

Xiaohan Zhang

PROGRAMMING WITH PROCESSING

What is Processing?

- ◎ <http://processing.org/>
- ◎ Language for interaction and visuals
- ◎ Java applet/application, JS port
- ◎ Get it at processing.org/download/

While we wait...

- ◎ Exhibition at processing.org/exhibition/
 - Platonic Solids
 - BallDroppings
- ◎ Some demos at openprocessing.org/
 - <http://openprocessing.org/visuals/?visualID=1210>

First Steps...

- `void setup() {
 size(800, 600);
 background(128);
 smooth();
}`
- `void draw() {}`
- Press control+R
- Escape to quit

Simple Drawing

- ⦿ ellipse(**x**, **y**, diameterX, diameterY);
- ⦿ line(**x1**, **y1**, x2, y2);
- ⦿ rect(**x**, **y**, width, height);
- ⦿ point(**x**, **y**);

Help -> Reference

Simple Colors

- ⦿ `color(r, g, b); color(r, g, b, alpha);`
- ⦿ `color(gray); color(gray, alpha);`
- ⦿ `stroke(color);`
 - `noStroke();`
- ⦿ `fill(color);`
 - `noFill();`

Help -> Reference

Simple Variables

- ⦿ mouseX, mouseY, pmouseX, pmouseY
- ⦿ mousePressed, mouseButton
- ⦿ keyPressed, key, keyCode
- ⦿ width, height, frameCount

Help -> Reference

Other useful stuff

- `millis()`
- `map(x, inLow, inHigh, outLow, outHigh)`
- `dist(x1, y1, x2, y2)`
- `noise(x [, y[, z[, w]]])`
- `colorMode(HSB or RGB);`