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Homework 3 Summary

Summary –

The purpose of this program is to let a single user play a fully functional game of Yahtzee. This program added onto HW1 and HW2 by adding more complex game flow to allow for multiple turns and upped the complexity of the scorecard to be functional in an entire game. After each round the user can choose one scoring line to add to their score card and it is then unavailable for the rest of the game. This loop continues until no scoring lines are available and the scorecard is full.

Design Overview –

I began this assignment by adding to the functionality of the scorecard class. I added class member fields for each scoring line and decided to go with an ArrayList to represent the upper scoring section so it could adjust to the users input. After adding the fields and new methods, I began to work on the game flow within the Game class as well as the playRound method within the Player class.

UML Class Diagram –
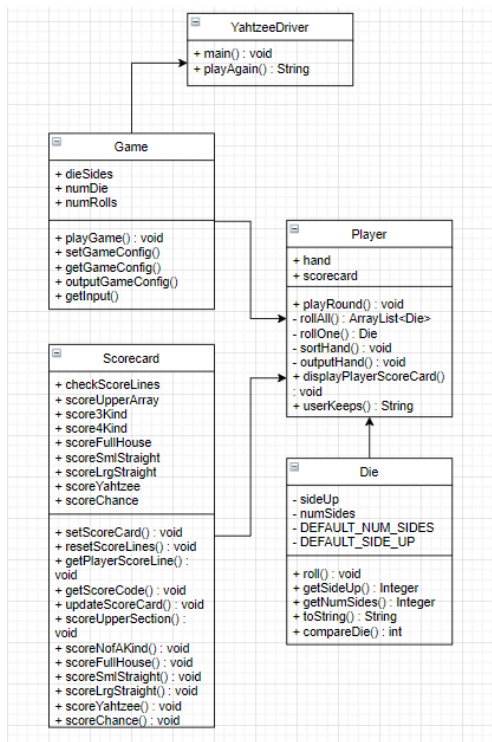
UML Sequence Diagram –
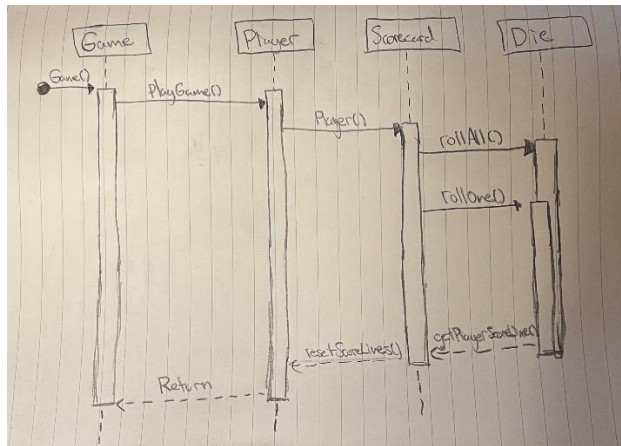
Issues –

I had some trouble figuring out how to go about displaying the possible values for each line and then applying the chosen line to the scorecard. I eventually went with the idea of a Boolean ArrayList to check if a line had been chosen and reset all the values of the scorecard fields after every turn unless the corresponding element in ArrayList was false, which would indicate that the line had already been chosen.

What I would have done differently –

If I had more time, I would have tried to figure out a better way of going about the problem described above. What I implemented works just fine, but I feel that there is a better way of solving the problem.