

### **Summary of Program:**

The goal of this program was very similar to that of the first homework assignment. Basically this is the most minimal version of Yahtzee possible. However, for this program the user has the option to change their settings for the gameplay. The number of dice, number of faces on each dice, and the number of turns per hand are all configurable. As of right now, the program only allows the player to play one hand before the game is reset.

### **Overview of Design:**

The design portion of this assignment was not it's strong suit. Essentially I just tried to piece together my code from the first homework and expand it so it could take in different settings. This was my approach and I can't say I'll ever be taking this approach again. I added the settings class for reading and configuring the settings of the game. I spent most of my time with this assignment rewriting code that was designed to play a traditional game of yahtzee. The overall design stayed relatively the same as the first assignment with the addition of the Settings class.

### **Design/Programming Issues:**

I ran into issues almost immediately with this assignment. Reading and writing to and from the settings file was unnecessarily difficult. I would say that most of my issues came from having little to no design process. I regrettably just jumped right into coding, thinking that I could just change a few things from HW1 to make it work. This was obviously the wrong approach and I won't be taking it for HW3. I would say the most frustrating part was the fact that I realized what I had done halfway through making my solution. It was at this point that I had to choose between re-writing nearly all of my program or just trying to piece together an already sloppy solution. I choose the second one for the sake of time.

Moving forward I will be changing the entire format and layout of my program so it is more object oriented. Right now my scorecard and HandOfDie classes are doing almost all of the work. I know now how to improve my program so this doesn't happen as much.

### **In Retrospect:**

I touched on this in the paragraph above but I would say the biggest thing I would've changed was how I approached the solution. Instead of just trying to throw random pieces of the program together and hope it works, I should've taken time to understand the most efficient and expandable way to program it. I would've made my solution much more abstract looking back. I also probably should've started earlier. That way I wouldn't have had to commit to the way I was programming it and I could've taken the time to add more objects and classes.

**UML Class Diagram:**

