## Reflection

Before starting the course, I had only done a bit of script writing with bash and the Linux terminal but I was looking forward to CART253 because I wanted to improve my programming skills. Writing more than a few lines of code was difficult at first because there is a lot to keep track of. However, I am getting used to navigating the code more and more.

A lot of useful principles were covered in the course and I believed I have progressed quite a bit because of that. For example, getting used to using the console, not just for error checking, but logging my outputs was very useful. Early on I found myself wondering why something wasn't working while forgetting to check, or avoiding, the console but that is now mostly a rarity. Unfortunately at this stage I often run into issues where there are no errors but my program isn't doing what I want. That is not a great feeling.

Furthermore, one of the more challenging parts of programming is the terminology, and tracking the logic. For example, a program can start to become difficult to read when there are variables that get linked to array instances which are modified by parameters that are being fed into the class constructor... In fact, I am not even sure if that is correct but that is the type of logic that can be tough to parse.

There are rewarding moments in coding though, like being able to diagnose and solve a bug by oneself. After taking note of the instructors and how they debugged, which very often involves following the code logic to a point of failure, I am more confident now in my own debugging ability. Getting the audio to work successfully with my collision detection for my project 2, for example, was a satisfying feeling.

I am proud of my overall progress, however, since I am a novice I see room for improvement. Nevertheless, I am noticing my competence grow when I try to implement something, like a set of if else statements, and manage to accomplish the task without error. At the beginning of my programming journey I didn't expect code to work right off the bat. I still don't expect it to now, but it seems to work more often than it used to, which is a good sign.

I am excited about the future of my programming practice. I am actually interested now in practicing more in my free time. Especially now that I know how to write a basic program, I plan to practice making a bunch of other mini programs and work on areas of coding that I am still weak in, such as arrays, complex for loops, parameters, class hierarchies, etc. Ultimately, I am optimistic about further pursuing programming and I feel this course provided me some foundational knowledge that I can use to further build my programming skill set. Onward to CART263!