Self Assessment
Creative Coding Final
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• 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.

I spent much of my time learning how to use libraries and the code of an inspiring program I found in OpenProcessing. However, I chose to use Processing, that I did not use any library from p5 or that program.

For my final project, I actually spent most of my time working on the game mechanics instead of the visual effect. Making the shooter work is my primary objective. I used the rest 20% of the time finalize the visual and audio. The gameplay is smooth, but I may spend more time on the overall quality of the game.

• Comment on your successes and frustrations with Processing and P5.js.

I took some time to decide which language I was going to use for my final. On one hand, I learned Java before. And Processing did surprised me that Java can do these cool effects. I've also done some sketches in this semester. On the other hand, JavaScript is so convenient that I can create visual effects more easily. I wish I could learn p5 before. I chose Processing only because I felt more confident when programming with Java. The frustration I have with p5 would be that unfamiliarity.

• Compare and contrast OOP versus Procedural Programming.

OOP is more like the set of functions from procedural programming. When I want to visualize a solid, repetitive pattern in the main function, I declare an object. The process make the program concise, tidy and convenient to use. A class seems independent from the main function. The whole program is similar to drawing a picture of an apple tree, and what class does is the drawing of a single apple which can be copy and paste.

Comparing to OOP, procedural programming is the stem. The program goes through the main function and visualize these effect. The difference between OOP and procedural programming would be that OOP requires to declare unique variables.

• 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 was always thinking of making games using Processing or p5. In last semester, I made a Pong game using python. The effect was even more simple, and I did not use

OOP to visualize it. This time the most parts of my code are classes. I feel more familiar with OOP during the process of this final project.

• 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 resolved most of my bugs, but there are two bugs I did not directly fix them. One is the collision check. The bullet object disappears when shooting too many bullets at one time. I somehow resolved it by limiting the amount of bullet that can be shot. Another bug is with the audio. The program is able to load and play the music, but the console says it can not find the file name. Eventually I did not use the music, but I believe that the program was not broken.

I learned that a bug can be fixed in many ways, like how I did with the bullet objects. But as the bug is still there, I have to deal with it entirely after all.

• 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?

I keep a keen interest on games and I wish to join this industry in the future. I will definitely move forward with programming. Maybe I will implement 3D models and great graphics to the game program after I learn more about them. But right now, I have much more to review. When I was programming, I can not totally “think like a computer.” The logic is something I need to perfect.