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Individual Summary

This project helped me to understand pointers and classes. Pointers were especially useful when I needed to change variables objects. I kept forgetting to use pass by reference when I needed to change the object I was using, which caused a lot of problems. I now am more careful about how I’m using objects in functions. I also feel much more comfortable using classes now. When I first learned them, they were convenient because I could store all the information I’d need in one place, but they weren’t easy for me. I didn’t like having two files I needed to control and switch back and forth from. After completing this project, I’m much more comfortable with that and have learned a lot about organizing code.

I also learned a lot about structs, which were critical for my project. While they are like classes, their lighter and simpler. They really helped when I just needed an easy way to keep and x and y coordinate together for placing all the images. Using SDL was a big challenge that required me to learn about windows and renderers. I really enjoyed creating something where I could actually see my work on screen rather than just outputting text. I’m really excited to use SDL in other projects to come.

I was surprised at how hard it was to make a simple board game like Catan. I was frustrated at how difficult it was just to tell the computer to get the objects next to what I was referencing, because to me they’re right next to each other, but not for the computer. It seems so simple, but there a lot more to it when your coding it into a game. Thankfully, I found a hexagonal coordinate system online that really helped to simplify the location system I was using.

I wish I had started with the hexagon system sooner, and I wish I had decided to stop at just making a savable game sooner. I spent too much time trying to handle hexagon corners with just x/y coordinates that wouldn’t work, and I spent way too much time trying to make the game playable.

The next version would be finishing the game mechanics. This would include implementing a turn system, rolling, collecting and spending resources, moving the knight, and building improvements properly. I also think more of the code should be using the Hex Location system, but I made that so late into the projected that many points aren’t using it yet. Luckily, the code was written with this goal in mind, so many of the features are there, just not being used yet.