Aaron Meyers

6/29/16

CS172: Individual Summary

For my final project, I chose to recreate a card game that my family plays all the time, *Hand-and-Foot*.

One concept that learned in class that I used in my program is vectors. I also used classes and objects to organize my functions for the different players and the cards used in the game.

I used vector extensively in my program and using a storage variable that was capable of dynamic memory is what made my program possible in the first place. Using vectors made it infinitely easier to store and remove cards from possession of the player, the discard pile, and tge draw deck. Classes were a great help in organizing my functions, especially since all of the functions for the different players were completely identical except for a few different letters in the function name.

The one thing that I had to learn outside of class was the concept of inheritance. Aside from the video lecture, I had to look in the book and work with it hands-on before I could completely understand inheritance and it was a big help in making sure that different players had access to a single deck of cards. I had two classes for each player and I made them both inherit the data same vector, which was the deck from which they had to draw cards from, by having that vector in a third class that was dedicated to making and shuffling all of the cards that would be used the game.

I was surprised at the shear amount of functions that I had to make in order to make sure that the players were constrained by the rules of the game. Actually, after a while, I had to alter the rules of the game so that it was simpler, and thus, easier to code in order to finish the project in time. So the final product is the true version of *Hand-and-Foot* that my family plays. Another surprise that occurred during this project was trying to make sure that discarding of cards from the players to the discard pile and from the discard pile to the players was not as easy as I thought it would be. I managed to figure out ways around the problem, but that was perhaps the biggest obstacle that I encountered while making my game.

What I would do differently and how I would make in “version 2” of this project are the one and the same: make it so that it is really like the game that I play with my family. While I am very proud of the work that I have managed to do with this project, it is not the same game that my family plays. If I were to work on it in the future, I would work on making it play more along the lines of the rules that I had initially started this project with, instead of the altered rules that I used for this project.