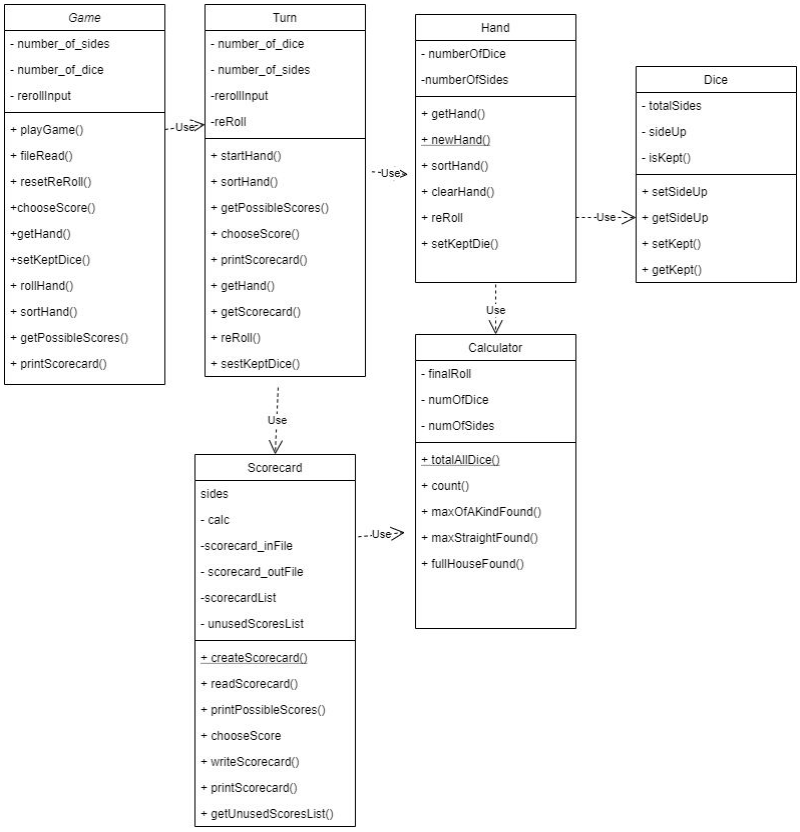
· **A summary of the goal or purpose of the program in your own words.**

- To create the game of Yahtzee. To use classes to create dice, hands, turns, and scoring for a functional use similar to the board game, but with the option to change the configuration of the dice and total rolls.

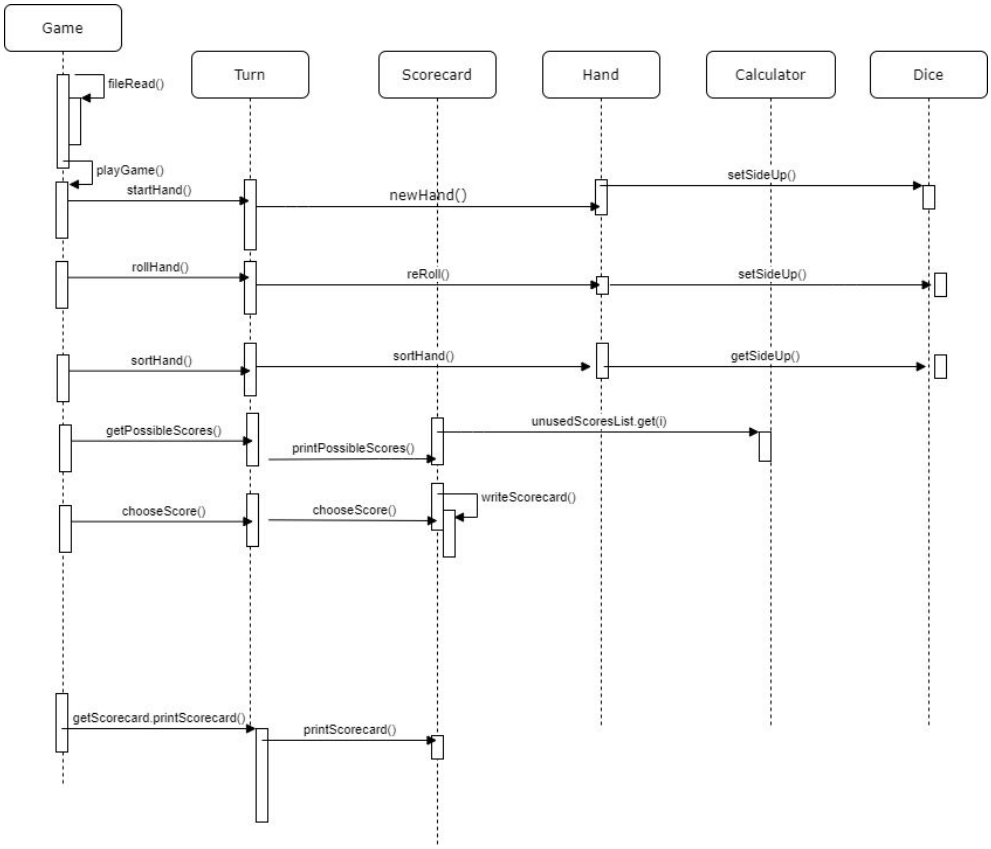
· An overview of the general design you chose for your program.

- * classes: Driver, Dice, Turn, Game, Hand, Calculator, and Scorecard.
- Window class sets up the frame, and manages the gui. It interacts with the game class to get information to display and play the game
- The Driver class has the main method to start the game.
- The dice class only rolls a single dice, and then can return what the sideUp is for that instance, also has isKept value
- The turn class goes through the actions to play through a hand, but calls on the hand class to execute most of the actions. It also manages and calls on the scorecard to run scores.
- The game class creates/starts the turn, and manages the configuration file. It also prints the final scorecard at the end of a game, and goes through all of the actions to play through a hand, calling on the turn class
- The hand class creates a hand in an ArrayList, and then has methods to, reroll, sort, and clear, along with interacting with the dice class
- Calculator class calculates the total dice, the number of dice with a certain value, and the max of a kind, max of straight, and full house functions. Sends the information to the scorecard class.

· A UML Class Diagram that includes all classes that are part of your solution. Diagrams must be produced by a software tool and not hand drawn—I use Visio. No classes related to java swing are shown because it was specified that they were unnecessary



· UML Sequence Diagram



· A description of any major design and/or programming issues, why these were the major issues, how you addressed them, and why you addressed them the way you did.

- Sometimes the dice images border doesn't change when clicked on. It just takes a double click to get it focused again. I wasn't sure how to address this issue because it often isn't an issue, or fixes itself after a few clicks.
- The red border stays on after all the rolls have been used up, but only on certain dice, seemingly random. I'm not sure how to fix this. It seems worse when the dice configuration is one of the lizard spock yahtzee configurations.
- If all dice are being kept, the roll button still has to be hit until the total rolls are used before you can get to the scores. I just didn't have time to add this function

· A retrospective of what you would have done differently if you had more time.

- Obviously, I would've made the GUI look more visually appealing.
- Had more organization within my window class.
- Have a keep all button, or have the roll button be able to determine if all of the dice are kept.