

Process & Decision Documentation

Project/Assignment Decisions

In completing Side Quest #2, I learned how to manipulate an objects' colour and properties to convey an emotion (frustration). I specifically edited the visual properties of the “blob”, such as wobble, and its time values for breathing animation, such as tSpeed. I also updated the blob and the game's background colour to reflect my chosen emotion. → I enhanced the code written by Karen and David (Week 2 Example 3 Repo).

My Code Documentation

1. Updated “wobble” to 12 to add more movement to the blob, representing my chosen emotion (frustration).

- When figuring out how to change the orientation/effects of the blob, I referred to the visual properties section of the code in “let blob3”, which I understood was used to create the blob because it is a “let” statement.
- I looked up what wobble meant because I didn't understand what it meant.
- I figured out that the wobble function was used to make shapes and text appear to vibrate or shake (jianj691, 2026) according to the p5js website (linked in the appendix).
- I didn't understand what wobbleFreq meant and couldn't reference it online, so I would change the number, push the code and view the site through GitHub. Therefore, I just changed it from the original code to 1.1, and I didn't see any major changes so I just left it at 1.1.
- I referred to Karen and David's note beside “jumpV” to determine that it controls the initial jump impulse of the blob. Similar to the wobbleFreq, I would change the number, push the code and view the site through GitHub. I determined that making the number lower, which was -15 (see figure 1 for reference) it would jump higher than what it was before. I also tested it at 0 and saw the difference in how high it would jump.

```
r: 26, // Base radius  
points: 48, // Number of points used to draw the blob  
wobble: 12, // Edge deformation amount  
wobbleFreq: 1.1,
```

Screenshot 1: GitHub Desktop showing the commit history and code diff for sketch.js.

The screenshot shows the GitHub Desktop application interface. The repository is "ahormill_sidequest_W2" and the branch is "main". The commit history lists several changes, with the most recent being "Updated blob speed and text colour" by "arabella555" 9 days ago. The code diff for sketch.js shows the following changes:

```

@@ -10,8 +10,8 @@ let blob3 = {
 10  10 // Visual properties
 11  11 r: 26, // Base radius
 12  12 points: 48, // Number of points used to draw the blob
 13  - wobble: 10, // Edge deformation amount
 14  - wobbleFreq: 0.9,
 13  + wobble: 12, // Edge deformation amount
 14  + wobbleFreq: 1.1,
 15  15 // Time values for breathing animation
 16  16 t: 0,
 17  17 @@ -25,7 +25,7 @@ let blob3 =
 25  25 accel: 0.55, // Horizontal acceleration
 26  26 maxRun: 4.0, // Maximum horizontal speed
 27  27 gravity: 0.65, // Downward force
 28  - jumpV: -11.0, // Initial jump impulse
 28  + jumpV: -15, // Initial jump impulse
 29  29
 30  30 // State
 31  31 onGround: false, // True when standing on a platform
 32  32 @@ -140,7 +140,7 @@ function draw() {
 140 140 drawBlobCircle(blob3);
 141 141
 142 142 // --- HUD ---
 143  - fill(0);
 143  + fill(220, 40, 40);
 144 144 text("Move: A/D or +/- • Jump: Space/W/t • Land on platforms", 10, 18);
 145 145
 146 146

```

Screenshot 2: GitHub Desktop showing the commit history and code diff for sketch.js.

The screenshot shows the GitHub Desktop application interface. The repository is "ahormill_sidequest_W2" and the branch is "main". The commit history lists several changes, with the most recent being "Update sketch.js" by "arabella555" 9 days ago. The code diff for sketch.js shows the following changes:

```

@@ -10,12 +10,12 @@ let blob3 = {
 10  10 // Visual properties
 11  11 r: 26, // Base radius
 12  12 points: 48, // Number of points used to draw the blob
 13  - wobble: 7, // Edge deformation amount
 14  - wobble: 8, // Edge deformation amount
 13  + wobble: 8, // Edge deformation amount
 14  + wobbleFreq: 0.9,
 15  15 // Time values for breathing animation
 16  16 t: 0,
 17  17 - tSpeed: 0.01,
 18  18 + tSpeed: 0.03,
 19  19
 20  20 // Physics: velocity
 21  21 vx: 0, // Horizontal velocity
 22  22 @@ -63,10 +63,10 @@ function setup() {
 63  63 }
 64  64
 65  65 function draw() {
 66  - background(240);
 66  + background(255);
 67  67
 68  68 // --- Draw all platforms ---
 69  - fill(200);
 69  + fill(255, 0, 0);
 70  70 for (const p of platforms) {
 71  71 rect(p.x, p.y, p.w, p.h);
 72  72
 73  73 @@ -154,7 +154,7 @@ function overlap(a, b) {

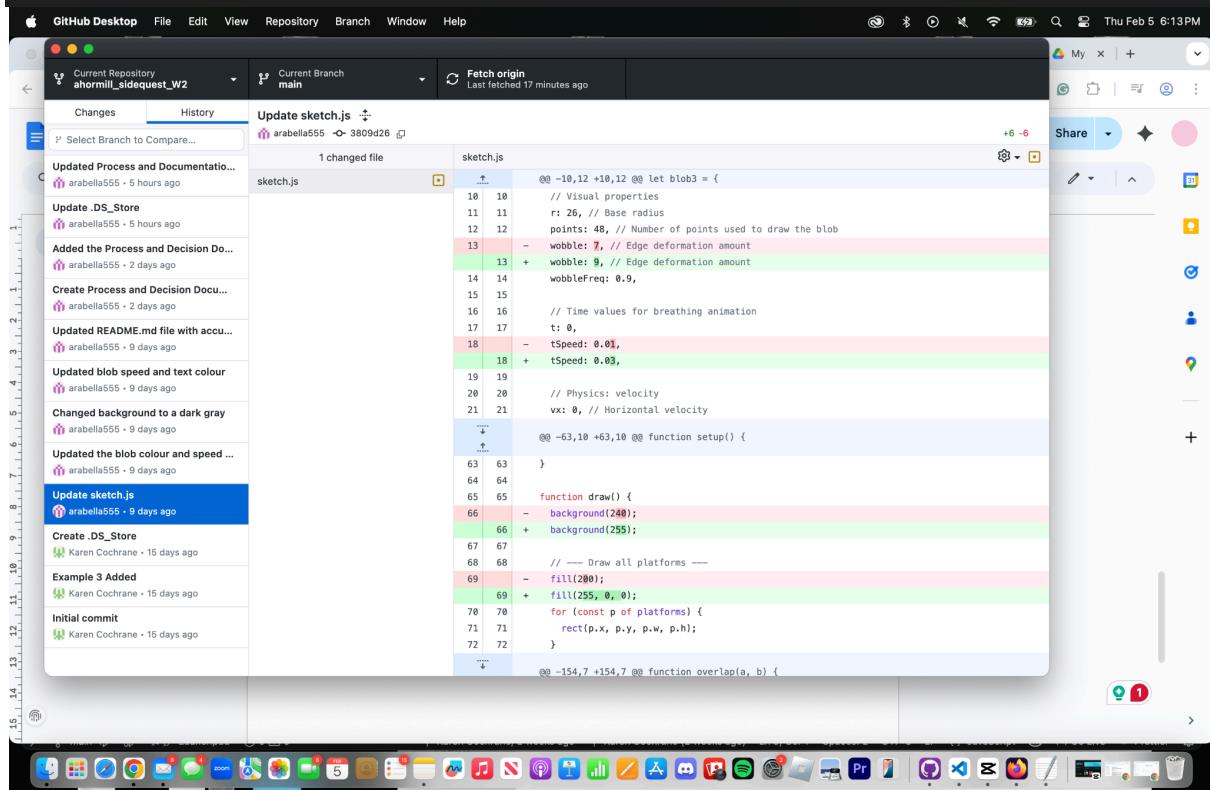
```

Figure 1 & 2 (screenshotted by Arabella Hormillada)

2. Updated speed to 0.05

- I updated the speed to make it move more slowly, so the user has more difficulty controlling the blob and meeting the platform when it is going up and down.
- I had this idea because I was trying out the original code by Karen and David, and I tried to think about how it could convey the feeling of frustration. I determined that changing the properties and speed of the wobble would make it more difficult for the user to use.
- I referred to the notes written by Karen and David to determine that the tSpeed function was used to change the time values for the breathing animation of the blob.
- I tested out different speed numbers like 0.20, 0.10, saving the code and then pushing it on GitHub, reloading the website to see changes. Then I would go back to editing the code to repeat the process.
- I determined 0.05 was a good enough speed to represent my emotion, so I left it at that.

```
// Time values for breathing animation
t: 0,
tSpeed: 0.05,
```



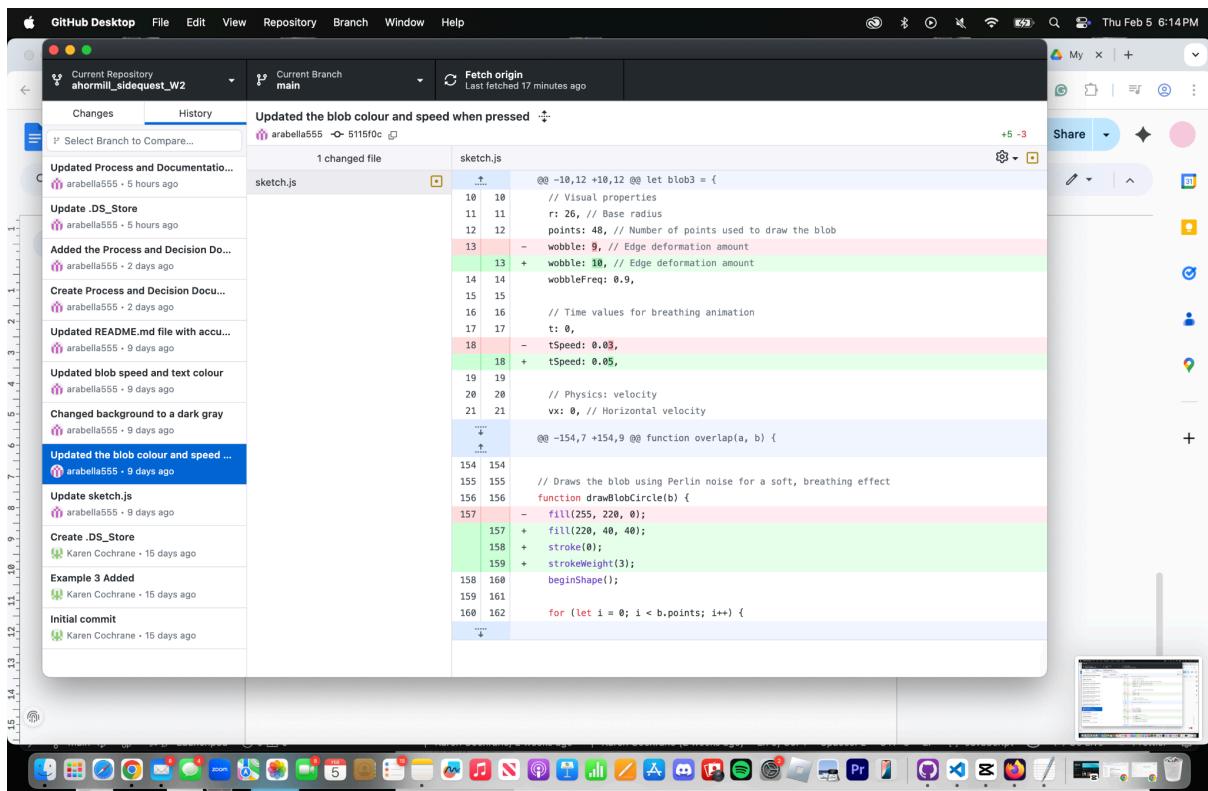


Figure 3 & 4 (screenshoted by Arabella Hormillada)

3. Updated background to (40) and fill to (255, 0, 0)

- I primarily wanted to edit the colours and effects of the code to convey my emotion. I chose darker colours like red, gray, and black because to me, these colours represent the emotion.
- Referred back to previous coding courses I've taken (CS 105 and CS 106) and my own understanding, that when you set the background to 0, it makes it black, and 255 when you make it white. Therefore, I set it to 40 to make it a lighter gray because I originally set it to 50, then wanted it a little darker to make the text appear better. I understood that the background colour is set in draw, referring back to my knowledge about p5js and the draw function.
- Made the fill of the platforms red by adjusting the RGB. Since the fill is written in RGB, I wrote the first number at 255 to make it appear the most red, and made the G and B zero so it would just be red.

```
function draw() {
  background(40);

  // --- Draw all platforms ---
  fill(255, 0, 0);
  for (const p of platforms) {
    rect(p.x, p.y, p.w, p.h);
  }
}
```

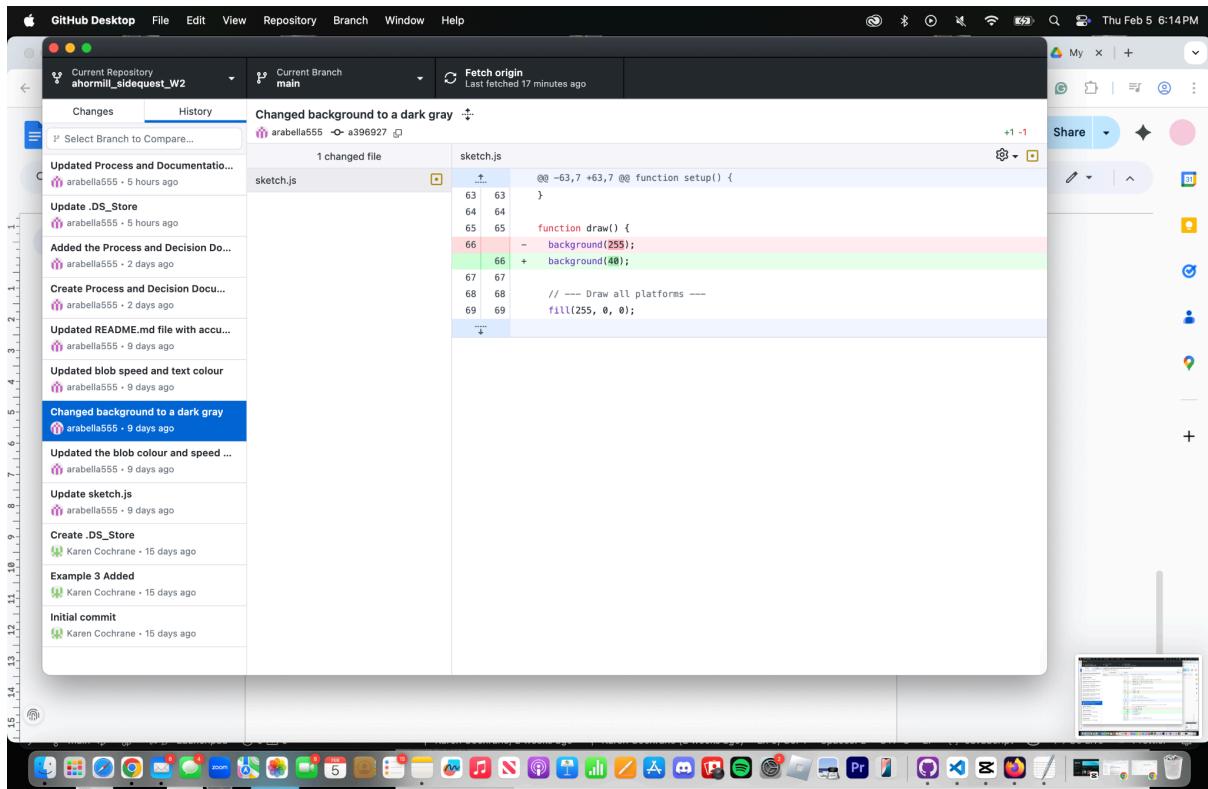


Figure 5 (screenshoted by Arabella Hormillada)

4. Updated “Blob” colour to red and stroke to black with a stroke width of

- Similar to the background colour, I wanted to update the blob’s colour to convey the emotion.
- I determined that this function was used to draw the blob due to Karen and David’s notes, also because the name of the function is drawBlobCircle.
- Used previous knowledge of p5js through CS 105 and CS 106 to understand the fill and stroke function, and that to make the strokeWeight thicker, you must increase the number.
- Wanted to make it a different shade of red compared to the platforms, so I just tested out different RGB combinations, making red the highest number and B & G the same.
- I would test it out by randomizing the numbers, saving the changes, and pushing it to GitHub, reloading the website to see how the colour changes.

```
// Draws the blob using Perlin noise for a soft, breathing effect
function drawBlobCircle(b) {
  fill(220, 40, 40);
  stroke(0);
  strokeWeight(3);
  beginShape();
```

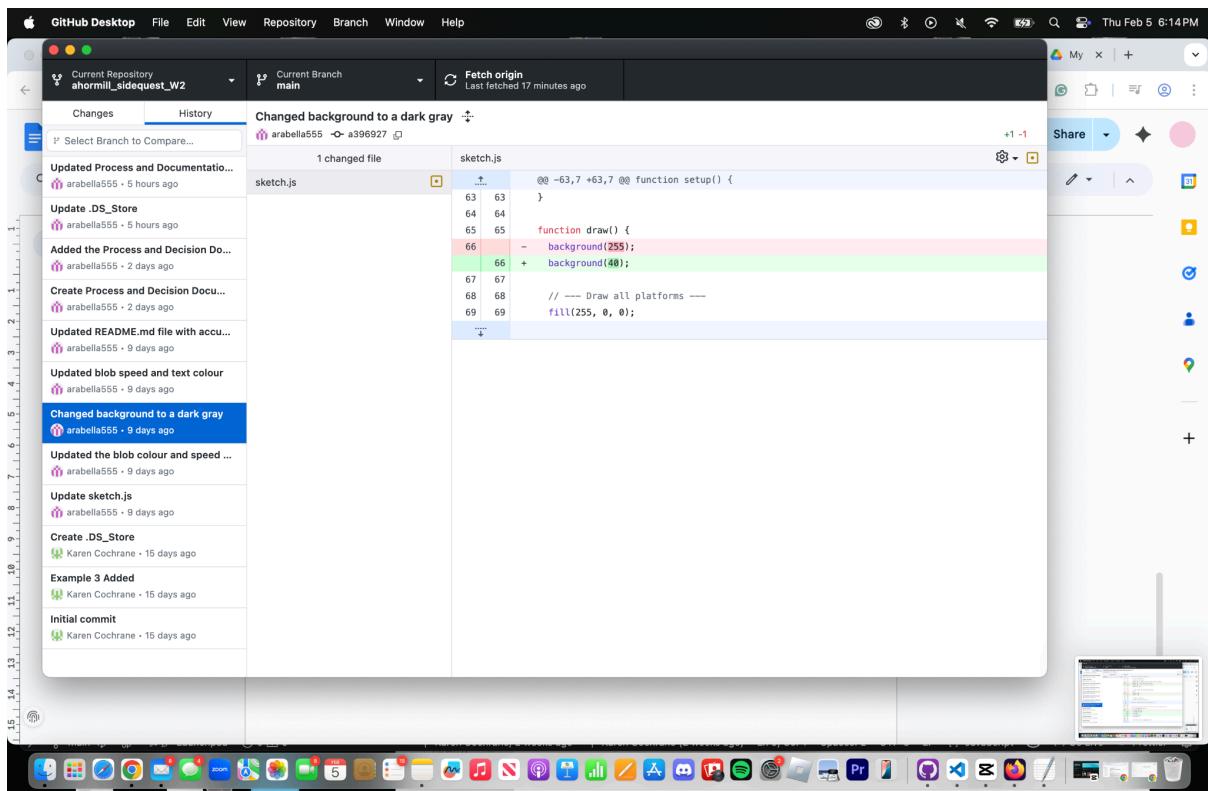


Figure 6 (screenshoted by Arabella Hormillada)

GenAI Documentation

I did not use GenAI for this side quest.

Appendix

D_Snyder. (2026). *p5.js sketch a6w45-iy9* [p5.js sketch]. p5.js Web Editor.
https://editor.p5js.org/D_Snyder/sketches/a6w45-iy9

jianj691. (2026). *p5.js sketch yFI9QsRP6* [p5.js sketch]. p5.js Web Editor.
<https://editor.p5js.org/jianj691/sketches/yFI9QsRP6>