I spent a decent amount of time learning syntax, structure, and programming concepts. I read the textbooks and looked at the processing tutorial videos by Daniel Shiffman. I didn’t go out of my way to learn much more advanced concepts, except when I read the Generative Design. I found it difficult when I tried to implement the more advanced concepts from the Generative Design examples and gave up pretty quickly. I haven’t worked on any personal projects with p5.js or Processing, which could’ve helped me develop my ideation ability and programming skills. I understand the basics enough to meet the demands of the assignments and projects. I learned more programming skills while working on final project like creating an offset image, rotation, textures, text, and sound. I learned as many skills as I needed to develop the concept I already had in my mind. I’m extremely satisfied with how my final project turned out because I was able to expand my creative horizon with the programming concepts I learned in class and on my own.

When I first started learning Processing and p5.js, I had a lot of trouble with the syntax and being able to bring my ideas to life. As the class progressed through the semester, I understood the textbook and concepts better. Each assignment allowed me to really grasp concepts taught in class. I began developing the ability to create custom functions and objects and movement which expanded my creative horizons. I had a lot of bugs every time I had a new idea for my assignments. Feeling the frustration of it not working and problem solving allowed to my brain to stretch in different ways. It was frustrating when my first project worked perfectly in Processing but not in OpenProcessing. The syntax for p5.js seemed so farfetched at first but as I was forced to work in it, I realized it wasn’t as complicated. And my horizons kept on expanding from there.

Procedural Programming and OOP have different uses. Sometime you want to use different types of functions that don’t involve objects, and other times you do. Procedural Programming is useful for smaller functions. Usually when I use OOP, I use it to for objects that are used in multiple ways and for movement of the object. OOP is extremely useful when trying to update variables in different ways. And when creating multiple objects is extremely helpful. In my final project I incorporated both for different uses and effects. For my first function, I created one function for the movement of my photography and OOP to have my angel object move through it.

There are many concepts solidified in my final project. Whatever concepts we were learning while doing the assignments and exercises, that I didn’t master, I mastered by the completion of the final project. I understood and applied using custom functions, variables, conditionals, sound, images, image manipulation, objects, constructors and methods to manipulate movement, transformations such as push, pop, translation, XYZ rotation, scaling, random function to creating a generative collage or crazy, text and text manipulation. I learn how to create automated movement by using these concepts which will be helpful in my work. Every single function created was a breakthrough, because I was able to visualize the abstract ideas in my head. But the greatest breakthrough was finally figuring out how to perfectly time each function with the sound, using the millis and duration functions.

I was able to resolve most of my own bugs. I had a very particular opinion of how each graphic and function should work and look, so naturally I had a lot of bugs every step. The Professor helped me figure out one of my main bugs which was to get the sound to play automatically. The most frustrating bug was getting the timing to coincide with the sound. Thankfully I was able to figure it out by remembering what was taught during class. I used the p5.js reference, library, and examples to figure out how to debug. Another helpful trick was to isolate and work out one part of the code at a time.

I’m not too sure about what ideas I might have in the future. But I have the foundation skills to be able to visualize my ideas to coding. I might design functioning app interfaces or animations or work that can be exhibited at a gallery of sorts. I may also venture into other coding languages to see how I can expand my skills. It relates to other classes because I can use my graphic design skills and sound design skills and intertwine them with coding to create a more developed experience.