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Post-Reflection

Before taking this course, my grasp of programming – whether it be JavaScript, CSS, or C# - was near non-existent, a scattered assortment of facts rather than a cohesive skill set. My only experience came mostly from a micro-program in Web Design and UI, as well as a college course in game programming using C#. I knew fragments of syntax, recognised the general idea of functions, and had a vague sense of what values and conditionals did from college, but I could neither truly connect nor grasp their use after a few years. Throughout this semester, my understanding of what code can do and how it can support my artistic creativity has improved. In this reflection, I look back at where I started, how my knowledge has grown, and how it has helped shape my future in programming and the visual arts.

At the beginning, I came in with little experience from building interfaces, designing my website, and writing somewhat disjointed scripts in C#, but these skills didn't translate smoothly into the kind of creative building this class encouraged. My previous work in college had been more orientated towards structure and functionality than it had been with artistic creativity, and with Santos, I touched on CSS and only the foundation in JavaScript. While it did help smooth over a few bumps when trying to understand a few concepts faster, I was still left unsure about my ability to express myself in creative coding. I could copy what I saw and understand a small bit of the logic, but I didn't yet know how to transform and utilise it into something more.

P5.js was entirely new to me, and creative coding sounded like an abstract vision or possibility rather than anything concrete. I had thought of it more as structure and performance than art, despite the wide range of possibilities I knew coding introduced. And as the course progressed, the most significant change had been the shift from my fragmented understanding to a sense of logic –the feeling that I could move through coding with a bit more intuition without having to constantly return to past examples for simpler codes. One of the most dramatic transformation came from understanding how the fundamental concepts –variables, conditionals, loops, functions, arrays, etc– behaved in JavaScript. This course showed me how these concepts can be used to shape motion, colour, interactivity and visual form. Over time, the few logic in C# that I had remembered slowly connected with the creative possibilities of p5.js references, and programming became easier. I started to see my

knowledge –combined with the new tools and support of lessons – grow. Instead of an impasse, it became a flexible tool.

It gave me the skill to reshape my approach to creativity and a wider berth for the kind of projects I could explore. With tools like p5.js, I could comfortably design objects that could move and respond to triggers/commands. For example, *if()* and *else if()* conditionals could shape my intentions when wanting to call for an object. Similarly with loops, something as simple as *for(let i = 0; i < x; i += 10)* expanded both my technical vocabulary and ability to build a pattern and call for changes within my work, by generating the objects I wanted without having to manually calling for them.

With variables and arrays, it gave me the possibility to build a script that could affect multiple different objects within a single function. They allowed me to assign similar values, for example, *let altar = {x: random(200, 1300 - 200), y: 340, size: 50, altar: altars, }; return altar;* to multiple objects once called in the *setup()*. Although I had trouble with arrays, assigning names when using *for ...of*, when I finally understood, it helped shortening my previously long script into something easier to digest.

Other concepts –keyboard events and conditionals– felt more natural since it worked on simpler logic and mathematics for their layout and structure. It made the interactivity of my project much more dynamic than it was before, making it both smoother and functional. Especially with the implementation of *random()* or curves and lines such as *sin()* and *cos()* in my x and y position. It thrived on unpredictability to make it more interesting by producing organic texture, chaotic motion and generative compositions that look unplanned but still purposeful.

However, creative coding introduced a new layer of challenges: balancing between my creativity with the level of my knowledge and structure with my spontaneity to change my intention halfway through it. As an artist, I'm comfortable with improvisation on the spot when it comes to my work, but coding often requires planning. It was difficult to balance planning my intentions, finding the methods and tools to build it, when it could change within the same hour, because I was hit with a sudden brainstorm. Fortunately, the web is expansive, and utilising its reach to find tools, such as Mozilla developers, W3School and youtube tutorials, helped me move forward and achieve my intended, planned and sudden vision. As someone who still struggles with programming, I can shape interactive scenes, dynamic and random object movement, and build a visual experience that responds to input –things that I could only dream of doing before. Now, despite all my chagrin, I enjoy creative coding; it has expanded my toolkit, giving me another medium to add to my repertoire.

Even as I work towards hopefully becoming a graphic designer, I can see creative coding becoming a part of my future –something I can return to in my free time, or as a side project. This course has shown me that coding doesn't have to be separate from design. Instead, it can expand the

possibilities available to me as an artist. I might not feel so close as to call myself a creative coder, not because I don't plan to me it my main career, but I now understand how this tool can support me in my endeavours. My view on creative coding has shifted from seeing it as a technical skill to a flexible medium for generating patterns, motions and interactive works. In the future, I'm excited to use coding to possibly experiment with ideas outside my professional work.