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Cart 253

Reflective Essay

This semester has been a rollercoaster, but it has been very gratifying, nonetheless. I didn't have much knowledge of programming when I started, as I graduated from a studio art program. While I had experience with digital work, I hadn't ventured into programming. My only prior experience came when I decided to apply for this program and built my portfolio from scratch. I relied on videos, online searches, and trial and error to figure things out. Finishing my portfolio website in less than a week made me feel incredibly proud of myself. At that point, I knew more about HTML and CSS but had only basic familiarity with JavaScript, like creating toggle navigation.

Despite this accomplishment, I was nervous about starting a new program. I knew the approach to projects in programming would be vastly different from my art practice. Additionally, I was worried that my ADHD medications and other health challenges might hinder my ability to grasp the concepts of p5.js. My journey started slowly, but after switching to medications with fewer side effects, I found myself becoming more daring with my ideas.

When I built my portfolio website, I relied on a straightforward template for the design, so I didn't have to explore too deeply. However, the first project in this class felt overwhelming. I was completely freaking out and forgetting everything we had learned. Over time, though, I noticed a big change in my confidence and comfort with coding. Even when I don't know

exactly how to implement something, I can often grasp the main concept of what the code needs to do. What I'm missing now is more knowledge and practice.

I've also found that my way of communicating about my code has improved. Instead of vaguely saying, "I want to do this," I can now articulate, "If this specific thing interacts with this part, it should trigger this action." This shift reflects how I've started to think critically about programming and problem-solving. While I still sometimes overcomplicate or overthink my approach, I've also become more willing to experiment.

Interestingly, my growing knowledge of programming has influenced how I approach my creative practice in computation art. My experience with various art forms—painting, sculpture, cosplay, drawing, comics, installation, marketing, digital art, 3D modelling, photography and so on has made trying new things feel natural. The more comfortable I become with a medium, the more my approach to it starts blending with my other projects and reflects a part of me as an artist. For example, in the *frog frog frog* project, I integrated my visual art skills into the programming, which opened up a variety of creative possibilities.

I also enjoyed the *variation* project the most, where I approached coding as I would any art piece. My dyslexia and willingness to experiment led to unexpected results that I ended up keeping as additional variations. This process mirrored how I approach my creative work, allowing myself to be freer in the ideation phase. This freedom represents a key aspect of my artistic process. Initially, I worried that my strengths and knowledge were vastly different from my classmates, but I found myself helping others with their code and exchanging ideas, which made me feel like something clicked and comprehension became easier. Some even described or commented in a way that described me as seasoned or mature in my ideas and approach, which

surprised me at first. I realized that my diverse experiences across mediums and having already graduated brought a more veteran vibe to my explanations or way of speaking. I found that our different perspective, experiences and knowledge gave unique perspective that complement the collaborative environment.

That said, I still find some aspects challenging, particularly the math and physics involved in programming. Although I'm good at these subjects, I sometimes struggle to translate concepts into a physical or visual context. For example, in the *mob jam*, I completely forgot how cosine and sine worked in programming. Visually seeing the canvas confused me because I couldn't picture the graphs and x-y coordinates that were in concept present which then made it difficult in understanding how the formulas' roles worked in the code. Revisiting how cosine and sine looked visually helped me make sense of the code again. Similarly, while working on radius calculations for my *variation* project, I had to sketch out the problem like a physics or math diagram to understand it better. I'm still adapting to the "invisible" nature of math and physics in code. One part of the reason is my learning disabilities and how I picture things in my mind. This was sometimes an added difficulty with coding which had a more learning and writing base approached but I don't see it as a bad thing. As it is also the reason in a way that helps me experiment with a wide variety of mediums, in addition to my thought and idea process.

One of my favourite discoveries has been working with *if* statements. They resonate with how my brain naturally thinks, making it easier to explore creative and diverse possibilities in my code. I also found creating boolean properties fascinating, though I need more practice with them. For instance, I learned that you could define attributes like speed, acceleration, and velocity all in the same const value, but I often forget I can create custom terms to simplify my

code. I tend to work within functions and *if* statements first before realizing I could design new attributes to streamline my process.

Sometimes, I approach coding too rigidly, as though everything has predefined rules. For example, when working on a brick-breaker game, I didn't know how to handle the overlap between a circle and a rectangle. I only knew how to calculate overlaps between two circles or two rectangles. It didn't occur to me that I could adapt the rectangle's criteria into the ellipse. However, I enjoy getting into a focused "zone" when tackling problems and experimenting with different approaches. While coding the brick breaker, I spent hours testing loops, arrays, and other methods to replicate bricks efficiently. I found a loop that worked visually but counted as a single object, which taught me that there are many paths to solving a problem.

This willingness to explore also ties into my artistic practice. I'd like to experiment more with loops and randomness to create visual effects that merge with my art. Using code as a base to generate artwork, then translating that into physical or digital pieces, feels like an exciting direction.

I also worked on a website for *211* that displayed visual effects related to some of my disabilities. My goal was to use p5.js to include interactive elements, like drawing or painting tools that are disrupted or influenced by external factors. While I couldn't fully implement these ideas early in the semester, I plan to revisit and expand on them.

Looking ahead, I'm excited to continue learning and to integrate programming into my physical art projects. I love the simplicity of certain coding concepts, like game variations, which don't always require deep complexity. This approach feels refreshing compared to some aspects of

traditional art, where innovation is often emphasized. My experience experimenting across mediums has helped me appreciate the value of simplicity and iteration.

At the same time, I want to explore more advanced concepts, especially those involving interaction with physical objects. I think programming could elevate my installation work, making it more immersive and engaging. For example, I've considered projecting animations onto a canvas background, inspired by early cartoons where characters and backgrounds were drawn separately. By adding interactive coding elements, I could create dynamic and responsive installations.

I also want to experiment with cosplay and movie props, incorporating programming to trigger effects or respond to inputs. These ideas, along with integrating coding into my artistic process, open up countless possibilities for merging mediums. I'm excited to see where this journey takes me. Lastly, just experimenting more into interactive website and games is also something I want to dive deeper in. Before the semester, I didn't think it would be completely possible but now I can imagine it clearer.