```
var currentScene = 0; //Sets the current scene
var bitmojiX = 0;
var bitmojiY = 0;
var bitmoji2X = 0;
var bitmoji2Y = 0;
var score1 = 0; //Sets score for player 1
var score2 = 0; //Sets score for player 2
var playerSpeed = 3;

//Both partners bitmoji code
//Josh's bitmoji code
var drawBitmojiFace = function (bitmojiX,bitmojiY,bitmojiHeight) {
noStroke();
fill(240, 210, 166);
ellipse(bitmojiX,bitmojiY,bitmojiHeight/150*80,bitmojiHeight/150*100); //head
fill(255,255,255);
ellipse(bitmojiX-(bitmojiHeight/150*15),bitmojiY-(bitmojiHeight/150*2),bitmojiHeight/150*12,bitm
ojiHeight/150*12); //left eye white
ellipse(bitmojiX+(bitmojiHeight/150*15),bitmojiY-(bitmojiHeight/150*2),bitmojiHeight/150*12,bitm
ojiHeight/150*12); //right eye white
fill(150,120,80);
ellipse(bitmojiX-(bitmojiHeight/150*14.5),bitmojiY-(bitmojiHeight/150*1.5),bitmojiHeight/150*4.5,
bitmojiHeight/150*4.5); //left eye color
ellipse(bitmojiX+(bitmojiHeight/150*14.5),bitmojiY-(bitmojiHeight/150*1.5),bitmojiHeight/150*4.5,
bitmojiHeight/150*4.5); //right eye color
stroke(0,0,0);
fill(240,210,156);
bezier(bitmojiX,bitmojiY,bitmojiX+(bitmojiHeight/150*21),bitmojiY+(bitmojiHeight/150*22),bitmoji
X-(bitmojiHeight/150*8),bitmojiY+(bitmojiHeight/150*20),bitmojiX-(bitmojiHeight/150*4),bitmojiY+
(bitmojiHeight/150*15)); //nose
fill(255,255,255);
arc(bitmojiX,bitmojiY+(bitmojiHeight/150*28),bitmojiHeight/150*30,bitmojiHeight/150*13,1,180);
//mouth
line(bitmojiX-(bitmojiHeight/150*14),bitmojiY+(bitmojiHeight/150*27.5),bitmojiX+(bitmojiHeight/1
50*14),bitmojiY+(bitmojiHeight/150*27.5)); //top of mouth
};

var drawBitmojiHair = function (bitmojiX,bitmojiY,bitmojiHeight) {
fill(122, 74, 27);
quad(bitmojiX-(bitmojiHeight/150*41),bitmojiY,bitmojiX-(bitmojiHeight/150*34),bitmojiY-(bitmojiH
eight/150*32),bitmojiX-(bitmojiHeight/150*11),bitmojiY-(bitmojiHeight/150*50),bitmojiX-(bitmojiHe
ight/150*40),bitmojiY-(bitmojiHeight/150*1)); //left hair
```

```
quad(bitmojiX+(bitmojiHeight/150*43),bitmojiY-(bitmojiHeight/150*2),bitmojiX+(bitmojiHeight/150
*33),bitmojiY-(bitmojiHeight/150*32),bitmojiX+(bitmojiHeight/150*13),bitmojiY-(bitmojiHeight/150
*43),bitmojiX+(bitmojiHeight/150*40),bitmojiY-(bitmojiHeight/150*3)); //right hair
ellipse(bitmojiX,bitmojiY-(bitmojiHeight/150*37),bitmojiHeight/150*62,bitmojiHeight/150*28); //top
hair
};

var drawBitmojiShirt = function (bitmojiX,bitmojiY,bitmojiHeight) {
noStroke();
fill(166, 166, 166);
quad(bitmojiX-(bitmojiHeight/150*54),bitmojiY+(bitmojiHeight/150*38),bitmojiX-(bitmojiHeight/15
0*60),bitmojiY+(bitmojiHeight/150*95),bitmojiX-(bitmojiHeight/150*1),bitmojiY+(bitmojiHeight/15
0*95),bitmojiX-(bitmojiHeight/150*1),bitmojiY+(bitmojiHeight/150*51)); //left part of shirt
quad(bitmojiX+(bitmojiHeight/150*52),bitmojiY+(bitmojiHeight/150*38),bitmojiX+(bitmojiHeight/1
50*58),bitmojiY+(bitmojiHeight/150*95),bitmojiX-(bitmojiHeight/150*1),bitmojiY+(bitmojiHeight/1
50*95),bitmojiX-(bitmojiHeight/150*1),bitmojiY+(bitmojiHeight/150*51)); //right part of shirt
stroke(25, 14, 240);
strokeWeight(3);
line(bitmojiX-(bitmojiHeight/150*40),bitmojiY+(bitmojiHeight/150*60),bitmojiX,bitmojiY+(bitmojiH
eight/150*60)); //part of J
line(bitmojiX-(bitmojiHeight/150*20),bitmojiY+(bitmojiHeight/150*60),bitmojiX-(bitmojiHeight/150
*20),bitmojiY+(bitmojiHeight/150*85)); //part of J
line(bitmojiX-(bitmojiHeight/150*20),bitmojiY+(bitmojiHeight/150*85),bitmojiX-(bitmojiHeight/150
*37),bitmojiY+(bitmojiHeight/150*85)); //part of J
line(bitmojiX-(bitmojiHeight/150*37),bitmojiY+(bitmojiHeight/150*85),bitmojiX-(bitmojiHeight/150
*37),bitmojiY+(bitmojiHeight/150*80)); //part of J
line(bitmojiX+(bitmojiHeight/150*10),bitmojiY+(bitmojiHeight/150*60),bitmojiX+(bitmojiHeight/15
0*10),bitmojiY+(bitmojiHeight/150*85)); //part of K
line(bitmojiX+(bitmojiHeight/150*10),bitmojiY+(bitmojiHeight/150*72.5),bitmojiX+(bitmojiHeight/1
50*30),bitmojiY+(bitmojiHeight/150*60)); //part of K
line(bitmojiX+(bitmojiHeight/150*10),bitmojiY+(bitmojiHeight/150*72.5),bitmojiX+(bitmojiHeight/1
50*30),bitmojiY+(bitmojiHeight/150*85)); //part of K
};

var drawBitmojiHat = function (bitmojiX,bitmojiY,bitmojiHeight) {
noStroke();
fill(158, 158, 158);
ellipse(bitmojiX,bitmojiY-(bitmojiHeight/150*38),bitmojiHeight/150*70,bitmojiHeight/150*30);
//base of hat
fill(0,0,0);
ellipse(bitmojiX,bitmojiY-(bitmojiHeight/150*25),bitmojiHeight/150*57,bitmojiHeight/150*20);
//brim of hat
};
```

```
var drawBitmoji = function (bitmojiX,bitmojiY,bitmojiHeight) {
drawBitmojiFace (bitmojiX,bitmojiY,bitmojiHeight);
drawBitmojiHair (bitmojiX,bitmojiY,bitmojiHeight);
drawBitmojiShirt (bitmojiX,bitmojiY,bitmojiHeight);
drawBitmojiHat (bitmojiX,bitmojiY,bitmojiHeight);
};

//Anthony's bitmoji code
var drawBitmoji2 = function(x,y,bitmojiHeight) {


noStroke();

var drawBitmojiHead = function() {

fill(224, 172, 105);

ellipse(x+0*(bitmojiHeight/100),y+0*(bitmojiHeight/100),83*(bitmojiHeight/100),100
*(bitmojiHeight/100)); //head


fill(0, 0, 0);
quad(x-50*(bitmojiHeight/100),y+0*(bitmojiHeight/100),x-37*(bitmojiHeight/100),y-32
*(bitmojiHeight/100),x-10*(bitmojiHeight/100),y-50*(bitmojiHeight/100),x-30
*(bitmojiHeight/100),y-1*(bitmojiHeight/100)); //left hair

quad(x+49*(bitmojiHeight/100),y-2*(bitmojiHeight/100),x+34*(bitmojiHeight/100),y-32
*(bitmojiHeight/100),x+13*(bitmojiHeight/100),y-50*(bitmojiHeight/100),x+35
*(bitmojiHeight/100),y-3*(bitmojiHeight/100)); //right hair

ellipse(x+0*(bitmojiHeight/100),y-37*(bitmojiHeight/100),62*(bitmojiHeight/100),28
*(bitmojiHeight/100)); //top hair


fill(255,255,255);

ellipse (x-12*(bitmojiHeight/100),y+0*(bitmojiHeight/100),13*(bitmojiHeight/100),10
*(bitmojiHeight/100)); //left eye back

ellipse (x+15*(bitmojiHeight/100),y+0*(bitmojiHeight/100),13*(bitmojiHeight/100),10
*(bitmojiHeight/100)); //right eye back

fill(115,23,23); //brown eyes fill
```

```
ellipse(x-10*(bitmojiHeight/100),y+0*(bitmojiHeight/100),6*(bitmojiHeight/100),4
*(bitmojiHeight/100)); //left eye

ellipse(x+17*(bitmojiHeight/100),y+0*(bitmojiHeight/100),6*(bitmojiHeight/100),4
*(bitmojiHeight/100)); //right eye


stroke(0, 0, 0);
fill(224, 172, 105);

bezier(x+0*(bitmojiHeight/100),y+0*(bitmojiHeight/100),x+21*(bitmojiHeight/100),y
+22*(bitmojiHeight/100),x-8*(bitmojiHeight/100),y+20*(bitmojiHeight/100),x-4
*(bitmojiHeight/100),y+15*(bitmojiHeight/100)); //nose


fill(255, 255, 255);

arc(x+3*(bitmojiHeight/100),y+25*(bitmojiHeight/100), 30*(bitmojiHeight/100), 13
*(bitmojiHeight/100),1,180); //mouth

line(x-14*(bitmojiHeight/100),y+24*(bitmojiHeight/100),x+19*(bitmojiHeight/100),y
+24*(bitmojiHeight/100)); //top of mouth


noStroke();
fill(59, 80, 102);

arc(x+0*(bitmojiHeight/100), y-20*(bitmojiHeight/100), 85*(bitmojiHeight/100), -70
*(bitmojiHeight/100), 5, 186); //hat

fill(0, 0, 0);
arc(x+0*(bitmojiHeight/100), y-25*(bitmojiHeight/100), 30*(bitmojiHeight/100), -20
*(bitmojiHeight/100), 5, 186); //hat hole

};
drawBitmojiHead();


var drawBitmojiBody = function() {

fill(224, 172, 105);
```

```
rect(x-9*(bitmojiHeight/100),y+45*(bitmojiHeight/100),23*(bitmojiHeight/100),15
*(bitmojiHeight/100)); //neck


fill(116, 158, 109);

rect(x-30*(bitmojiHeight/100),y+55*(bitmojiHeight/100),66*(bitmojiHeight/100),80
*(bitmojiHeight/100)); //shirt

triangle(x-60*(bitmojiHeight/100), y+80*(bitmojiHeight/100), x-30*(bitmojiHeight       /100),
y+56*(bitmojiHeight/100), x-30*(bitmojiHeight/100), y+80*(bitmojiHeight/100     )); //right shirt

triangle(x+66*(bitmojiHeight/100), y+80*(bitmojiHeight/100), x+36*(bitmojiHeight       /100),
y+56*(bitmojiHeight/100), x-30*(bitmojiHeight/100),y+80*(bitmojiHeight/100       )); //left shirt


fill(0, 0, 0);
textSize(30*(bitmojiHeight/100));

text("AM",x-20*(bitmojiHeight/100),y+66*(bitmojiHeight/100),100*(bitmojiHeight/100
),100*(bitmojiHeight/100));


fill(224, 172, 105);

rect(x-50*(bitmojiHeight/100),y+80*(bitmojiHeight/100),15*(bitmojiHeight/100),30
*(bitmojiHeight/100)); //left arm

rect(x+41*(bitmojiHeight/100),y+80*(bitmojiHeight/100),15*(bitmojiHeight/100),30
*(bitmojiHeight/100)); //right arm


ellipse(x-43*(bitmojiHeight/100),y+115*(bitmojiHeight/100),20*(bitmojiHeight/100
),20*(bitmojiHeight/100)); //left hand

ellipse(x+49*(bitmojiHeight/100),y+115*(bitmojiHeight/100),20*(bitmojiHeight/100
),20*(bitmojiHeight/100)); //right hand

};
drawBitmojiBody();

};

//Function that draws the stars array background
```

```
var drawStars = function() {
var xStar = [33,115,335,250,230,20,120,200,330,120,280]; //Draws xPosition of the star
var yStar = [119,33,239,200,50,250,340,330,120,200,280]; //Draws yPosition of the star
for (var i = 0; i < xStar.length; i++) {
image(getImage("space/star"), xStar[i], yStar[i], 40, 40); //Draws the actual star
    }
};

//Function that draws the red and green barrier
var barrier = function () {
     fill(0, 255, 0);
     rect(0, 0, 10, 200);
     rect(390, 0, 10, 200);
     rect(0, 0, width, 10);
     fill(255, 0, 0);
     rect(0, 200, 10, 200);
     rect(390, 200, 10, 200);
     rect(0, 390, width, 10);
};
//All of the khan button class
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";
    this.onClick = config.onClick || function() {};
};

Button.prototype.draw = function() {
    fill(255, 255, 0);
    rect(this.x, this.y, this.width, this.height, 5);
    fill(0, 0, 0);
    textSize(19);
    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);
};
```

```
Button.prototype.handleMouseClick = function() {
    if (this.isMouseInside()) {
        this.onClick();
    }
};

//Button that changes home screen to game options screen
var gameOptions = new Button({
    x: 120,
    y: 275,
    label: "Game Options",
    onClick: function() {
        currentScene = 1;
    }
});

//Button to choose the option for one player game
var playerOptions1 = new Button ({
    x: 120,
    y: 200,
    label: "   One Player",
    onClick: function() {
        currentScene = 2;
    }
});

//Button to choose the option for two player game
var playerOptions2 = new Button ({
    x: 120,
    y: 280,
    label: "  Two Players",
    onClick: function() {
        currentScene = 3;
    }
});

//Draws the home screen
var drawHomeScreen = function () {
    currentScene = 0;
    background(41, 28, 28);
    drawStars();
    fill(255,255,255);
    textSize(40);
```

```
    text("Air Hockey", 100, 100);
    stroke(255,255,255);
    strokeWeight(5);
    line(85, 150, 305, 150);
    textSize(20);
    text("By: Josh Kleinberg & Anthony Martinez", 25, 175);
     drawBitmoji (350, 50, 75);
     drawBitmoji (50, 330, 75);
     drawBitmoji2 (50, 40, 40);
     drawBitmoji2 (350, 330, 40);
     gameOptions.draw ();
     barrier();
};

//Draws the game options screen
var drawGameOptions = function () {
    currentScene = 1;
    background(41, 28, 28);
    drawStars();
    fill(255,255,255);
    textSize(40);
    text("Game Options", 65, 100);
    stroke(255,255,255);
    strokeWeight(5);
    line(60, 150, 325, 150);
     drawBitmoji (350, 50, 75);
     drawBitmoji (50, 330, 75);
     drawBitmoji2 (50, 40, 40);
     drawBitmoji2 (350, 330, 40);
     playerOptions1.draw ();
     playerOptions2.draw ();
     barrier();
};

//Draws the instructions screen for the one player option
var drawInstructions1 = function () {
    currentScene = 2;
    background(41, 28, 28);
    drawStars();
    fill(255, 255, 255);
    textSize(40);
    text("Instructions", 90, 40);
    stroke(255, 255, 255);
    strokeWeight(5);
```

```
    line(85, 90, 300, 90);
    textSize(20);
    text("Use the up, down, left, and right arrow \nkeys to move the bitmoji across your \nside of the screen and try to score on \nthe opponents goal. First one to 7 goals \nwins! Click anywhere to choose player", 20, 150);
    drawBitmoji (350, 50, 75);
    drawBitmoji (50, 330, 75);
    drawBitmoji2 (50, 40, 40);
    drawBitmoji2 (350, 330, 40);
    barrier();
};

//Draws the instructions screen for the two player option
var drawInstructions2 = function () {
    currentScene = 3;
    background(41, 28, 28);
    drawStars();
    fill(255, 255, 255);
    textSize(40);
    text("Instructions", 90, 40);
    stroke(255, 255, 255);
    strokeWeight(5);
    line(85, 90, 300, 90);
    textSize(15);
    text("Player 1: Use the up, down, left, and right arrow keys \nto move your bitmoji across your side of the screen", 20, 130);
    text("Player 2: Use the A, W, D, and S keys to move your \nbitmoji across your side of the screen", 20, 210);
    text("First one to 7 goals wins! Click anywhere to choose \n                                your players", 20, 280);
    drawBitmoji (350, 50, 75);
    drawBitmoji (50, 330, 75);
    drawBitmoji2 (50, 40, 40);
    drawBitmoji2 (350, 330, 40);
    barrier();
};

//Screen where player can choose their character for the one player option
var drawChoosePlayer1 = function () {
    currentScene = 4;
    background(41, 28, 28);
    drawStars();
    fill(255, 255, 255);
    textSize(40);
```

```
    text("Choose Your Player", 20, 65);
    stroke(255, 255, 255);
    strokeWeight(5);
    line(20, 115, 375, 115);
    drawBitmoji (100, 250, 100);
    drawBitmoji2 (300, 250, 55);
    barrier();
};

//Screen where player can choose their character for the two player option
var drawChoosePlayer2 = function () {
    currentScene = 5;
    background(41, 28, 28);
    drawStars();
    fill(255, 255, 255);
    textSize(40);
    text("Choose Player 1", 50, 65);
    stroke(255, 255, 255);
    strokeWeight(5);
    line(50, 115, 345, 115);
    drawBitmoji (100, 250, 100);
    drawBitmoji2 (300, 250, 55);
    barrier();
};

//Screen where player can choose their character based on which character was picked first
var drawChoosePlayer201 = function () {
    currentScene = 6;
    background(41, 28, 28);
    drawStars();
    fill(255, 255, 255);
    textSize(40);
    text("Choose Player 2", 50, 65);
    stroke(255, 255, 255);
    strokeWeight(5);
    line(50, 115, 345, 115);
    drawBitmoji2 (300, 250, 55);
    barrier();
};

//Screen where player can choose their character based on which character was picked first
var drawChoosePlayer202 = function () {
    currentScene = 7;
    background(41, 28, 28);
```

```
    drawStars();
    fill(255, 255, 255);
    textSize(40);
    text("Choose Player 2", 50, 65);
    stroke(255, 255, 255);
    strokeWeight(5);
    line(50, 115, 345, 115);
    drawBitmoji (100, 250, 100);
    barrier();
};

//Draws the game screen for air hockey
var drawGameScreen = function () {
    background(41, 28, 28);
    stroke(255, 0, 0);
    strokeWeight(5);
    line(25, 25, 375, 25);
    line(25, 25, 25, 200);
    line(375, 25, 375, 200);
    stroke(0, 255, 0);
    strokeWeight(5);
    line(25, 375, 375, 375);
    line(25, 375, 25, 200);
    line(375, 375, 375, 200);
    stroke(255, 255, 0);
    strokeWeight(3);
    line(24, 198, 376, 198);
    fill(41, 28, 28);
    ellipse(200, 200, 85, 85);
    ellipse(200, 200, 3, 3);
    strokeWeight(1);
    line(25, 260, 375, 260);
    line(25, 140, 375, 140);
    ellipse(100, 300, 40, 40);
    ellipse(300, 300, 40, 40);
    ellipse(100, 100, 40, 40);
    ellipse(300, 100, 40, 40);
    strokeWeight(3);
    arc(200, 380, 121, 102, 183, 358);
    arc(200, 20, 121, 102, 5, 178);
};

var player1Y = height/2;
var player2Y = height/2;
```

```
var player1Score = 0;
var player2Score = 0;
var ball;
var gameStarted = false;
var t = 0;

var PAUSE_TIME = 60;
var PLAYER_MOVE_SPEED = 2;
var BALL_SPEED = 15;
var PADDLE_HEIGHT = 60;
var PADDLE_WIDTH = 60;

//Handles the puck
var Ball = function(position, speed) {
    this.position = position;
    this.speed = speed || BALL_SPEED;

    this.radius = 12;

    this.resetVelocity = function() {
        this.theta = random(0, 360);
        this.velocity = new PVector(
        this.speed*cos(this.theta), -this.speed*sin(this.theta));
        player2Y = height/2;
    };
    this.resetVelocity();

    this.draw = function() {
        fill(255, 255, 255);
        noStroke();
        ellipse(this.position.x, this.position.y,
        this.radius*2, this.radius*2);
    };

    //Handle paddle collisions
    this.collideWithPaddle = function() {
        if (this.position.x + 12 > bitmojiX - 30 &&
        this.position.x - 12 < bitmojiX + 30 &&
        this.position.y + 12 > bitmojiY - 30 &&
        this.position.y - 12 < bitmojiY + 30) {

        }
    };
```

```
    this.update = function() {

        //Handle goal collisions
        if (this.position.x >= 151 && this.position.x <= 248 && this.position.y >= 360         )
        {
            player2Score++;
            this.position = new PVector(width/2, height/2);
            gameStarted = false;
            this.resetVelocity();
        }

        if (this.position.x >= 151 && this.position.x <= 248 && this.position.y <= 40)
        {
            player1Score++;
            this.position = new PVector(width/2, height/2);
            gameStarted = false;
            this.resetVelocity();
        }

        // handle vertical collision
        if (this.position.y < 40) {
            this.position.y = 40;
            this.velocity.mult(new PVector(1, -1));
        }
        if (this.position.y > 360) {
            this.position.y = 360;
            this.velocity.mult(new PVector(1, -1));
        }

        // handle horizontal collision
        if (this.position.x < 40) {
            this.position.x = 40;
            this.velocity.mult(new PVector(-1, 1));
        }

        if (this.position.x > 360) {
            this.position.x = 360;
            this.velocity.mult(new PVector(-1, 1));
        }
        this.collideWithPaddle();
        this.position.add(this.velocity);
    };
};
ball = new Ball(new PVector(width/2, height/2));
```

```
//Displays the score during the game
var scoreBoard = function() {
    strokeWeight(1);
    stroke(255, 0, 0);
    rect(320, 160, 20, 20);
    stroke(0, 255, 0);
    rect(320, 220, 20, 20);
    fill(255, 255, 255);
    textSize(12);
    text(player1Score, 327, 222);
    text(player2Score, 327, 162);
    if (player1Score || player2Score === 7) {

    }
};

var drawGameScreen1 = function () {
    currentScene = 8;
    drawGameScreen();
    scoreBoard();
    drawBitmoji(bitmojiX+200, bitmojiY+340, 60);
    ball.draw();
    ball.update();

    if(keyIsPressed) {
        if (keyCode === UP) {
            bitmojiY -= playerSpeed;
        } else if (keyCode === DOWN) {
            bitmojiY += playerSpeed;
        } else if (keyCode === LEFT) {
            bitmojiX -= playerSpeed;
        } else if (keyCode === RIGHT) {
            bitmojiX += playerSpeed;
        }
    }

    bitmojiY = constrain(bitmojiY, -120, 0);
    bitmojiX = constrain(bitmojiX, -155,  155);
};

var drawGameScreen2 = function () {
    currentScene = 9;
    drawGameScreen();
```

```
    scoreBoard();
    drawBitmoji2(bitmoji2X+200, bitmoji2Y+335, 35);
    ball.draw();
    ball.update();

    if(keyIsPressed) {
        if (keyCode === UP) {
            bitmoji2Y -= playerSpeed;
        } else if (keyCode === DOWN) {
            bitmoji2Y += playerSpeed;
        } else if (keyCode === LEFT) {
            bitmoji2X -= playerSpeed;
        } else if (keyCode === RIGHT) {
            bitmoji2X += playerSpeed;
        }
    }

    bitmoji2Y = constrain(bitmoji2Y, -120, 0);
    bitmoji2X = constrain(bitmoji2X, -155, 155);
};

var drawGameScreen3 = function () {
    currentScene = 10;
    drawGameScreen();
    scoreBoard();
    drawBitmoji(bitmojiX+200, bitmojiY+340,60);
    ball.draw();
    ball.update();

     if(keyIsPressed) {
        if (keyCode === UP) {
            bitmojiY -= playerSpeed;
        } else if (keyCode === DOWN) {
            bitmojiY += playerSpeed;
        } else if (keyCode === LEFT) {
            bitmojiX -= playerSpeed;
        } else if (keyCode === RIGHT) {
            bitmojiX += playerSpeed;
        }
    }

    bitmojiY = constrain(bitmojiY, -120, 0);
    bitmojiX = constrain(bitmojiX, -155,  155);
```

```
    drawBitmoji2(bitmoji2X+200, bitmoji2Y+35,35);

    if(keyIsPressed) {
        if (keyCode === 87) {
            bitmoji2Y += playerSpeed;
        } else if (keyCode === 83) {
            bitmoji2Y -= playerSpeed;
        } else if (keyCode === 65) {
            bitmoji2X -= playerSpeed;
        } else if (keyCode === 68) {
            bitmoji2X += playerSpeed;
        }
    }
};

var drawGameScreen4 = function () {
    currentScene = 11;
    drawGameScreen();
    scoreBoard();
    drawBitmoji2(bitmoji2X+200, bitmoji2Y+335,35);
    ball.draw();
    ball.update();

    if(keyIsPressed) {
        if (keyCode === UP) {
            bitmoji2Y -= playerSpeed;
        } else if (keyCode === DOWN) {
            bitmoji2Y += playerSpeed;
        } else if (keyCode === LEFT) {
            bitmoji2X -= playerSpeed;
        } else if (keyCode === RIGHT) {
            bitmoji2X += playerSpeed;
        }
    }

    bitmoji2Y = constrain(bitmoji2Y, -120, 0);
    bitmoji2X = constrain(bitmoji2X, -155, 155);


    drawBitmoji(bitmojiX+200, bitmojiY+40,60);
};

//Mouseclicked function for all buttons
mouseClicked = function() {
```

```
    if (currentScene === 0) {
        gameOptions.handleMouseClick();
    } else if (currentScene === 1) {
        playerOptions1.handleMouseClick();
        playerOptions2.handleMouseClick();
    } else if (currentScene === 2) {
        drawChoosePlayer1();
    } else if (currentScene === 3) {
        drawChoosePlayer2();
    } else if (currentScene === 4) {
        if (mouseX <= 150 && mouseX >= 50 && mouseY <= 300 && mouseY >=200) {
            drawGameScreen1();
        } else if (mouseX <= 350 && mouseX >=250 && mouseY <=300 && mouseY >=200) {
            drawGameScreen2();
        }
    } else if (currentScene === 5) {
        if (mouseX <= 150 && mouseX >= 50 && mouseY <= 300 && mouseY >= 200) {
            drawChoosePlayer201();
        } else if (mouseX <=350 && mouseX >= 250 && mouseY <= 300 && mouseY >= 200) {
            drawChoosePlayer202();
        }
    } else if (currentScene === 6) {
        if (mouseX <=350 && mouseX >=250 && mouseY <= 300 && mouseY >= 200) {
        drawGameScreen3();
        }
    } else if (currentScene === 7) {
        if (mouseX <= 150 && mouseX >= 50 && mouseY <= 300 && mouseY >= 200) {
        drawGameScreen4();
        }
    }
};

//Draw function that makes the code run
draw = function() {
    if (currentScene === 0) {
        drawHomeScreen();
    } else if (currentScene === 1) {
        drawGameOptions();
    } else if (currentScene === 2) {
        drawInstructions1();
    } else if (currentScene === 3) {
        drawInstructions2();
    } else if (currentScene === 4) {
        drawChoosePlayer1();
```

```
    } else if (currentScene === 5) {
        drawChoosePlayer2();
    } else if (currentScene === 6) {
        drawChoosePlayer201();
    } else if (currentScene === 7) {
        drawChoosePlayer202();
    } else if (currentScene === 8) {
        drawGameScreen1();
    } else if (currentScene === 9) {
        drawGameScreen2();
    } else if (currentScene === 10) {
        drawGameScreen3();
    } else if (currentScene === 11) {
        drawGameScreen4();
    }
};
```