Post reflection

Hubert Sia

Prior to this class and my entry into university, I had some background experience with programming in technical areas like front-end development, web development, and database management. However, when it came to visual programming, the only tool I had explored was Touch Designer, and I had fun experimenting with it. Compared to where I am today, my understanding of programming has grown, especially in working with p5.j. Learning p5.js was significant for me because it introduced me to a new way of thinking about programming creatively. One new concept I learned in this course is how to use JSON files to store data and keep scripts organized, something I had never encountered before.

Additionally, my understanding of certain foundational programming concepts, like **for-loops**, became clearer through practice in this class. For example, I used loops and arrays in assignments to create dynamic visual effects. Learning how to work with particle systems, integrate p5 webcam input, and use the microphone system were some of the highlights of the semester for me. These tools gave me more ways to experiment and expand my coding capabilities beyond just the technical aspects I was already familiar with.

After 12 weeks of CART 253, I feel much more confident in my programming abilities and my relationship with programming has become more positive. As mentioned earlier, learning p5.js not only introduced me to a new programming language, but also simplified some aspects of JavaScript programming for me. For example, using JSON files in projects like *positive.js* allowed me to keep the script clean and easier to manage. Exploring examples like particle

systems, which use the **class** function, helped me understand how object-oriented programming could be used creatively. The p5 webcam and audio input systems were other exciting tools I explored and integrated into my work.

That being said, this semester wasn't without its challenges. One of the biggest struggles I faced was debugging scripts that weren't working as expected. I often spent long hours trying to fix issues, and there were times when I had to set the project aside and return to it later with a fresh perspective. If I couldn't find a solution, I simplified the code and focused on achieving a basic version of my goal. Another challenge was adjusting my mindset around programming. Before this course, I saw programming as purely technical—something used for database management or web development—tasks that felt more like work than creative expression.

A turning point for me was when you said something along the lines of, "We're not here to train super programming soldiers." At first, I was doubtful because my past experience made me think of programming as something rigid and purely functional. But after reflecting on that statement, I realized the potential for programming to be a medium for creativity. Instead of focusing on the technical side from the start, I let myself generate ideas freely, worrying about the technical implementation later. This mindset shift helped me see programming as less intimidating and more as a tool for creativity.

When I started combining art and programming, I began to see the possibilities for turning abstract ideas into something real. It gave me the opportunity to experiment and create works that I wouldn't have imagined before. By focusing on creativity first, I felt less restricted and more open to exploring unconventional approaches. Programming became a way to bring chaotic and imaginative ideas to life. For example, using interactive elements like webcam input or audio input in my projects allowed me to add layers of engagement that I hadn't considered before.

Overall, I feel that I’m starting to embrace the mindset of a creative coder. This course has helped me step away from the rigid, technical programming I was used to in cegep and move towards a more open-ended and experimental approach. I’ve also enjoyed seeing the work of my classmates and other creative coders online. Their ideas and projects have inspired me to push my own creative boundaries and think about how to incorporate programming into new forms of art.

In the future, I hope to create installations or projections that are interactive and accessible to everyone. I’m not interested in making video games because I feel that idea is overused. Instead, I want to explore ways to connect people through technology and art in a meaningful and innovative way. This course has shown me that programming can be more than just a tool it can be a way to bring creative ideas to life and share them with the world.