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CART 253

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### CART 253 Post Reflection

At the start of this course, I had very little coding knowledge, save for a couple of personal projects where I attempted to follow online tutorials for GameMaker. However, even after having followed these tutorials in some length, I still couldn't wrap my head around coding. I would follow them almost blindly, copying the code one for one without fully grasping the logic behind what I was writing. All that to say that I basically had no experience, and so going into this class felt daunting at first. Part of this, I would say, stems from the common sort of discussions around coding being very difficult. It is often spoken about the same way math is; something that can be relatively inaccessible due to its difficulty and is made for the particularly 'logical' and 'un-artistic' mind. It would be easy to say, then, that one of the changes in my knowledge would be having any coding skills at all. However, while this is true, there was also a mental shift as well. I went from viewing coding as something daunting to something that, while I still had my ups and downs, is a realistically attainable skill, as well as something that can also be used artistically.

On a more specific level, I feel as if I learnt to 'think like a computer', to use the terms mentioned in class. Being able to get a grasp on loops and arrays, especially, I feel as if they made me consciously begin to process the patterns in which the computer calculates the information. A particular example would be during my final project, 'Cycle'. As I went through the exercises, I felt as if the 'for loops' section wasn't really sticking in my mind. Even the refactoring aspect felt hard for me to grasp. However, I finally forced myself to

understand how they worked as a way to get my character to interact with the paths. Seeing this in action I felt like it finally clicked, the concepts becoming much more simplified in my mind as I noticed it really was just a matter of plugging variables into various similar equations. In fact, much of the math we were shown in this class is all incredibly similar (such as the aforementioned for loops, refactoring, plugging in arrays), and getting ahold of this distinct similarity between this is what allowed me to finish the project.

A similar thing happened as I struggled with the text boxes. As I worked through the project, I felt as if I was becoming more and more familiar with the ways in which the computer might process information wrongly, or rather, differently from me. The text within my text boxes were not showing up, and would only show up in very specific circumstances, and I struggled for a long time trying to figure out why it wasn't working. One obvious error was that I hadn't re-set the Index for the dialogue, along with some of the information being misplaced under various other functions. However, this issue felt overwhelming to me because of the amount of information I felt I was faced with. With the first text box being done in class with help, I wasn't completely sure on the setup as I hadn't done it completely on my own. But once I was faced with this issue, I felt that my earlier work had made me able to organize, analyse and then figure out what was wrong. Once again, I am well aware that I have a lot to learn, but I feel as if I have started to develop this new skill/way of thinking that will continue to develop.

When it comes to my creative practice and how this has been altered, I feel two things. Firstly, because of the fact that I have acquired some knowledge in a medium that previously felt somewhat inaccessible, I have begun to think more seriously about some of the game/programming related projects that I have had in mind for a long time. Or, more specifically, I have already begun to compile more learning materials and began thinking

more seriously about how I could achieve these goals. This was previously a very overwhelming task, as my lack of knowledge made it difficult for me to even know where to begin. Now, however, they feel much more tangible.

In a more abstract sense, I feel as if I have also developed a new relationship with my awareness of interactivity/ how interactivity is incorporated into some forms of media. I find myself now when I interact with games, no matter how simple or complex, I have caught myself thinking about the way that I interact with it, and by consequence, how alterations on a coding level would affect said experience. For example: this game expects the player to shoot at moving targets, but how would this feel if the targets tried to avoid the bullets? What is the difference in user experience if they went in different directions, sped up, etc., and how would these minute changes affect the player experience? As someone who wishes to develop my practice in ways that will hopefully allow me to create material that subverts expectation in some way, this sort of thinking is incredibly valuable. It is also something that I was not able to experiment with beforehand. Being an artist who codes, I have realised, is something that's incredibly powerful, since now I am not only able to come up with concepts, but also the feeling of directly interacting with such concepts. When creating computer-based works, the user is ultimately interacting with the code. Therefore, no matter how innovative the original idea, if the code doesn't also reflect the dynamics of the idea, the result will feel stale.

Interestingly, despite all that I have said, I feel as if my weakest point at the moment is my ability to 'think like a computer' due to my lack of experience. There are instances where I would write something thinking that the logic made sense, but in reality, it was not a logic that the computer could understand. Trying to get through this through trial and error is difficult, and I often find myself almost stubbornly trying to make my own human sense of

logic work within the program, instead of trying to take a step back and understand it from the computer's perspective.

Looking to the future, I am excited by the new possibilities that these new skills may unlock. I do believe that as an artist, it is important to have control over your own creative vision. Being able to control a project in such a profound way unlocks possibilities to mesh art and computation to create incredibly meaningful work. Of course, I have a lot to learn, but I feel as if I finally have the basics that will only increase exponentially from here if I continue to pursue this knowledge. Even the possibility of creating interactive visual art pieces without the game element has now been a recurring thought, whereas before it was not something I had previously even considered as an option. It is interesting to see how my understanding of 'creative computation' has expanded past the idea of the conventional 'video game'. Although I still do wish to make narrative-based games, I like to think now about the inclusion of more unconventional art-based elements within them that could bring a whole new layer of interest to the piece. This could be simple things like backgrounds that display art that interacts as the user moves their character across the screen, or perhaps something more experimental, like having the player shape the landscape of the next level themselves by creating an artwork.

I am particularly interested in the possibilities of getting the player aware of how they interact with the game through a subversion of expectation. By consciously allowing them to make decisions that they would normally have no control over, this has the potential of bringing new depth to 'playing' a game. What would happen, even, if the player decided on their own who the enemies were, and what the goal of the next level was?

I look forward to developing these skills, and for the new ways that this class has gotten me to think about my future projects. Once again, I am well aware that there is a lot to

learn, but I am excited to use my acquired knowledge as a springboard. Moreover, this class also had an emphasis on how to creatively use these concepts, differentiating itself from a standard beginner's coding class. Being able to 'think' like a computer and then being pushed to incorporate an artistic mindset into something that many consider 'non-artistic' has opened my eyes to exciting new artistic abilities.