

Go Fish / Cheat Assignment Final Report

Overall these 3 assignments had both ups and downs with some frustrations but also offered very beneficial aspect to my learning. For the code review section of this assignment I was given a codebase to review. The codebase I received was very well done and seemed to comply with MVC as well as being very extendable. My only complaint about the code is that it was perhaps a bit overkill for the scope of this project. This made me reflect on my own skill set and current coding ability. For this reason, I decided to take on the alternative codebase to implement Cheat.

Extending the code

The good

As I decided to use the alternate codebase for my assignment, I found it quite simple to read and understand the code provided. Another aspect of using this codebase over another was that knowing it came from Dr. Anvik I didn't find myself asking why something was done a certain way. Using the professors code over a peer's code added "weight" to the code and helped removed a feeling of uncertainty, regardless of how good or bad a peer's code may be. Overall the classes made sense and having a base class for the controller made it easy and painless to extend the code.

When implementing Go Fish I found myself struggling with every aspect of mocking. I think I understood the general idea but found I was missing some key concepts when trying to implement it myself. After going through assignment 3 and having the ability to read through the alternate codebase's mocking and testing for Go Fish, I was able to get a much better understanding of mocking. Using Go Fish as an example I was able to smoothly and painlessly do mocking on my Cheat controller and actually reaching 100% coverage.

The not so good

Using the alternate codebase definitely made this assignment easier for me as I knew it would provide everything I needed without any extra fillers. One of the biggest takeaway from this assignment is realizing that I have little experience with inheritance. Like the comment above about mocking, I find I understand the basic concept of inheritance but was struggling when implementing it.

One major issue I found was that I could not add functions to my CheatUI that were not in the base GameUI class. From my understanding this makes sense as Cheat gets a GameUI as a parameter therefor it does not know if it will be a CheatUI or something else. Maybe casting these functions would have been a more appropriate way to go but I am still not sure. I decided to add functionality to the base GameUI class in order to make more specific calls for Cheat.

Quality of code

The alternate codebase provided me with all I needed to successfully complete this assignment. The biggest issues I found were simply my own limitations based on what I know (or don't know). I don't think much could have been done to make it easier for me without overcomplicating it.

As I started the assignment using the initial code I was provided with I can briefly talk about my experience with that codebase. I mentioned this earlier but the biggest issue I had with the code is that I found it complicated and overkill for this project. Although to be fair, my lack of understanding about shared_ptr's does not mean it wasn't well written. One thing he could have done better is think about the skill level required for the course and maybe designed it based on that. But after talking to him he told me he misunderstood and thought he would be the one adding Cheat to his own code.

How I could have improved

Using the alternate codebase showed me how the game can be written simply and elegantly as well as being extendable. Probably the most important thing I did not offer in my code was adding base classes for the controller and the view. I am assuming this led to a lot of code being copied as Go Fish and Cheat share some similarities, this could have been avoided with providing base classes to encapsulate the things that are the same. I also found that I broke SOLID + Dry principles as I was in a time crunch to get assignment 1 finished and working.

Overall I found this assignment to be very challenging but also very rewarding, I learned a lot about inheritance, MVC, and mocking. I can say I have a much better understanding of these concepts now that I have hands on experience over simply reading about it in a text book.