Homework 11 Result

// local and global variables

var redColor = 123;

var greenColor = 39;

var blueColor = 21;

var x = 100;

var y00 = 200;

var diameter = 50;

var movement00;

var movement01;

var y01 = 100;

// ???

// var y02 = 200;

let rad = 60; // Width of the shape

let xpos, ypos; // Starting position of shape

let xspeed = 2.8; // Speed of the shape

let yspeed = 2.2; // Speed of the shape

let xdirection = 1; // Left or Right

let ydirection = 1; // Top to Bottom

let dia = 5;

let growAmount = 0.1;

let grow = true;

function setup() {

createCanvas(400, 400);

noStroke();

frameRate(30);

ellipseMode(RADIUS);

// Set the starting position of Circle 1

xpos = width / 2;

ypos = height / 2;

// change how fast Circle 2 and 3 and Rectangle 1 and 2 move

movement00 = Math.floor(Math.random() \* 10) + 1;

movement01 = Math.floor(Math.random() \* 100) + 1;

}

function draw() {

background(redColor, greenColor, blueColor);

// Cirle 1 - X Axis

fill(255);

circle(x, y00, diameter);

// Cirle 2 - X Axis

fill(redColor, greenColor, blueColor);

circle(x, y00, 25);

/\* If the x variable exceeds

the width, then

revert to the other direction,

and repeat infinitely. \*/

if (x >= 400 || x <= 0) {

movement00 \*= -1;

}

x += movement00;

// Rectangle 1 and 2 - Y Axis

stroke(226, 204, 0);

rect(200, y01, 50, 75);

rect(200, y01, 5, 75);

/\* If the y01 variable exceeds

the width, then

revert to the other direction,

and repeat infinitely. \*/

if (y01 > 400 || y01 < 0) {

movement01 \*= -1;

}

y01 += movement01;

// Nose

rect(200, 170, 5, 15);

// Head

circle(200, 200, 25);

// Neck

rect(220, 190, 15, 25);

// Left Arm

rect(235 + 10, 185 + 25, 15, 25 - 10);

rect(240 + 10, 185 + 25, 15, 25 - 10);

rect(245 + 10, 185 + 25, 15, 25 - 10);

rect(250 + 10, 185 + 25, 15, 25 - 10);

rect(235 + 10, 185 + 20, 15, 25 - 10);

rect(240 + 10, 185 + 20, 15, 25 - 10);

rect(245 + 10, 185 + 20, 15, 25 - 10);

rect(250 + 10, 185 + 20, 15, 25 - 10);

// Leg

rect(225 + 35, 190 + 5, 15 - 5, 25 - 5);

rect(230 + 35, 195 + 5, 15 - 5, 25 - 5);

rect(235 + 35, 195 + 5, 15 - 5, 25 - 5);

rect(240 + 35, 195 + 5, 15 - 5, 25 - 5);

rect(245 + 35, 195 + 5, 15 - 5, 25 - 5);

rect(230 + 35, 185 + 5, 15 - 5, 25 - 5);

rect(235 + 35, 185 + 5, 15 - 5, 25 - 5);

rect(240 + 35, 185 + 5, 15 - 5, 25 - 5);

rect(245 + 35, 185 + 5, 15 - 5, 25 - 5);

// Foot

rect(225 + 70, 190 + 5, 15 - 5, 25 - 5);

rect(235 + 40, 195 + 5, 15 - 5, 25 - 5);

rect(240 + 40, 195 + 5, 15 - 5, 25 - 5);

rect(245 + 40, 195 + 5, 15 - 5, 25 - 5);

rect(250 + 40, 195 + 5, 15 - 5, 25 - 5);

rect(235 + 40, 185 + 5, 15 - 5, 25 - 5);

rect(240 + 40, 185 + 5, 15 - 5, 25 - 5);

rect(245 + 40, 185 + 5, 15 - 5, 25 - 5);

rect(250 + 40, 185 + 5, 15 - 5, 25 - 5);

noFill();

// Torso

rect(225, 190, 15, 25);

rect(230, 195, 15, 25);

rect(235, 195, 15, 25);

rect(240, 195, 15, 25);

rect(245, 195, 15, 25);

rect(230, 185, 15, 25);

rect(235, 185, 15, 25);

rect(240, 185, 15, 25);

rect(245, 185, 15, 25);

// Right Arm

rect(235 + 10, 185, 15, 25 - 10);

rect(240 + 10, 185, 15, 25 - 10);

rect(245 + 10, 185, 15, 25 - 10);

rect(250 + 10, 185, 15, 25 - 10);

rect(235 + 10, 185 - 5, 15, 25 - 10);

rect(240 + 10, 185 - 5, 15, 25 - 10);

rect(245 + 10, 185 - 5, 15, 25 - 10);

rect(250 + 10, 185 - 5, 15, 25 - 10);

rect(235 + 25, 185, 15, 25 - 10);

rect(240 + 25, 185, 15, 25 - 10);

rect(245 + 25, 185, 15, 25 - 10);

rect(250 + 25, 185, 15, 25 - 10);

rect(235 + 25, 185 - 5, 15, 25 - 10);

rect(240 + 25, 185 - 5, 15, 25 - 10);

rect(245 + 25, 185 - 5, 15, 25 - 10);

rect(250 + 25, 185 - 5, 15, 25 - 10);

// Mind

triangle(30 + 25, 75 + 25, 58 + 25, 20 + 25, 86 - 25, 75 - 25);

point(50, 50);

line(30, 20, 85, 75);

// Circle 3 - Y Axis

// Update the circle's position

xpos = xpos + xspeed \* xdirection;

ypos = ypos + yspeed \* ydirection;

/\* If the xpos variable exceeds

the width, then

revert to the other direction,

and repeat infinitely. \*/

if (xpos > width - rad || xpos < rad) {

xdirection \*= -1;

}

/\* If the ypos variable exceeds

the width, then

revert to the other direction,

and repeat infinitely. \*/

if (ypos > height - rad || ypos < rad) {

ydirection \*= -1;

}

// Draw Circle 3

noFill();

ellipse(xpos, ypos, rad, rad);

// Title

// Grow and shrink title

textSize(dia);

text('You bad bot.', 325, 10);

if (dia > 10) {

grow = false

}

if (dia < 5) {

grow = true

}

if (grow == true) {

dia += growAmount

} else {

dia -= growAmount

}

// Signature

textSize(10);

text('by Gabriel A. Sterling', 290, 370);

}