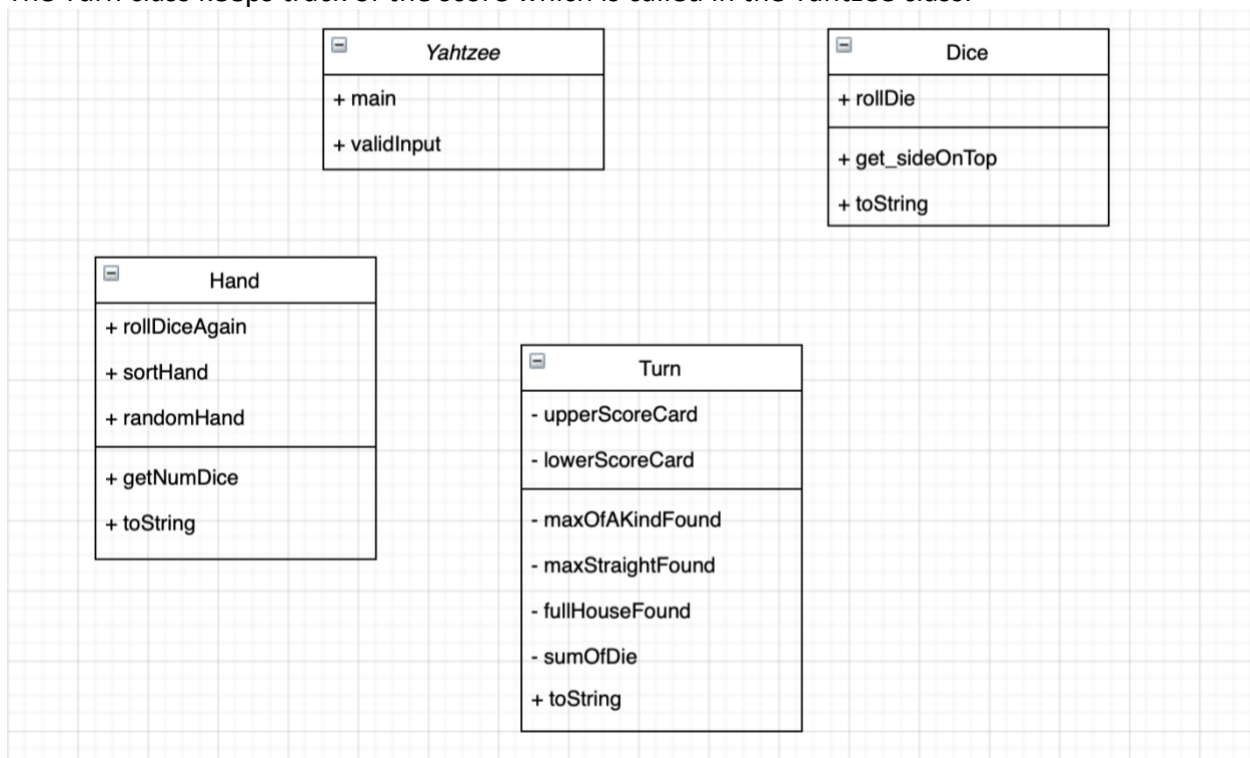Sophie Braun
Design Implementations
3 February 2020

Summary of Goal/Purpose

The goal of this program was to play one turn of Yahtzee. We were provided a C++ version of the code and had to remake the assignment using Java. I think the purpose of this assignment was to familiarize us with java basics which are used throughout this program.

Overview of the General Design

The general design I chose was to have four classes: Dice, Hand, Turn, Yahtzee. The Yahtzee class drives the game, it creates an instance of a hand that rolls dice in the dice class. The Turn class keeps track of the score which is called in the Yahtzee class.

Yahtzee
+ main
+ validInput

Dice
+ rollDie
+ get_sideOnTop
+ toString

Hand
+ rollDiceAgain
+ sortHand
+ randomHand
+ getNumDice
+ toString

Turn
- upperScoreCard
- lowerScoreCard
- maxOfAKindFound
- maxStraightFound
- fullHouseFound
- sumOfDie
+ toString

Issues

I struggled with the initial concepts of Java at the beginning of this assignment but once I stopped trying to code and worried about watching Gina's videos and going through the textbook the code became much easier. I also struggled with being able to start the game over with a brand-new roll. I was able to use the rollDiceAgain function to fix this issue.

More Time

If I had more time, I would try to implement a separate Yahtzee Dice class that would assist the hand in keeping a die. I would also find a better way to start the game over with a new hand.