

Neha Vasudevan

Creative Coding

Katherine Bennett

Final Self -Assessment

- ***Critically analyze/evaluate how much time was spent learning syntax & structure, programming concepts vs. actually programming, and how does this reflect on the final quality of your end result.***

This entire semester I spent a lot of time learning syntax and structure. I found the lectures interesting as well as the videos and material that we were assigned helpful! I spent a lot of time reading/ watching and understanding the material. Then I would take notes on the syntax and structure. After that I would spend more time programming the concepts and referring back to the notes I took. I think I spent a little more time actually coding the concepts in the second half of the semester than the first half of the semester. The first half of the semester I also spent a lot of time actually coding however I was just trying to grasp the basics first by reading and taking notes a lot. I coded a lot and experimented while researching on my own to understand different concepts in addition to the material we are assigned and we cover in class. I think the fact that I really applied the concepts in programming and experimented with them on my own really helped with my final result. In my final project and in many sketches I was

able to really apply concepts we learned because I grasped them and was able to further deep dive and experiment with them! (which was fun :))))

- ***Comment on your successes and frustrations with Processing and P5.js.***

My successes are with graphics, color, classes and functions. After lots of practice classes and functions I was finally able to work with them with more ease. I was especially able to use functions with parameters in them which I am really proud of. I really enjoyed working with for loops and if statements as well. I really liked working with color and opacity and tint when it comes to coding images and graphics. I think I worked well with images and for the final project I got more comfortable working with text. I think that I was able to understand vectors a little bit. In terms of frustrations, at first I struggled so much with classes I needed to study those concepts a lot to get the hang of it. I was also frustrated initially while working with images since I wasn't aware of the range with which they could be used. I felt the same way with text. I also struggled initially with how to use API's and the play library but I figured it out gradually. I struggled a lot switching back and forth between both languages. Processing was easy to work with initially since all the variables had a type when they were declared but then p5.js got confusing because the variable did not have a type. I felt the same when traversing through functions and the differences there. I definitely began to found p5.js more straight forward after working with it for a while but the transition was very difficult. I found it especially hard when working with classes.

- ***Compare and contrast OOP versus Procedural Programming. How are they similar? How are they different?*** I am looking for you to explain this in your own

words, what these concepts are. I am NOT looking for you to tell me how you used these in your project.

OOP is object oriented programming which means setting up code in the form of classes and objects. This means that there can be a template of cookie cutter which comes in the form of classes while the actual cookie is the object. (I think I picked up the cookie analogy from Dan Shiffman but I'm not sure?) Even though the template is the same, the objects coming from the template can have different features and perform different actions which are the methods within a class. To me, object oriented programming also means having a fixed structure written out that can be used multiple times rather than hard coding it over and over again. That way I can reuse it and check a smaller length of code for any problems if I have any (which I usually do). On the other hand procedural programming is a set of instructions I tell the program to do but it may not necessarily be reusable. The difference is that OOP is so much more organized and makes it easier to find code while Procedural programming means that code is not organized in groups.

• Specifically considering your final project: What programming concepts solidified in your final project? What did you learn with reference to programming? Did you have a break through?

I solidified the concepts of image, text, vectors, classes, functions, millis() and the p5.js play library in the final project. I learned the importance of deciding when there should be interactivity and when there shouldn't be. I initially made the project to work on keyPressed rather than in an automatic timed fashion. I liked that professor emphasized

that interactivity should only be introduced if there is a solid purpose to it. I had a breakthrough creatively with my story and wanting to make it an animation rather than interactive. I also had a breakthrough with using typography similar to how we work with graphics and images and shapes. I realized that I could move around typography in many ways. I realized that I could use `translate()`, `rotate()` and `scale()` in a push and pop with reference to the typography which was so interesting and fun to me.

• *Specifically considering your final project: Were you able to resolve your own bugs? What tricks did you learn in the process to help? Did you do any debugging?*

I was able to resolve a few of my bugs with regards to moving text and having it show up when I wanted to. I also had a few bugs when I used vectors and the play library. Actually, I had bugs all throughout for nearly every section. And there was one point when I redid nearly every section in order to incorporate kinetic typography into. As I was doing this I realized I had too much code to properly debug it so I tried splitting it into classes. After that there were still certain parts that didn't work so I decided to take the scenes one by one and make them into a separate sketch so I could focus on the bugs that came up in each and every section. I resolved many of my own bugs but I also asked our TA Lilly for help or Erin because she's such a kind genius.

• *What was your intended milestone? Did you make it? Did another one pop up? Tell me about this. Tell me how you resolved it.*

My intended milestone was to incorporate the p5 play library into the lantern scene and I was able to do it! I couldn't have done it without Erin's help though because initially I

had done most of the work with regards to initializing the animation it still wouldn't work. I must've looked at the different p5 play examples 30 times because I couldn't find what it was I was doing wrong. After spending nearly an hour and a half confused about where I was going wrong with my code I asked if Erin could help me out with my code and she was an angel and said she could. When she did, we combed through the reference and all the examples, *again*. After more than an hour I was looking at an example (or was it Erin? Or maybe we both did? I don't remember since it was nearly 3 am for me and 12 am for her.) and we figured out I forgot drawSprites() which is why no matter how I translated it the sprite wouldn't show up but the animation would. As a result I quickly added the drawSprites() line. Then it worked! Another milestone also popped up which was to try to have the opening be a vector that followed the mouse which I was able to do after studying vectors, watching videos regarding vectors, rewatching lectures again and again and asking Lilly for some help. Another milestone for me was trying to get TextToPoints to work. I did a lot of research and watched a lot of videos before understanding it. I first came across TextToPoints in a Dan Shiffman video where he used steering and TextToPoints to move particles around. I also had a milestone to have an animated scene between the two characters with the text bubbles appearing and disappearing. I was scared I wouldn't be able to do it due to lack of time but I was able to!

• **What are you *most* proud of, with reference to your final project?**

I am most proud of my ability to take feedback and quickly adapt. I was really happy that Professor gave me feedback to use kinetic typography and I was quickly able to implement it and I'm proud of how it turned out. I am most proud of how I used the

colors and came up with new ways to move the text in the project around inspired by the kinetic typography that Professor sent me.

• *How do you think you'll move forward with programming? will you keep doing it ? How does this relate to other classes you are either taking or wish to take?*

This class was difficult but rewarding. I think I may use programming when I make web development pieces and integrate html, css and p5.js together! I may also keep doing it to prototype something for another class if I need to or maybe even if I just want to make a creative piece for myself. This relates to other classes in the sense that I can use what I learned in coding to learn other languages easier as well not only due to my knowledge of the concepts themselves but how to learn coding. I feel like in this class we also learned the discipline and the methods needed to learn coding such as practicing, taking notes, reading material, watching videos, studying with others, asking for help, etc.