

```
Ball balls = new Ball ();
Line lines = new Line();
Surface surfaces = new Surface();
```

```
import processing.serial.*;
float[] datalist;
```

```
Serial myPort;
String incomingData = null;
float rawSensorData1 = 0;
float rawSensorData2 = 0;
float rawSensorData3 = 0;
```

```
int x1 = 200;
int y1 = 200;
int x2 = 300;
int y2 = 300;
int x3 = 300;
int y3 = 300;
```

```
float angleRotate = 0;
```

```
void setup() {
  size(1200, 1200);
  String portName = Serial.list()[5];
  myPort = new Serial(this, portName, 9600);
  myPort.bufferUntil('\n');
```

```
  background (0,0,0);
  textSize(15);
  fill(255,255,255);
  text ("Sitexx", 790, 1025);
  textAlign (RIGHT, BOTTOM);
```

```
  float angle1 = radians(90);
  translate(130, 240);
  rotate(angle1);
  text("Site 1", 0, 0);
  circle(20,-3,6.3);
  circle(13,-8,6.3);
  circle(20,-12,6.3);
```

```
  float angle2 = radians(0);
  translate(350, 0);
```

```

rotate(angle2);
text("Site 2 //", 0, 0);

float angle3 = radians(0);
translate(350, 0);
rotate(angle3);
text("Site 3", 0, 0);
rect(17,-13,10,10);
}

```

```

void draw() {
  lines.update();
  balls.update();
  surfaces.update();
  rec();
}

```

```

void serialEvent(Serial myPort) {
  incomingData = myPort.readString();
  datalist =float(split(trim(incomingData), ','));
  println (datalist);

```

```

  rawSensorData1=int(datalist[0]);
  rawSensorData2 =int(datalist[1]);
  rawSensorData3=int(datalist[2]);

```

```

  myPort.clear();
}

```

```

void keyPressed() {
  if (key == 's' || key == 'S')
    saveFrame("output/image####.jpg");}

```

```

=====
class Ball {
  Ball() {
  }

```

```

// functions
void update() {
  if (x1>=width-210) {
    x1= 185 + int(datalist[0]/4);
    y1= y1 + 30;
  } else {
    x1= x1+int(rawSensorData1/26)+9;

```

```

}

if (y1>=height-210) {
  y1=200;

  background (0);
  fill(255);
  textSize(15);
  text ("b, 09.02.2022", 1023, 1029);
  textAlign (RIGHT, BOTTOM);
  float angle1 = radians(90);
  translate(130, 240);
  rotate(angle1);
  text("Site 1", 0, 0);

  circle(20,-3,5);
  circle(13,-8,5);
  circle(20,-12,5);

  float angle2 = radians(0);
  translate(350, 0);
  rotate(angle2);
  text("Site 2 //" , 0, 0);

  float angle3 = radians(0);
  translate(350, 0);
  rotate(angle3);
  text("Site 3", 0, 0);
  rect(17, -13, 10, 10);
}

stroke(255, rawSensorData1*1.7);
fill(255, rawSensorData1*1.7);
circle(x1, y1, rawSensorData1/100);
}
}
=====
class Line {

  Line(){

  }

void update(){
  if (x2>=width-210){
    x2= 185 + int(rawSensorData2/8);
    y2= y2 + 25;}
}

```

```

else{
  x2= x2+int(rawSensorData2/15);}

if (y2>=height-210){
  y2=200;

  background (0);
  fill(255);
  textSize(15);
  text (" , 09.02.2022",1023,1029);
  textAlign (RIGHT,BOTTOM);
  float angle1 = radians(90);
  translate(130, 240);
  rotate(angle1);
  text("Site 1" , 0, 0);
  circle(20,-3,5);
circle(13,-8,5);
circle(20,-12,5);

  float angle2 = radians(0);
  translate(350, 0);
  rotate(angle2);
  text("Site 2 //" , 0, 0);

  float angle3 = radians(0);
  translate(350, 0);
  rotate(angle3);
  text("Site 3" , 0, 0);
  rect(17,-13,10,10);
}
//stroke(0, rawSensorData2*1.7);
// fill(0, rawSensorData2*1.5);
  circle(x2, y2, rawSensorData2/200);
}
}

```

=====

```

class Surface {

  Surface(){

  }

}

```

```

void update(){
  if (x3>=width-210){

```

```

x3= 185 + int(rawSensorData3/8);
y3= y3 + 35;}

else{
  x3= x3+int(rawSensorData3/8)+5;}

if (y3>=height-210){
  y3=200;

  background (0);
  fill(255);
  textSize(15);
  text ("b, 09.02.2022",1023,1029);
  textAlign (RIGHT,BOTTOM);
  float angle1 = radians(90);
  translate(130, 240);
  rotate(angle1);
  text("Site 1", 0, 0);
  circle(20,-3,5);
circle(13,-8,5);
circle(20,-12,5);

  float angle2 = radians(0);
  translate(350, 0);
  rotate(angle2);
  text("Site 2 //" , 0, 0);

  float angle3 = radians(0);
  translate(350, 0);
  rotate(angle3);
  text("Site 3", 0, 0);
  rect(17,-13,10,10);
}
fill(220,rawSensorData3/1.11);
beginShape();
vertex(x1+rawSensorData3/8, y3+rawSensorData3/12);
bezierVertex(10+x3, 1+y3, 20+x3, rawSensorData3/8+y3, x3,
rawSensorData3/12+y3);
endShape();
}
}
=====
final String sketchname = getClass().getName();

import com.hamoid.*;
VideoExport videoExport;

```

```
void rec() {  
  if (frameCount == 1) {  
    videoExport = new VideoExport(this, "../"+sketchname+".mp4");  
    videoExport.setFrameRate(30);  
    videoExport.startMovie();  
  }  
  videoExport.saveFrame();  
}
```