Programming Sketch Self-Portrait

Project 1

Bendebel, Zanya Nadelle (u3201052)

Simon Thompson

11055 Programming for Design

Flowcharts and Pseudocode

HTML file

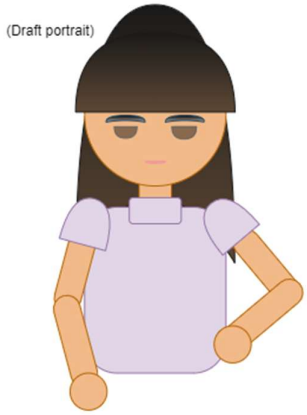
```
<!DOCTYPE html>
<html>
  <head>
    <script src = "https://cdn.jsdelivr.net/npm/p5@1.1.9/lib/p5.js"></script>
  </head>
  <body>
    <h1>Project 1</h1>
    <b>Programming for Design (11055)</b>
    <br>
    <p>By Zanya Nadelle Bendebel (u3201052)</p>
    <p>September 2020</p>
    <p>Unit Convenor & Tutor: Simon Thompson</p>
    <br>
    <br>

    <h2>Self-Portrait Flowcharts</h2>

    <h3>Procedural Flowchart</h3>
    <img src="./u3201052_ProceduralFlowcharts_Portrait.png"/>
    <br>


    <h3>Functional Flowchart</h3>
    <br>

    <b>Self-portrait - Head</b>
    <br>
    <br>
    <img src="./u3201052_Portrait_FunctionalFlowchart_A1.png"/>
    <br>

    <b>Self-portrait - Body</b>
    <br>
    <br>
    <img src="./u3201052_Portrait_FunctionalFlowchart_A2.png"/>


    <h2>Pseudocode</h2>
    <br>
    <b>Self-portrait Head</b>
    <br>
```

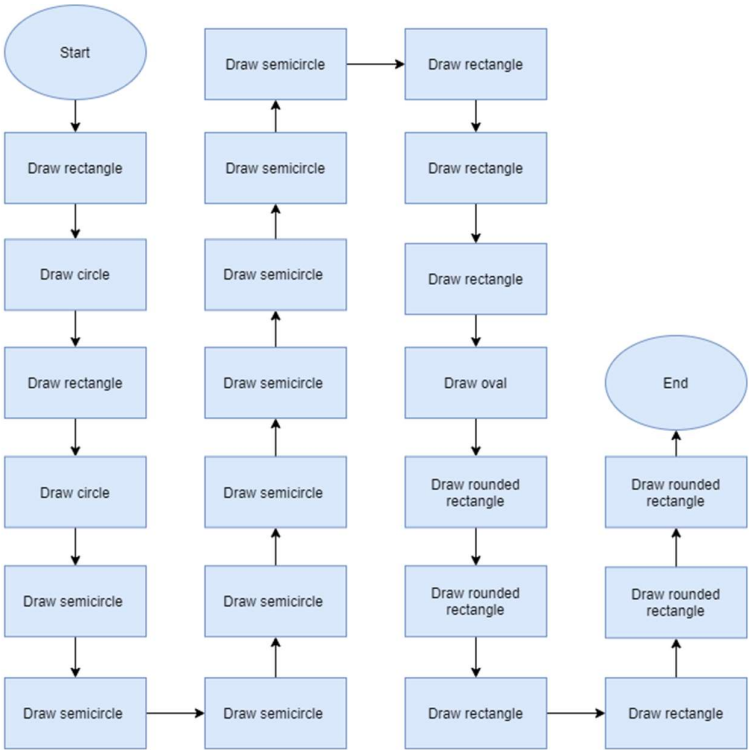
```
    <br>
    <img src="./u3201052_Portrait_PseudocodeA1.png"/>
    <br>

    <b>Self-portrait - Body</b>
    <br>
    <br>
    <img src="./u3201052_Portrait_PseudocodeA2.png"/>

    <h2>P5 Self-portrait</h2>
    <a href="Project1_Self-portrait.html">Click here to see my portrait</a>
  </body>
</html>
```

Flowcharts & Pseudocode

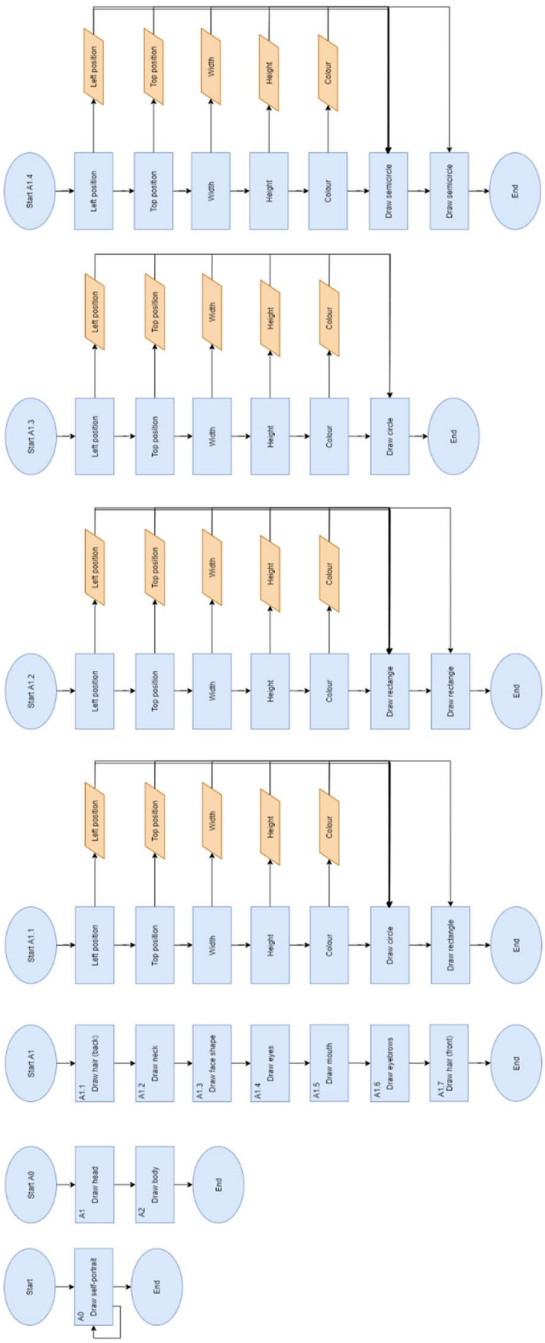
PNG files

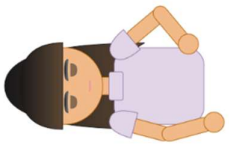
Procedural Flowchart



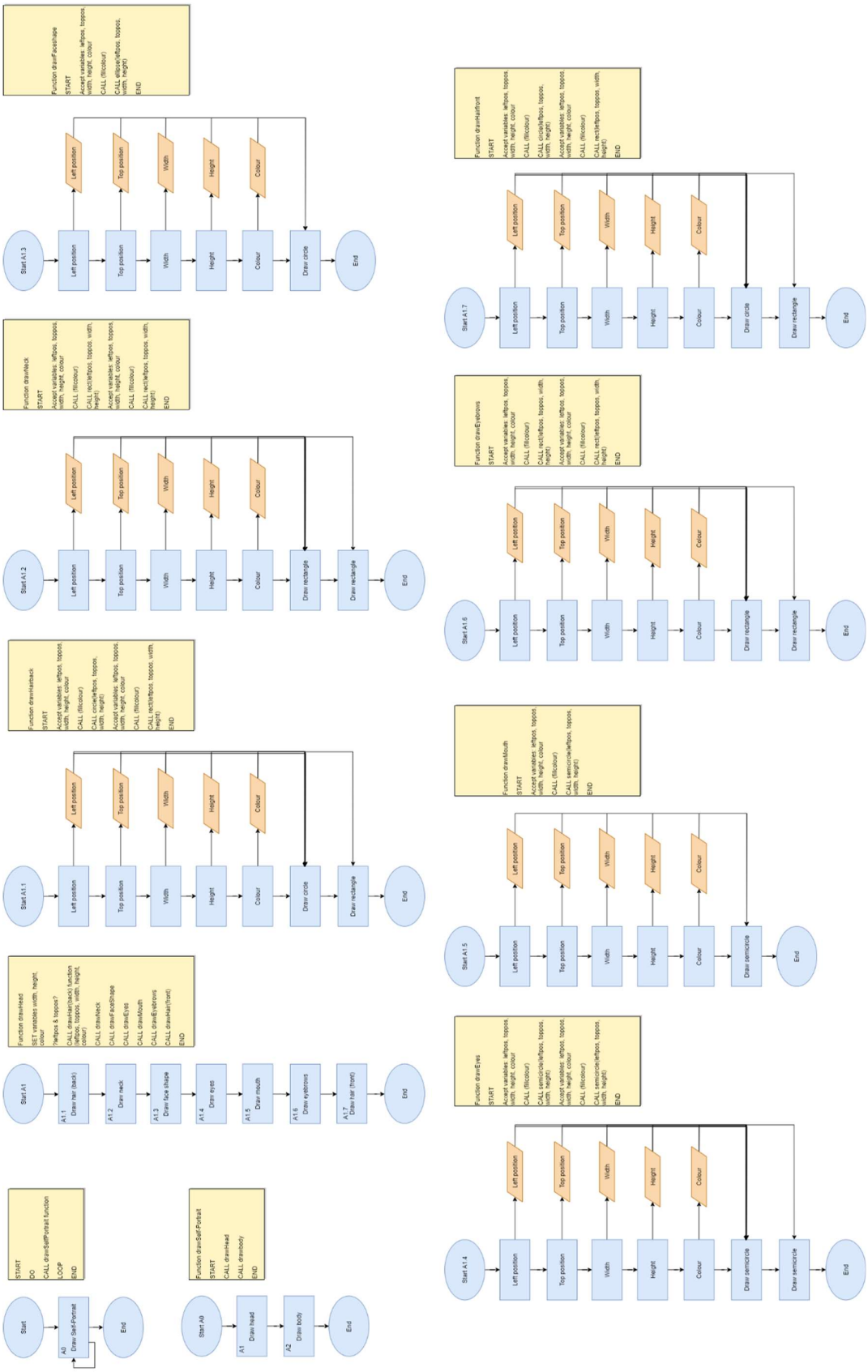


Functional Flowchart A1

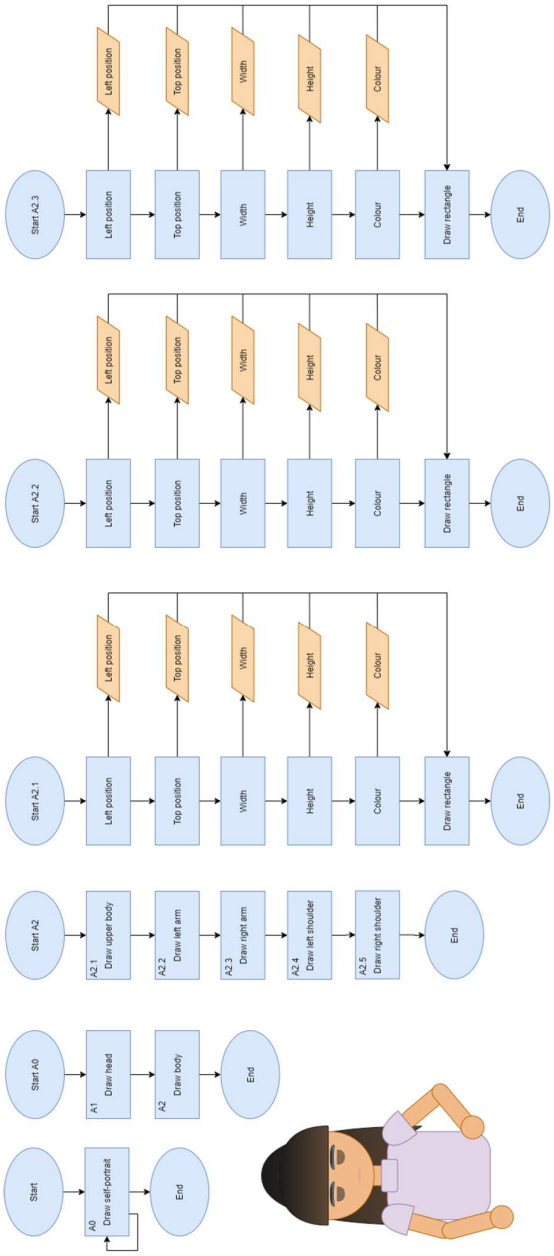


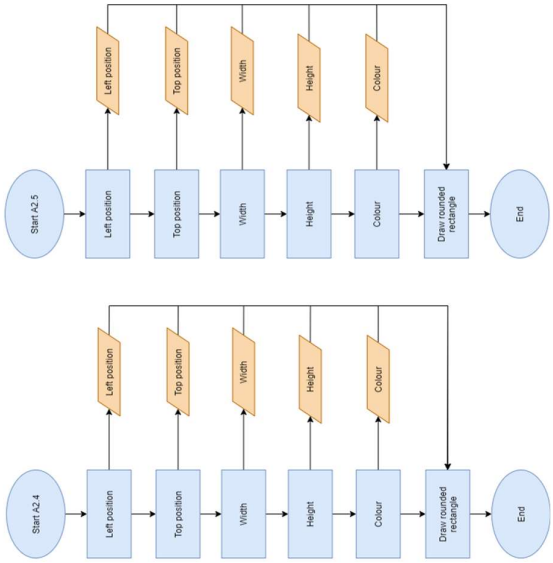


Pseudocode A1

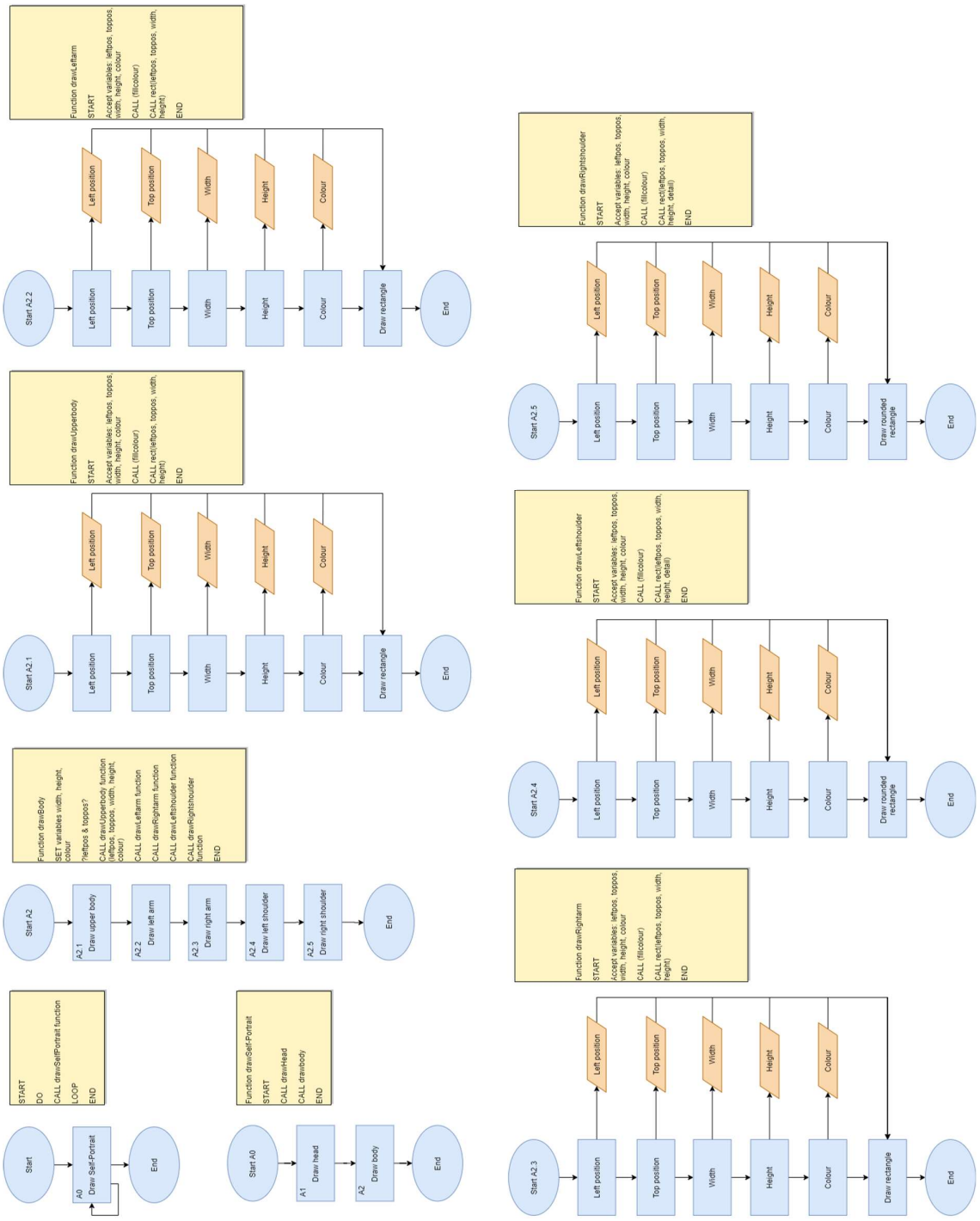


Functional Flowchart A2





Pseudocode A2



Self-Portrait

HTML file

```
<!DOCTYPE html>
<html>
  <head>
    <script src = "https://cdn.jsdelivr.net/npm/p5@1.1.9/lib/p5.js"></script>
  </head>
  <body>
    <h1>Project 1</h1>
    <b>Programming for Design (11055)</b>
    <br>
    <p>By Zanya Nadelle Bendebel (u3201052)</p>
    <p>September 2020</p>
    <p>Unit Convenor & Tutor: Simon Thompson</p>
    <br>

    <h2>Self Portrait</h2>
    <p>Here is my self portrait. I made it using flowcharts, pseudocoding, p5 and understanding programming language.</p>
    <p>The art-style is inspired by the Powerpuff Girls cartoon. I have dark brown hair and eyes, and I also like the colour purple.</p>
    <script src = "Project1_Self-portrait.js"></script>
  </body>
</html>
```

Self-Portrait

JavaScript file

```
//11055 Programming For Design
//Project 1
//Zanya Nadelle Bendebel (u3201052)
//September 2020

//SELF-PORTRAIT

//P5 standard run once function
function setup() {
  // CALL Canvas(width = 400, height = 500)
  createCanvas(400, 500);
}

function draw() {
  background(199,255,215);//#C7FFD7 color background
  strokeWeight(0);//no lines/strokes across all portrait pieces

  // Function drawHead

  // SET variables width, height, colour

  // ?leftpos & toppos?

  // CALL drawHair(back) function (leftpos, toppos, width, height, colour)
  // Accept variables: leftpos, toppos, width, height, colour
  // CALL (fillcolour = dark brown)
  fill(15, 10, 3)
  // CALL rect(leftpos = 50, toppos = 196, width = 275, height = 20)
  rect(50, 196, 300, 275, 20)
  // CALL (fillcolour = dark brown)
  fill(15, 10, 3);
  // CALL ellipse(leftpos = 200, toppos = 230, width = 302, height = 300)
  ellipse(200, 230, 302, 300);


  // CALL drawNeck
  // CALL (fillcolour = skin colour)
  fill(217, 168, 113)
  // CALL rect(leftpos = 175, toppos = 350, width = 55, height = 55)
  rect(175, 350, 55, 55)//rectangle neck
  // CALL (fillcolour = neck shadow colour)
```

```
fill(168, 128, 81)
// CALL rect(leftpos = 275, toppos = 350, width = 55, height = 25)
rect(175, 350, 55, 25)


// CALL drawFaceShape

// CALL (fillcolour = skin colour)
let c = color(217, 168, 113);
fill(c);
noStroke();//no lines
//CALL ellipse(leftpos = 200, toppos = 250, width = 240, height = 230)
ellipse(200, 250, 240, 230)


// CALL drawEyes

//Right eye
// CALL (fillcolour = white)
fill(255)
//CALL arc(leftpos = 265, toppos = 265, width = 80, height = 80, stop = 0, [mode] = PI)
arc(265, 265, 80, 80, 0, PI);//eye (semicircle)
// CALL (fillcolour = brown)
fill(133, 93, 24)//brown coloured eye
//CALL arc(leftpos = 265, toppos = 265, width = 70, height = 70, stop = 0, [mode] = PI)
arc(265, 265, 70, 70, 0, PI);//semicircle eye shape
// CALL (fillcolour = black)
fill(0)
//CALL arc(leftpos = 265, toppos = 265, width = 40, height = 50, stop = 0, [mode] = PI)
arc(265, 265, 40, 50, 0, PI)//pupil (semicircle)
// CALL (fillcolour = white)
fill(255)
//CALL arc(leftpos = 285, toppos = 265, width = 20, height = 20, stop = 0, [mode] = PI)
arc(285, 265, 20, 20, 0, PI)//light reflecting eye (semicircle)

//Left eye
// CALL (fillcolour = white)
fill(255)
//CALL arc(leftpos = 140, toppos = 265, width = 80, height = 80, stop = 0, [mode] = PI)
arc(140, 265, 80, 80, 0, PI);//eye (semicircle)
// CALL (fillcolour = brown)
fill(133, 93, 24)//brown coloured eye
//CALL arc(leftpos = 140, toppos = 265, width = 70, height = 70, stop = 0, [mode] = PI)
arc(140, 265, 70, 70, 0, PI);//semicircle eye shape
// CALL (fillcolour = black)
```

```
fill(0)
//CALL arc(leftpos = 140, toppos = 265, width = 40, height = 50, stop = 0, [mode] = PI)
arc(140, 265, 40, 50, 0, PI)//pupil (semicircle)
// CALL (fillcolour = white)
fill(255)
//CALL arc(leftpos = 160, toppos = 265, width = 20, height = 20, stop = 0, [mode] = PI)
arc(160, 265, 20, 20, 0, PI)//light reflecting eye (semicircle)


// CALL drawMouth

//smile
// CALL (fillcolour = white)
fill(255)
//CALL arc(leftpos = 200, toppos = 325, width = 40, height = 13, stop = 0, [mode] = PI)
arc(200, 325, 40, 13, 0, PI)//teeth


// CALL drawEyebrows

//Right eyebrow
// CALL (fillcolour = dark brown)
fill(15, 10, 3);
// CALL rect(leftpos = 220, toppos = 250, width = 75, height = 10)
	rect(220, 250, 75, 10);//rectangle eyebrow

//Left eyebrow
// CALL (fillcolour = dark brown)
fill(15, 10, 3)
// CALL rect(leftpos = 15, toppos = 250, width = 75, height = 10)
	rect(110, 250, 75, 10);//rectangle eyebrow


// CALL drawHair(front)

//Fringe
// CALL (fillcolour = dark brown)
fill(15, 10, 3)//dark brown hair colour
// CALL rect(leftpos = 70, toppos = 140, width = 260, height = 20, detail = 20)
rect(70, 140, 260, 105, 20);
// CALL (fillcolour = dark brown)
fill(15, 10, 3)//dark brown hair colour
//CALL arc(leftpos = 20, toppos = 140, width = 120, height = 20)
ellipse(200, 140, 120, 20);//semicircle shape (fringe) to cover empty spot on head
```

```
  // Function drawBody
  // SET variables width, height, colour
  // ?leftpos & toppos?


  // CALL drawUpperbody function (leftpos, toppos, width, height, colour)
  // CALL (fillcolour = purple)
  fill(212, 182, 252)
  // CALL rect(leftpos = 70, toppos = 410, width = 260, height = 120, detail = 40)
  rect(70, 410, 260, 120, 40);//clothing
  // CALL (fillcolour = purple)
  fill(202, 140, 222)
  // CALL rect(leftpos = 161, toppos = 387, width = 80, height = 40, detail = 10)
  rect(161, 387, 80, 40, 10)//sweater collar

  // CALL drawLeftarm function
  // CALL (fillcolour = skin colour)
  fill(217, 168, 113)
  // CALL rect(leftpos = 30, toppos = 460, width = 50, height = 70)
  rect(30, 460, 50, 70)//left arm

  // CALL drawRightarm function
  // CALL (fillcolour = skin colour)
  fill(217, 168, 113)
  // CALL rect(leftpos = 315, toppos = 460, width = 50, height = 70)
  rect(315, 460, 50, 70)//right arm

  // CALL drawLeftshoulder function
  // CALL (fillcolour = purple)
  fill(202, 140, 222)
  // CALL rect(top-left = 30, top-right = 15, bottom-right = 10, bottom-left = 8)
  //a rectangle with rounded corners having the following radii: top-left = 30, top-right = 15,
bottom-right = 10, bottom-left = 8.
  rect(20, 400, 75, 65, 30, 15, 10, 8);//Left sleeve
  // circle(60, 430, 90)//Left sleeve

  // CALL drawRightshoulder function
  // CALL (fillcolour = purple)
  fill(202, 140, 222)
  // CALL rect(top-left = 15, top-right = 30, bottom-right = 8, bottom-left = 10)
  //a rectangle with rounded corners having the following radii: top-left = 15, top-right = 30,
bottom-right = 8, bottom-left = 10.
  rect(300, 400, 75, 65, 15, 30, 8, 10);//Left sleeve
  // circle(340, 430, 90)//Right sleeve
```

```
// Function drawTitle
// SET variables sizze, weight, style
// ?leftpos & toppos?


//Heading
// CALL (fillcolour = purple)
fill(202, 140, 222)
// CALL textSIZE(theSize = 28)
textSize(28);
// CALL strokeWeight(theWeight = 0.5)
strokeWeight(0.5);
// CALL textStyle(theStyle = bold text)
textStyle(BOLD);

// CALL line(leftpos, toppos, width, height)
line(0, 12, width, 12);
// CALL textAlignment(theAlignment = center top)
textAlign(CENTER, TOP);
// CALL text('[words]' = PROJECT 1, leftpos = 0, toppos = 16, width)
text('PROJECT 1', 0, 16, width);

//Subtitle
// CALL (fillcolour = dark brown)
fill(15, 10, 3)
// CALL textSIZE(theSize = 12)
textSize(12);
// CALL strokeWeight(theWeight = 0.5)
strokeWeight(0.5);
// CALL textStyle(theStyle = normal text)
textStyle(NORMAL);

// CALL line(leftpos, toppos, width, height)
line(0, 24, width, 24);
// CALL textAlignment(theAlignment = center top)
textAlign(CENTER, TOP);
// CALL text('[words]' = 11044 PROGRAMMING FOR DESIGN, leftpos = 0, toppos = 48, width)
text('11044 PROGRAMMING FOR DESIGN', 0, 48, width);

//Text
// CALL (fillcolour = purple)
fill(202, 140, 222)
// CALL textSIZE(theSize = 32)
```

```
  textSize(32);
  // CALL strokeWeight(theWeight = 0.5)
  strokeWeight(0.5);
  // CALL textStyle(theStyle = normal text)
  textStyle(NORMAL);

  // CALL line(leftpos, toppos, width, height)
  line(0, 24, width, 24);
  // CALL textAlignment(theAlignment = center top)
  textAlign(CENTER, TOP);
  // CALL text('[words]' = student number U3201052, leftpos = 0, toppos = 450, width)
  text('U3201052', 0, 450, width);

}

var message = "Hello there! Click ok to proceed to my portrait :)"; //Welcome popup message

/* Please create comments for your algorithm from last weeks exercise
in a script so that it is ready to create the program */

// this command will write the message into a popup in your browser
window.alert(message);
```