## Code Save

## Project Name : Bitmoji Reunion Copy and Paste Code Below

```
//When ready, bitmoji draw code will be up top and we will call it below
var DrawShirt = function(x,y,h) {
  var p = h/200;
  fill(0, 10, 87);
  arc(x+(p*75), y+(p*150), p*100, p*40, 180, 360); // shirt
  fill(255, 255, 255);
  textSize(14*p);
  text("C X M", x+(p*55), y+(p*135), p*100, p*100);
};
var DrawHead = function(x,y,h) {
  var p = h/200;
  fill(0, 0, 0);
  ellipse(x+(p*75), y+(p*65), p*80, p*90); // hair
  rect(x+(p*35),y+(p*60),p*79,p*70);
  fill(186, 160, 109);
  rect(x+(p*70),y+(p*125),p*10,p*10); //neck
  fill(186, 160, 109);
  ellipse(x+(p*75), y+(p*75), p*75, p*100); // face
  fill(255, 255, 255);
  ellipse(x+(p*64), y+(p*70), p*10, p*4); // left eye
  ellipse(x+(p*86), y+(p*70), p*10, p*4); // right eye
  fill(74, 43, 0);
  ellipse(x+(p*64), y+(p*70), p*4, p*4); // left eye
  ellipse(x+(p*86), y+(p*70), p*4, p*4); // right eye
  noFill();
  arc(x+(p*64), y+(p*68), p*15, p*6, 180, 360); // eyebrow
  arc(x+(p*86), y+(p*68), p*15, p*6, 180, 360); // eyebrow
  fill(0, 0, 0);
  triangle(x+(p*74), y+(p*100), x+(p*75), y+(p*85), x+(p*76), y+(p*100)); //nose
  noFill();
  arc(x+(p*75), y+(p*105), p*30, p*15, 10, 170); // mouth
```

```
fill(0, 0, 0);
  arc(x+(p*75), y+(p*60), p*75, p*70, 178, 362); // hair bangs
};
var DrawBitmoji = function(x,y,h) {
  var p = h/200;
  x = x - (75*p);
  y = y - (90*p);
  DrawHead(x,y,h);
  DrawShirt(x,y,h);
};
DrawBitmoji(100,100,153);
//Player A
//Code divider for bitmojis of player A and B
//Player B
var drawBitmoji = function(bitmojiScale, x, y) {
 noStroke();
 fill(176, 110, 80);
 ellipse(x + 200 * bitmojiScale, y + 152 * bitmojiScale, 70 * bitmojiScale, 86 * bitmojiScale); //
head
 fill(0, 0, 0);
 ellipse(x + 201 * bitmojiScale, y + 101 * bitmojiScale, 18 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 207 * bitmojiScale, y + 101 * bitmojiScale, 18 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 192 * bitmojiScale, y + 101 * bitmojiScale, 18 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 183 * bitmojiScale, y + 104 * bitmojiScale, 18 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 214 * bitmojiScale, y + 98 * bitmojiScale, 36 * bitmojiScale, 36 * bitmojiScale);
 ellipse(x + 223 * bitmojiScale, y + 110 * bitmojiScale, 18 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 231 * bitmojiScale, y + 123 * bitmojiScale, 17 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 174 * bitmojiScale, y + 113 * bitmojiScale, 18 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 246 * bitmojiScale, y + 134 * bitmojiScale, 18 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 166 * bitmojiScale, y + 125 * bitmojiScale, 18 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 246 * bitmojiScale, y + 119 * bitmojiScale, 26 * bitmojiScale, 31 * bitmojiScale);
 ellipse(x + 231 * bitmojiScale, y + 104 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 ellipse(x + 200 * bitmojiScale, y + 97 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 ellipse(x + 177 * bitmojiScale, y + 97 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 ellipse(x + 172 * bitmojiScale, y + 107 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 ellipse(x + 154 * bitmojiScale, y + 121 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 ellipse(x + 153 * bitmojiScale, y + 135 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 ellipse(x + 247 * bitmojiScale, y + 137 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 ellipse(x + 152 * bitmojiScale, y + 146 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 ellipse(x + 247 * bitmojiScale, y + 148 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
```

```
stroke(0, 0, 0);
 fill(176, 110, 80);
 rect(x + 175 * bitmojiScale, y + 133 * bitmojiScale, 18 * bitmojiScale, 17 * bitmojiScale); //
glasses left
 rect(x + 204 * bitmojiScale, y + 133 * bitmojiScale, 18 * bitmojiScale, 17 * bitmojiScale); //
glasses right
 line(x + 193 * bitmojiScale, y + 144 * bitmojiScale, x + 205 * bitmojiScale, y + 143 *
bitmojiScale); // nose bridge
 line(x + 176 * bitmojiScale, y + 143 * bitmojiScale, x + 146 * bitmojiScale, y + 137 *
bitmojiScale); // left glasses
 line(x + 259 * bitmojiScale, y + 132 * bitmojiScale, x + 223 * bitmojiScale, y + 144 *
bitmojiScale); // right classes
 fill(92, 54, 54);
 ellipse(x + 185 * bitmojiScale, y + 142 * bitmojiScale, 7 * bitmojiScale, 7 * bitmojiScale); // left
 ellipse(x + 214 * bitmojiScale, y + 142 * bitmojiScale, 7 * bitmojiScale, 7 * bitmojiScale); // right
eye
 fill(176, 110, 80);
 triangle(x + 192 * bitmojiScale,y + 160 * bitmojiScale,x + 206 * bitmojiScale,y + 159 *
bitmojiScale,x + 198 * bitmojiScale,y + 151 * bitmojiScale
 );
 noStroke();
 arc(x + 212 * bitmojiScale, y + 169 * bitmojiScale, 23 * bitmojiScale, 36 * bitmojiScale, 1, 361);
// nose shaping
 arc(x + 193 * bitmojiScale, y + 170 * bitmojiScale, 9 * bitmojiScale, 25 * bitmojiScale, 1, 361); //
nose shaping
 arc(x + 199 * bitmojiScale, y + 171 * bitmojiScale, 9 * bitmojiScale, 25 * bitmojiScale, 1, 361); //
nose shaping
 stroke(0, 0, 0);
 fill(255, 255, 255); // teeth
 arc(x + 200 * bitmojiScale, y + 175 * bitmojiScale, 30 * bitmojiScale, 11 * bitmojiScale, 7, 391);
// mouth
 fill(217, 158, 208);
 quad(
  x + 176 * bitmojiScale,
  y + 194 * bitmojiScale,
  x + 223 * bitmojiScale,
  y + 194 * bitmojiScale,
  x + 300 * bitmojiScale,
  y + 351 * bitmojiScale,
  x + 100 * bitmojiScale,
```

```
y + 350 * bitmojiScale
 ); // dress
 rect(x + 116 * bitmojiScale, y + 167 * bitmojiScale, 30 * bitmojiScale, 88 * bitmojiScale); //
 rect(x + 253 * bitmojiScale, y + 167 * bitmojiScale, 30 * bitmojiScale, 88 * bitmojiScale); //
sleeve
 textSize(32 * bitmojiScale);
 fill(0);
 text("L", x + 178 * bitmojiScale, y + 259 * bitmojiScale);
 textSize(32 * bitmojiScale);
 fill(0);
 text("R", x + 199 * bitmojiScale, y + 259 * bitmojiScale);
};
//here is where bitmoji code will end when we implement it
//declare var variables
//stage phases
var phase = 0;
var currentPhase = 0;
var WL = 0; //win/lose
var i = 0;
var gate = 0; //gate activation for stages
var starters = 1;
var AtoB = 0;
var AorB = 0;
//Time vars
var startTime;
var elapsedTime;
var timeMS = 0;
//Bitmoji possitional code Decloration
//A
var XofA = 0;
var YofA = 0;
//B
var XofB = 0;
var YofB = 0;
```

```
// round obstacle arrays
var round1 = [];
var round2 = [];
var BarPara = [];
//Obstacle 1
var Obstacle1 = function (x,y) {
  fill(0, 0, 0);
  rect (x,y,130,16);
};
//Obstacle 2
var Obstacle2 = function (x,y) {
  fill(0, 0, 0);
  rect (x+45,y,130,16);
};
//Obstacle 3
var Obstacle3 = function (x,y) {
  fill(0, 0, 0);
  rect (x+32.5,y,110,16);
};
//generate array course numbers
var generateCourseNumbers = function(roundNumber) {
  for (var i=0; i<5; i++) {
     roundNumber.push (round(random(0.5,3.4)));
  }
};
//generate course
var CourseCreate = function (Player, roundNumber) {
  if (Player === "A") {
     AtoB = 25:
     fill(199, 189, 82);
     ellipse((25+87.5), 40, 20, 20);
  if (Player === "B") {
     AtoB = 200;
     fill(199, 189, 82);
```

```
ellipse((200+87.5), 40, 20, 20);
  }
  for (var i=0; i < roundNumber.length; i++) {
     if (roundNumber[i] === 1){
       Obstacle1 (AtoB, (355-40)-(i*62));
     if (roundNumber[i] === 2){
       Obstacle2 (AtoB, (355-50)-(i*62));
     if (roundNumber[i] === 3){
       Obstacle3 (AtoB, (355-50)-(i*62));
};
var XaYnXbY_Reset = function () {
     //A
     XofA = 0;
     YofA = 0;
     //B
     XofB = 0;
     YofB = 0;
};
//background setup code
var backroundScreen = function () {
background (0,0,0);
//Screen space
fill(255, 255, 255);
rect (25,25,350,350);
};
var backroundPlayerScreen = function () {
background (0,0,0);
//player A Side
fill(255, 255, 255);
rect (200,25,175,350);
//Player B Side
fill(255, 255, 255);
rect (25,25,175,350);
};
```

```
// main code
backroundScreen ();
//code start button to enable phase 1;
var Button = function(config) {
  this.x = config.x || 0;
  this.y = config.y || 0;
  this.width = config.width || 150;
  this.height = config.height || 50;
  this.label = config.label || "Click";
};
Button.prototype.draw = function() {
  fill(227, 227, 227);
  rect(this.x, this.y, this.width, this.height, 5);
  fill(0, 0, 0);
  textSize(20);
  textAlign(LEFT, TOP);
  text(this.label, this.x+10, this.y+this.height/4);
};
Button.prototype.isMouseInside = function() {
  return mouseX > this.x &&
       mouseX < (this.x + this.width) &&
       mouseY > this.y &&
       mouseY < (this.y + this.height);
};
//buttons set up
var startButton = new Button({x: 50, y: 50, label: "Start Game"});
var restartButton = new Button({x: 200, y: 50, label: "Restart"});
startButton.draw();
//goldenGate Check
//mouse check
mouseClicked = function() {
  if (startButton.isMouseInside()) {
     if (phase === 0) {
        phase = 1;
        starters = 0;
```

```
//println ("button");
       round1 = [];
       round2 = [];
       generateCourseNumbers (round1);
       generateCourseNumbers (round2);
    }
  }
  if (restartButton.isMouseInside()) {
     if (phase === -1) {
       phase = 1;
       starters = 0;
       //println ("button 2");
       round1 = [];
       round2 = [];
       generateCourseNumbers (round1);
       generateCourseNumbers (round2);
  }
};
//var test = 0;
// timer var function
mouseClicked = function() {
  if (startButton.isMouseInside()) {
     if (phase === 0) {
       phase = 1;
       starters = 0;
       startTime = millis(); // Record the start time
       round1 = [];
       round2 = [];
       generateCourseNumbers (round1);
       generateCourseNumbers (round2);
    }
  if (restartButton.isMouseInside()) {
     if (phase === -1) {
       phase = 1:
       starters = 0;
       startTime = millis(); // Record the start time
       round1 = [];
       round2 = [];
       generateCourseNumbers (round1);
       generateCourseNumbers (round2);
```

```
}
  }
};
frameRate(50);
keyReleased = function() {
  if (keyCode === 18) {
     if (AorB === 0) {
        AorB = 1;
       //println ("toggle " + AorB);
     else if (AorB === 1) {
        AorB = 0;
        //println ("toggle " + AorB);
};
draw = function () {
  //timer var code
  if (phase === 1 || phase === 2) {
     elapsedTime = millis() - startTime; // Calculate elapsed time
     timeMS = (round(elapsedTime/1000));
  }
  //testing code
  //test = test + 1;
  //println (test);
//left-right-up-down format
//A B switch L-Shift
/*
  if (keylsReleased && (keyCode === 18)) {
     if (AorB === 0) {
        AorB = 1;
        println ("toggle " + AorB);
     else if (AorB === 1) {
        AorB = 0;
        println ("toggle " + AorB);
```

```
}
  }
*/
  //37 left arrow
  if (keylsPressed && (keyCode === 37)) {
    if (AorB === 0) {
       XofA=XofA-1;
    if (AorB === 1) {
       XofB=XofB-1;
    }
  }
  //39 = right arrow
  if (keylsPressed && (keyCode === 39)) {
    if (AorB === 0) {
       XofA=XofA+1;
    if (AorB === 1) {
       XofB=XofB+1;
  }
  //39 = up arrow
  if (keylsPressed && (keyCode === 38)) {
    if (AorB === 0) {
       YofA=YofA-1;
    if (AorB === 1) {
       YofB=YofB-1;
  //40 = down arrow
  if (keylsPressed && (keyCode === 40)) {
    if (AorB === 0) {
       YofA=YofA+1;
    if (AorB === 1) {
       YofB=YofB+1;
  }
  //Barriors check
  if ((YofA >= 2) || (YofB >= 4)) {
    phase = -1;
```

```
WL = 0;
  }
  if ((YofA <= -325) || (YofB <= -325)) {
    phase = -1;
    WL = 0;
  }
  if ((XofA \ge 78.5) || (XofB \ge 78.5)) {
    phase = -1;
    WL = 0;
  if ((XofA <= -78.5) || (XofB <= -78.5)) {
    phase = -1;
    WL = 0;
  }
  if (phase === 1) {
    backroundPlayerScreen();
    CourseCreate("A", round1);
     CourseCreate("B", round1);
    // Display the timer on the screen
    fill(255, 0, 255);
    textSize(10);
    text("Time: " + timeMS + "s", 10, 10);
    //insert main code round 1 A
    DrawBitmoji(112.5+XofA,360+YofA,40);
    //insert main code round 1 B
     drawBitmoji(0.1, 268+XofB, 336+YofB);
  }
    if (((360+YofA)>25 && (360+YofA)<50) && ((360+YofB) >25 && (360+YofB)<50)) {
       if ((((112.5+XofA-10)>100) && ((112.5+XofA-10) < 120)) && (((290+XofB) > 275) &&
((290+XofB) < 300))) {
         gate = 1;
       }
    if (gate === 1) {
       phase = 2;
       gate = 0;
       XaYnXbY_Reset();
  else if (phase === 2) {
    backroundPlayerScreen();
```

```
CourseCreate("A", round2);
     CourseCreate("B", round2);
    // Display the timer on the screen
     fill(255, 0, 255);
     textSize(10);
     text("Time: " + timeMS + "s", 10, 10);
    //insert main code round 2 A
     DrawBitmoji(112.5+XofA,360+YofA,40);
     //insert main code round 2 B
     drawBitmoji(0.1, 268+XofB, 336+YofB);
     if (((360+YofA)>25 && (360+YofA)<50) && ((360+YofB) >25 && (360+YofB)<50)) {
       if ((((112.5+XofA-10)>100) && ((112.5+XofA-10) < 120)) && (((290+XofB) > 275) &&
((290+XofB) < 300))) {
         gate = 1;
       }
    }
    if (gate === 1) {
       phase = -1;
       gate = 0;
       WL = 1;
       XaYnXbY_Reset();
    }
  else if (phase === -1) {
    backroundScreen();
    //insert end code
    XaYnXbY_Reset();
    //Display WL (win/lose) status
    if (WL === 1) {
       fill(0, 0, 0);
       textSize(50);
       text("You Win!", 150, 200);
    // Display the timer on the screen
    fill(255, 0, 255);
     textSize(10);
    text("Time: " + timeMS + "s", 10, 10);
       // Display confetti as a reunion effect
       for (var j = 0; j < 100; j++) {
```

```
fill(random(255), random(255), random(255));
          ellipse(random(width), random(height), 10, 10);
       }
     if (WL === 0) {
       fill(0, 0, 0);
       textSize(50);
       text("You Lose ):", 150, 200);
     // Display the timer on the screen
     fill(255, 0, 255);
     textSize(10);
     text("Time: " + timeMS + "s", 10, 10);
     //check for play again button
     restartButton.draw();
     //if button pressed start phase 1 again
  }
  //println (mouseX);
  //println (mouseY);
};
//Notes
//Create Barriers for testMojiIMG + Gravity
//Obstacle courses of both rounds be still
```

```
//When ready, bitmoji draw code will be up top and we will call it below var DrawShirt = function(x,y,h) {
    var p = h/200;

fill(0, 10, 87);
    arc(x+(p*75), y+(p*150), p*100, p*40, 180, 360); // shirt

fill(255, 255, 255);
    textSize(14*p);
    text("C X M", x+(p*55), y+(p*135), p*100, p*100);
};
```

```
var DrawHead = function(x,y,h) {
  var p = h/200;
  fill(0, 0, 0);
  ellipse(x+(p*75), y+(p*65), p*80, p*90); // hair
  rect(x+(p*35),y+(p*60),p*79,p*70);
  fill(186, 160, 109);
  rect(x+(p*70),y+(p*125),p*10,p*10); //neck
  fill(186, 160, 109);
  ellipse(x+(p*75), y+(p*75), p*75, p*100); // face
  fill(255, 255, 255);
  ellipse(x+(p*64), y+(p*70), p*10, p*4); // left eye
  ellipse(x+(p*86), y+(p*70), p*10, p*4); // right eye
  fill(74, 43, 0);
  ellipse(x+(p*64), y+(p*70), p*4, p*4); // left eye
  ellipse(x+(p*86), y+(p*70), p*4, p*4); // right eye
  noFill();
  arc(x+(p*64), y+(p*68), p*15, p*6, 180, 360); // eyebrow
  arc(x+(p*86), y+(p*68), p*15, p*6, 180, 360); // eyebrow
  fill(0, 0, 0);
  triangle(x+(p*74), y+(p*100), x+(p*75), y+(p*85), x+(p*76), y+(p*100)); //nose
  noFill();
  arc(x+(p*75), y+(p*105), p*30, p*15, 10, 170); // mouth
  fill(0, 0, 0);
  arc(x+(p*75), y+(p*60), p*75, p*70, 178, 362); // hair bangs
};
var DrawBitmoji = function(x,y,h) {
  var p = h/200;
  x = x - (75*p);
  y = y - (90*p);
  DrawHead(x,y,h);
  DrawShirt(x,y,h);
};
```

```
DrawBitmoji(100,100,153);
//Player A
//Code divider for bitmojis of player A and B
//Player B
var drawBitmoji = function(bitmojiScale, x, y) {
 noStroke();
 fill(176, 110, 80);
 ellipse(x + 200 * bitmojiScale, y + 152 * bitmojiScale, 70 * bitmojiScale, 86 * bitmojiScale); //
 fill(0, 0, 0);
 ellipse(x + 201 * bitmojiScale, y + 101 * bitmojiScale, 18 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 207 * bitmojiScale, y + 101 * bitmojiScale, 18 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 192 * bitmojiScale, y + 101 * bitmojiScale, 18 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 183 * bitmojiScale, y + 104 * bitmojiScale, 18 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 214 * bitmojiScale, y + 98 * bitmojiScale, 36 * bitmojiScale, 36 * bitmojiScale);
 ellipse(x + 223 * bitmojiScale, y + 110 * bitmojiScale, 18 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 231 * bitmojiScale, y + 123 * bitmojiScale, 17 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 174 * bitmojiScale, y + 113 * bitmojiScale, 18 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 246 * bitmojiScale, y + 134 * bitmojiScale, 18 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 166 * bitmojiScale, y + 125 * bitmojiScale, 18 * bitmojiScale, 20 * bitmojiScale);
 ellipse(x + 246 * bitmojiScale, y + 119 * bitmojiScale, 26 * bitmojiScale, 31 * bitmojiScale);
 ellipse(x + 231 * bitmojiScale, y + 104 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 ellipse(x + 200 * bitmojiScale, y + 97 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 ellipse(x + 177 * bitmojiScale, y + 97 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 ellipse(x + 172 * bitmojiScale, y + 107 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 ellipse(x + 154 * bitmojiScale, y + 121 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 ellipse(x + 153 * bitmojiScale, y + 135 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 ellipse(x + 247 * bitmojiScale, y + 137 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 ellipse(x + 152 * bitmojiScale, y + 146 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 ellipse(x + 247 * bitmojiScale, y + 148 * bitmojiScale, 33 * bitmojiScale, 26 * bitmojiScale);
 stroke(0, 0, 0);
 fill(176, 110, 80);
 rect(x + 175 * bitmojiScale, y + 133 * bitmojiScale, 18 * bitmojiScale, 17 * bitmojiScale); //
glasses left
 rect(x + 204 * bitmojiScale, y + 133 * bitmojiScale, 18 * bitmojiScale, 17 * bitmojiScale); //
glasses right
 line(x + 193 * bitmojiScale, y + 144 * bitmojiScale, x + 205 * bitmojiScale, y + 143 *
bitmojiScale); // nose bridge
 line(x + 176 * bitmojiScale, y + 143 * bitmojiScale, x + 146 * bitmojiScale, y + 137 *
bitmojiScale); // left glasses
```

```
line(x + 259 * bitmojiScale, y + 132 * bitmojiScale, x + 223 * bitmojiScale, y + 144 *
bitmojiScale); // right classes
 fill(92, 54, 54);
 ellipse(x + 185 * bitmojiScale, y + 142 * bitmojiScale, 7 * bitmojiScale, 7 * bitmojiScale); // left
eye
 ellipse(x + 214 * bitmojiScale, y + 142 * bitmojiScale, 7 * bitmojiScale, 7 * bitmojiScale); // right
 fill(176, 110, 80);
 triangle(x + 192 * bitmojiScale,y + 160 * bitmojiScale,x + 206 * bitmojiScale,y + 159 *
bitmojiScale,x + 198 * bitmojiScale,y + 151 * bitmojiScale
 );
 noStroke();
 arc(x + 212 * bitmojiScale, y + 169 * bitmojiScale, 23 * bitmojiScale, 36 * bitmojiScale, 1, 361);
// nose shaping
 arc(x + 193 * bitmojiScale, y + 170 * bitmojiScale, 9 * bitmojiScale, 25 * bitmojiScale, 1, 361); //
nose shaping
 arc(x + 199 * bitmojiScale, y + 171 * bitmojiScale, 9 * bitmojiScale, 25 * bitmojiScale, 1, 361); //
nose shaping
 stroke(0, 0, 0);
 fill(255, 255, 255); // teeth
 arc(x + 200 * bitmojiScale, y + 175 * bitmojiScale, 30 * bitmojiScale, 11 * bitmojiScale, 7, 391);
// mouth
 fill(217, 158, 208);
 quad(
  x + 176 * bitmojiScale,
  y + 194 * bitmojiScale,
  x + 223 * bitmojiScale,
  y + 194 * bitmojiScale,
  x + 300 * bitmojiScale,
  y + 351 * bitmojiScale,
  x + 100 * bitmojiScale,
  y + 350 * bitmojiScale
 ); // dress
 rect(x + 116 * bitmojiScale, y + 167 * bitmojiScale, 30 * bitmojiScale, 88 * bitmojiScale); //
 rect(x + 253 * bitmojiScale, y + 167 * bitmojiScale, 30 * bitmojiScale, 88 * bitmojiScale); //
sleeve
 textSize(32 * bitmojiScale);
 fill(0);
 text("L", x + 178 * bitmojiScale, y + 259 * bitmojiScale);
 textSize(32 * bitmojiScale);
```

```
fill(0);
 text("R", x + 199 * bitmojiScale, y + 259 * bitmojiScale);
};
//here is where bitmoji code will end when we implement it
//declare var variables
//stage phases
var phase = 0;
var WL = 0; //win/lose
var i = 0;
var gate = 0; //gate activation for stages
var starters = 1;
var AtoB = 0;
var AorB = 0;
//Bitmoji possitional code Decloration
//A
var XofA = 0;
var YofA = 0;
//B
var XofB = 0;
var YofB = 0;
// round obstacle arrays
var round1 = [];
var round2 = [];
var BarPara = [];
//Obstacle 1
var Obstacle1 = function (x,y) {
  fill(0, 0, 0);
  rect (x,y,130,16);
};
//Obstacle 2
var Obstacle2 = function (x,y) {
  fill(0, 0, 0);
  rect (x+45,y,130,16);
};
```

```
//Obstacle 3
var Obstacle3 = function (x,y) {
  fill(0, 0, 0);
  rect (x+32.5,y,110,16);
};
//generate array course numbers
var generateCourseNumbers = function(roundNumber) {
  for (var i=0; i<5; i++) {
     roundNumber.push (round(random(1,3)));
  }
};
//generate course
var CourseCreate = function (Player, roundNumber) {
  if (Player === "A") {
     AtoB = 25;
     fill(199, 189, 82);
     ellipse((25+87.5), 40, 20, 20);
  }
  if (Player === "B") {
     AtoB = 200;
     fill(199, 189, 82);
     ellipse((200+87.5), 40, 20, 20);
  }
  for (var i=0; i < roundNumber.length; i++) {
     if (roundNumber[i] === 1){
       Obstacle1 (AtoB, (355-40)-(i*62));
     if (roundNumber[i] === 2){
       Obstacle2 (AtoB, (355-50)-(i*62));
     if (roundNumber[i] === 3){
       Obstacle3 (AtoB, (355-50)-(i*62));
  }
};
var XaYnXbY_Reset = function () {
     //A
```

```
XofA = 0;
     YofA = 0;
     //B
     XofB = 0;
     YofB = 0;
};
//background setup code
var backroundScreen = function () {
background (0,0,0);
//Screen space
fill(255, 255, 255);
rect (25,25,350,350);
};
var backroundPlayerScreen = function () {
background (0,0,0);
//player A Side
fill(255, 255, 255);
rect (200,25,175,350);
//Player B Side
fill(255, 255, 255);
rect (25,25,175,350);
};
// main code
backroundScreen ();
//code start button to enable phase 1;
var Button = function(config) {
  this.x = config.x || 0;
  this.y = config.y || 0;
  this.width = config.width || 150;
  this.height = config.height || 50;
  this.label = config.label || "Click";
};
Button.prototype.draw = function() {
  fill(227, 227, 227);
  rect(this.x, this.y, this.width, this.height, 5);
  fill(0, 0, 0);
```

```
textSize(20);
  textAlign(LEFT, TOP);
  text(this.label, this.x+10, this.y+this.height/4);
};
Button.prototype.isMouseInside = function() {
  return mouseX > this.x &&
       mouseX < (this.x + this.width) &&
       mouseY > this.y &&
       mouseY < (this.y + this.height);
};
//buttons set up
var startButton = new Button({x: 50, y: 50, label: "Start Game"});
var restartButton = new Button({x: 200, y: 50, label: "Restart"});
startButton.draw();
//goldenGate Check
//mouse check
mouseClicked = function() {
  if (startButton.isMouseInside()) {
     if (phase === 0) {
       phase = 1;
       starters = 0;
       //println ("button");
       round1 = [];
       round2 = [];
       generateCourseNumbers (round1);
       generateCourseNumbers (round2);
     }
  if (restartButton.isMouseInside()) {
     if (phase === -1) {
       phase = 1;
       starters = 0;
       //println ("button 2");
       round1 = [];
       round2 = [];
       generateCourseNumbers (round1);
       generateCourseNumbers (round2);
     }
  }
```

```
};
//var test = 0;
frameRate(50);
keyReleased = function() {
  if (keyCode === 18) {
     if (AorB === 0) {
       AorB = 1;
       //println ("toggle " + AorB);
     else if (AorB === 1) {
       AorB = 0;
       //println ("toggle " + AorB);
     }
  }
};
draw = function () {
  //testing code
  //test = test + 1;
  //println (test);
//left-right-up-down format
//A B switch L-Shift
  if (keylsReleased && (keyCode === 18)) {
     if (AorB === 0) {
       AorB = 1;
       println ("toggle " + AorB);
     else if (AorB === 1) {
       AorB = 0;
       println ("toggle " + AorB);
  }
*/
  //37 left arrow
  if (keyIsPressed && (keyCode === 37)) {
     if (AorB === 0) {
       XofA=XofA-1;
     }
     if (AorB === 1) {
       XofB=XofB-1;
```

```
}
}
//39 = right arrow
if (keylsPressed && (keyCode === 39)) {
  if (AorB === 0) {
     XofA=XofA+1;
  if (AorB === 1) {
     XofB=XofB+1;
  }
}
//39 = up arrow
if (keyIsPressed && (keyCode === 38)) {
  if (AorB === 0) {
     YofA=YofA-1;
  if (AorB === 1) {
     YofB=YofB-1;
}
//40 = down arrow
if (keylsPressed && (keyCode === 40)) {
  if (AorB === 0) {
     YofA=YofA+1;
  if (AorB === 1) {
     YofB=YofB+1;
}
//Barriors check
if ((YofA \ge 2) || (YofB \ge 4)) {
  phase = -1;
  WL = 0;
if ((YofA <= -325) || (YofB <= -325)) {
  phase = -1;
  WL = 0;
if ((XofA \ge 78.5) || (XofB \ge 78.5)) {
  phase = -1;
  WL = 0;
}
```

```
if ((XofA \le -78.5) || (XofB \le -78.5)) \{
    phase = -1;
    WL = 0:
  }
  if (phase === 1) {
    backroundPlayerScreen();
    CourseCreate("A", round1);
    CourseCreate("B", round1);
    //insert main code round 1 A
    DrawBitmoji(112.5+XofA,360+YofA,40);
    //insert main code round 1 B
    drawBitmoji(0.1, 268+XofB, 336+YofB);
    if (((360+YofA)>25 && (360+YofA)<50) && ((360+YofB) >25 && (360+YofB)<50)) {
       if ((((112.5+XofA-10)>100) && ((112.5+XofA-10) < 120)) && (((290+XofB) > 275) &&
((290+XofB) < 300))) {
         gate = 1;
       }
    if (gate === 1) {
       phase = 2;
       gate = 0;
       XaYnXbY Reset();
    }
  }
  if (phase === 2) {
    backroundPlayerScreen();
    CourseCreate("A", round2);
    CourseCreate("B", round2);
    //insert main code round 2 A
    DrawBitmoji(112.5+XofA,360+YofA,40);
    //insert main code round 2 B
    drawBitmoji(0.1, 268+XofB, 336+YofB);
    if (((360+YofA)>25 && (360+YofA)<50) && ((360+YofB) >25 && (360+YofB)<50)) {
       if ((((112.5+XofA-10)>100) && ((112.5+XofA-10) < 120)) && (((290+XofB) > 275) &&
((290+XofB) < 300))) {
         gate = 1;
       }
    if (gate === 1) {
       phase = -1;
       gate = 0;
       WL = 1;
```

```
XaYnXbY_Reset();
     }
  }
  if (phase === -1) {
     backroundScreen();
     //insert end code
     XaYnXbY_Reset();
     //Display WL (win/lose) status
     if (WL === 1) {
       fill(0, 0, 0);
       textSize(50);
       text("You Win!", 150, 200);
       // Display confetti as a reunion effect
       for (var j = 0; j < 100; j++) {
          fill(random(255), random(255), random(255));
          ellipse(random(width), random(height), 10, 10);
       }
     }
     if (WL === 0) {
       fill(0, 0, 0);
       textSize(50);
       text("You Lose ):", 150, 200);
     //check for play again button
     restartButton.draw();
     //if button pressed start phase 1 again
  }
  //println (mouseX);
  //println (mouseY);
//Notes
//Create Barriers for testMojiIMG + Gravity
//Obstacle courses of both rounds be still
```

**}**;