## today

**Due: Final Project Proposal** 

more Array Objects + Text

proposal presentations

**Student Presentations** 

Reading Ch 17, Optional Reading Ch 15, 16, 18, 19, 20

# Wednesday, March 3

Due: Final Project Paper Sketches

AV + data

make prototype

Student Presentations

### more Array and Objects

```
Array>sketch_3_Array_storing_circle_attributes.pde
   if (dist (x[i], y[i], mouseX, mouseY)) <=r[i]{</pre>
Objects>sketch_8_Class_random.pde
   introducing a new datatype: color
      int x=0;
      color c = color(random(255), random(255), random(255));
 objects>sketch_8_array_class.pde
```

## more Array and Objects

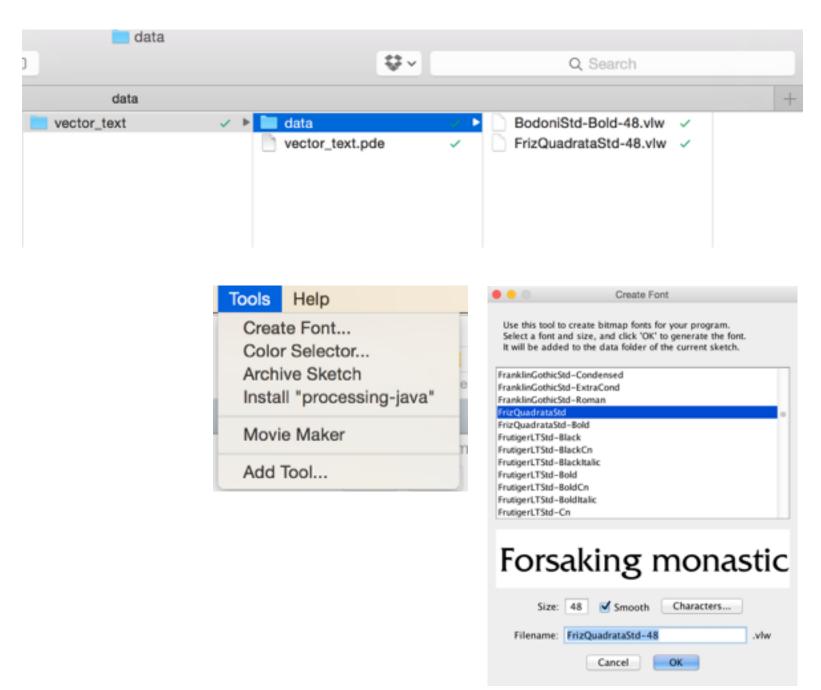
Objects>sketch\_8\_4\_two\_constructors.pde

```
//constructor #1
Particle() {
 x=random(width);
 y=random(height);
 r=random(4, 18);
//constructor #2
Particle(float tempX, float tempY, float tempR) {
 x=tempX;
 y=tempY;
 r=tempR;
```

### vector text

### vector text

### Text>vector\_text



### vector text

Text>vector\_text

```
PFont zigBlack;
void setup() {
 size(500, 500);
 zigBlack = createFont("BodoniStd-Bold", 100);
 //zigBlack = createFont("FrizQuadrataStd", 100);
 textFont(zigBlack);
 fill(0);
void draw() {
 background(204);
 text("LAX", 50, 140);
 text("LHR", 50, 270);
 text("TXL", 50, 400);
```

## characters and strings

#### character

a single character inside of single quotes

```
char letter = 'A';
char digit = '0';
```

### string

a sequence of characters in double quotes

```
String word = "hello";
String robot = "r2d2";
String nothing = "";
```

### type

.vlw format is required

1. create a font in Processing environment

Tools » Create Font...

2. load font in setup()

```
PFont font = loadFont(".....") ;
```

3. set font (anywhere in code before adding text)

```
textFont(font) ; //remains in effect until changed
```

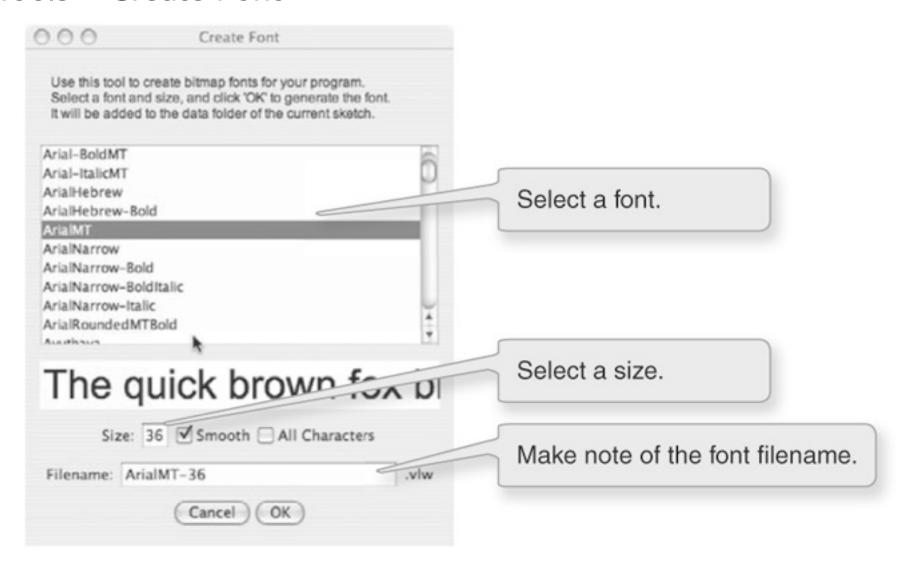
4. write with font

```
text(".....", x, y) ;
```

### type

Processing uses fonts in .vlw file format

#### Tools > Create Font



### useful text functions

```
textWidth("...") // Returns width in pixels of string
textAlign(LEFT) // Other options are RIGHT, CENTER
textSize(n) // Sets size of font in pixels
textLeading(x); // Sets the space between the lines
```

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rapid fire: proposal presentations

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