

Reflective Essay

This semester I feel that my programming took a big step forward in terms of comfort with troubleshooting and interactivity, which I suppose is the point of the class. This is not to say that it is as advanced as I would like to take it by any means, but some of the material that we covered during the semester changed my perception of how much interactivity I can get out of my projects and not only in the sense of interaction between the user and my program.

At the beginning of the semester, I would have readily agreed that my coding skills were limited by my lack of knowledge, experience, and comfort. This still holds true for me today but I dare to say that my skills are more advanced than they were a few months ago. By last December, I was really only working with the program locally on my computer and was creating all of the features that I used in my code myself, though these were just shapes and interactions between them. I was also not really looking for inspiration and help online, spending most of my time energy figuring it out on my own. A good example of this is the final assignment from CART 253, where I make football game that necessitated lots of work to get values from user input and represent it on the screen, but it was ultimately just a more complex version of the different object interactions that were the focus of the class. All this to say that I'm not embarrassed of my abilities last semester because I'm learning, but I definitely see how they were simple and led to me feeling intimidated by more involved functions. Probably my biggest difficulty was in understanding how arrays work and how to properly use information from them.

Thanks to the material that we covered in terms of machine learning, interacting with the microphone and camera, and voicing, I feel as though a whole other level of coding is open to me. The Jam assignments obviously led to me learning how to implement those different aspects of programming, but it was really the final assignment that I feel pushed me to engage with programming to an extent that I hadn't considered before. Even though there are features that I would have liked to include that I did not give myself time to, I am proud of the final result and was very excited while working on it whenever I got a new aspect of it to work. One of the biggest differences between the final assignment and those that came before it was the amount of time that I spent reading about resources and watching videos about coding in order to figure out how to properly implement the code that I needed.

Most importantly, the use of APIs to get information from the internet using data that I fed it through a url was a huge revelation. I had no idea how to do it before and was almost jumping up and down from excitement when it worked. This is what I meant in the first paragraph when I spoke about perception of how much interactivity I can get through programming. It's unbelievably exciting to me that I can write some lines of code on my computer and not only run it on a live server, but give and get information from the internet. Sure, the interactions from the user are interesting in that I can use the microphone and camera to make stuff happen in my program, but it is much less exciting compared to the wealth of information that is now available to me online. If I had to single out one subject that we covered in CART 263 that I want to continue exploring

Going forward, I want to continue working on interactivity between the user and other forms of technology. I am interested in object-oriented programming in the other sense of the word, as what I find really exciting is learning how to make technology workable without a

screen. A simple example of this is detecting touch through a sensor to turn a light on, though I definitely want to push that interactivity further given the possibilities of technology. Next semester I have applied for CART 360, which I hope will be the class that helps me develop those abilities. As a design student, I find that one of the limitations of the program is how much of a focus there is on graphic art and the projects that we work on are rarely able to be interacted with beyond the mechanical features of the object. At the Fusion expo there was a really cool instrument that made use of user input to change the note and modulation being broadcast. That is the sort of marriage of technology and design that I think gives the most potential for creativity.

Feedback about CART 263

I really enjoyed CART 263 and felt that it was well taught. I preferred the format of a few jams per semester to CART 253's format of weekly assignments where only a few counted towards the grade. I found that it felt more official and while it was more imperative to get each piece of work done, it was much more relaxed to learn from the videos at my own pace. However, I do see why 253 has the pace that it does because so much information is crammed into one short semester. Maybe the spread of info could be more even between the two classes, with less stuff taught in 253 and more in 263, allowing more time to be spent learning the fundamentals? In 253 it felt like more time was spent working on the really basic concepts of variables and interactivity, which I think was really good because it let me absorb the information properly. However, the subjects covered in the second half of the semester, like arrays, were much tougher for me to grasp and I didn't feel like enough time was spent on them. I don't have much specific feedback, other than the following:

- The videos are extremely entertaining and effective.

- The pace could be more spread out between the two semesters, especially in the second half of the 253 class.

- I prefer the submission format of CART 263 to that of CART 253.