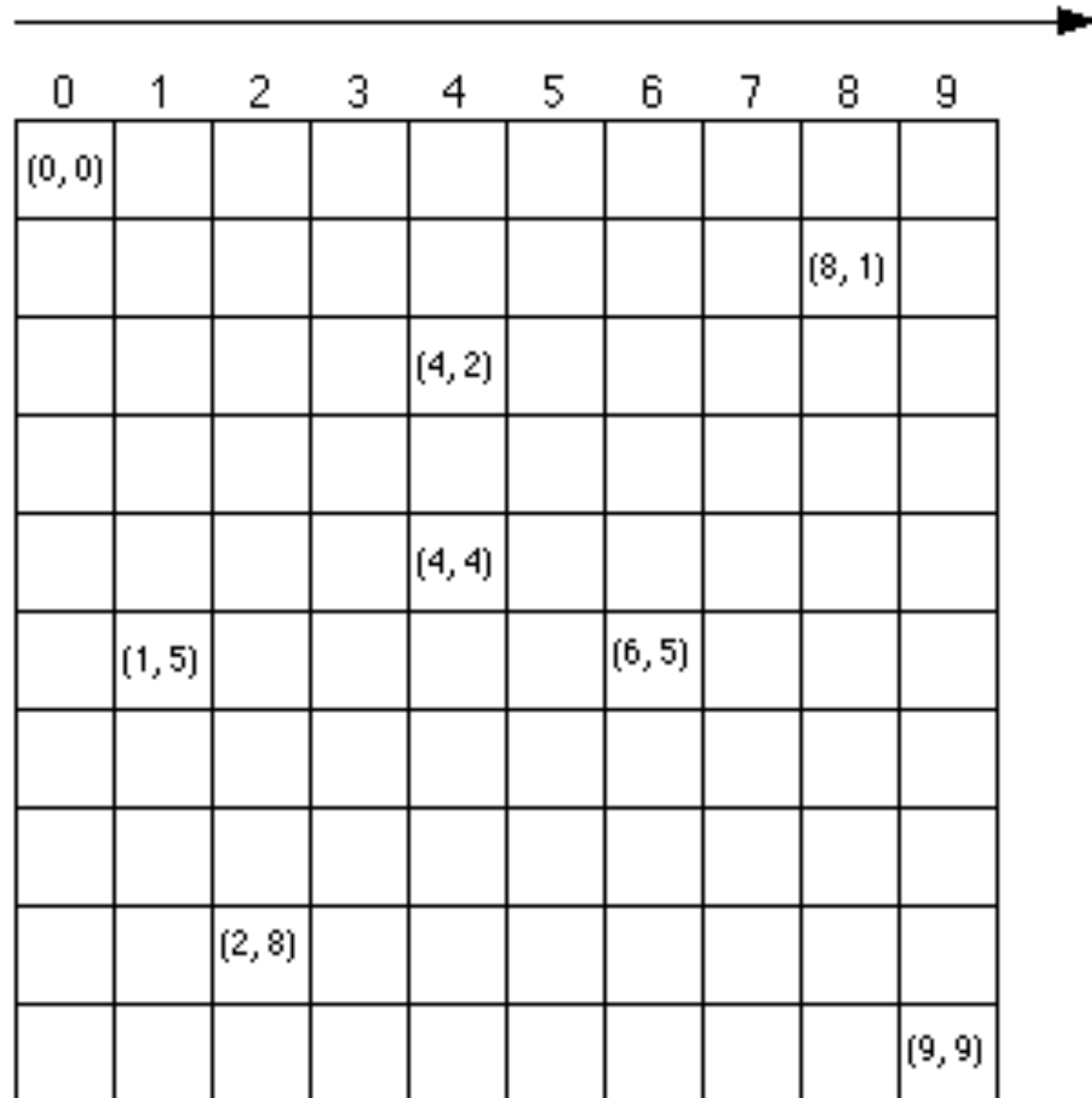




Coordinates



increasing x



increasing y

Shapes

rect(x, y, w, h);

ellipse(x, y, w, h);

x = starting x position

y = starting y position

w = shape width

h = shape height

line(x1, y1, x2, y2);

x1- starting x position

y1- starting y position

x2 - ending x position

y2 - ending y position

Basic commands

size(w, h);

w = desired window width

h = desired window height

width: "keyword" which gets set to the canvas width

height: "keyword" which gets set to the canvas height

background(r,g,b);

r = red value

g = green value

b = blue value

Attributes of Shapes - Fill

fill(r,g,b);

Set the fill color

r = red value

g = green value

b = blue value

noFill();

Removes fill

```
ellipse(50, 50, 80, 80);
```

```
rect(30, 30, 50, 50);
```

```
line(30, 30, 50, 50);
```

```
size(480, 120);
```

```
quad(158, 55, 199, 14, 392, 66, 351, 107);
```

```
triangle(347, 54, 392, 9, 392, 66);
```

```
triangle(158, 55, 290, 91, 290, 112);
```

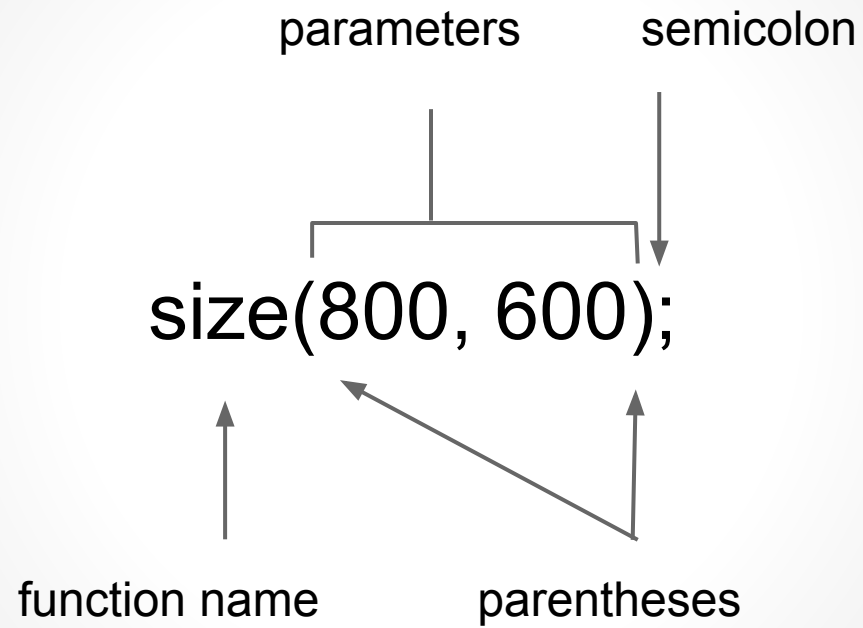


```
size(480, 120);  
background(100,25,50);  
fill(100); // gray 0 to 255  
quad(158, 55, 199, 14, 392, 66, 351, 107);  
fill(255,0,0); //(RGB) 255 RED, 0 GREEN, 0 BLUE  
triangle(347, 54, 392, 9, 392, 66);  
fill(0,0,255,50); //(RGBA) 0 RED, 0 GREEN, 255 BLUE, 50  
ALPHA  
triangle(158, 55, 290, 91, 290, 112);
```

**WAIT – WHAT'S WITH
ALL THOSE SYMBOLS?**

(;!)

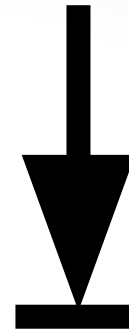
Syntax



```
declaration;
```

ONCE

```
void setup() {  
  our code goes here;  
  //we comment here  
}
```



ONCE

```
void draw() {  
  our code goes here;  
  //we comment here  
}
```



LOOP


```
void setup() {  
  size(480, 120);  
  smooth();  
}
```

```
void draw() {  
  if (mousePressed) {  
    fill(0);  
    //fill(random(255),random(255),random(255));  
  } else {  
    //fill(random(255),random(255),random(255));  
    fill(255);  
  }  
  ellipse(mouseX, mouseY, 80, 80);  
}
```

Homework

REVIEW:

Review today's class

DRAW:

A scene, character or object. Use the elements we learnt in class today.

Gold stars if you can make it interactive with the mouse