

I decided on this project because I had been struggling with the GUI portion of the course and figured I should work on it. I had also struggled with the pygame module, which while more relevant to my career goals in game development, was a bit *more* than the GUI portion. I decided on the Game of NIM in particular because I understood the logic well and it was a good starting point.

My initial design was far more simplistic, barren, and difficult to code than what I ended up making. I had not figured out in the beginning just how separate the GUI would be, so I made a second class. Then I changed how I was trying to make the classes interact. Then I got rid of the NIM class entirely and just collapsed them into one. In the end, even though I ended up back with one class, it was still not like what I'd originally designed. I learned that the outline will change and the best thing you can do is find the best way for it to work. I also learned a lot about making classes (and their methods and attributes) working together properly.

The hardest part of this project for me was getting the game logic/data and GUI to work together. A good portion of the issues in my issue queue are about that in one way or another. In the end, my solution to the issue was to cut down on barriers between the game stuff and GUI stuff (putting them in the same class) and breaking down the game logic into parts to be called when they needed to happen. I also had to figure out the label, which was the hardest part of the GUI to get working partially for this very reason.

Next time I do a coding project anywhere near this scale (or bigger, which it very well might be), I'm going to pay more attention to interactions in the planning phases. Specifically HOW will I make this aspect and this aspect work together nicely and without weird hiccups? The method I learned in this project was to remove any barrier whatsoever, even if the code itself became a bit cluttered. Finding a better way would be a definite priority. I tried to organize it, but with that method some clutter was difficult to avoid. It does however have the merit of not requiring me to flip between files when I need to look between two things when I can just have them right next to each other.