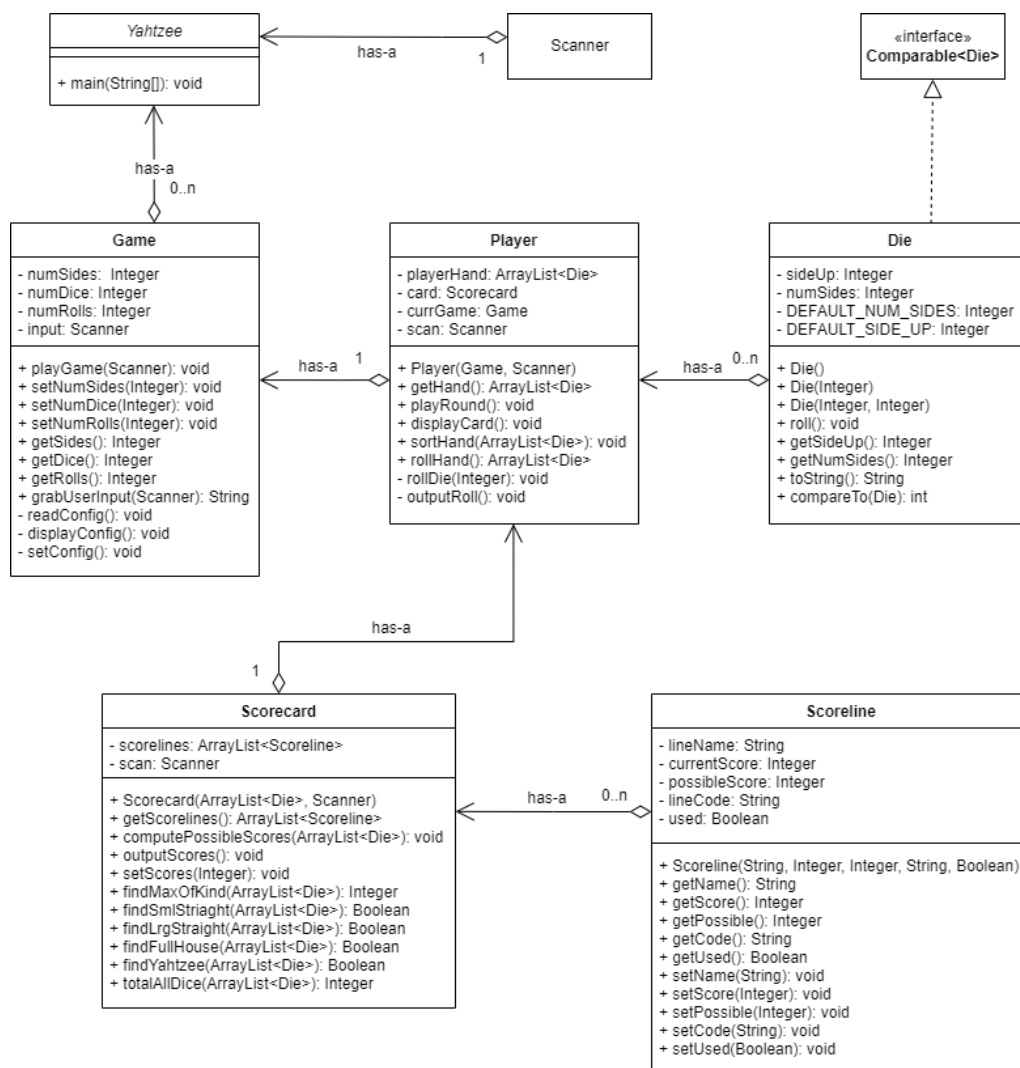
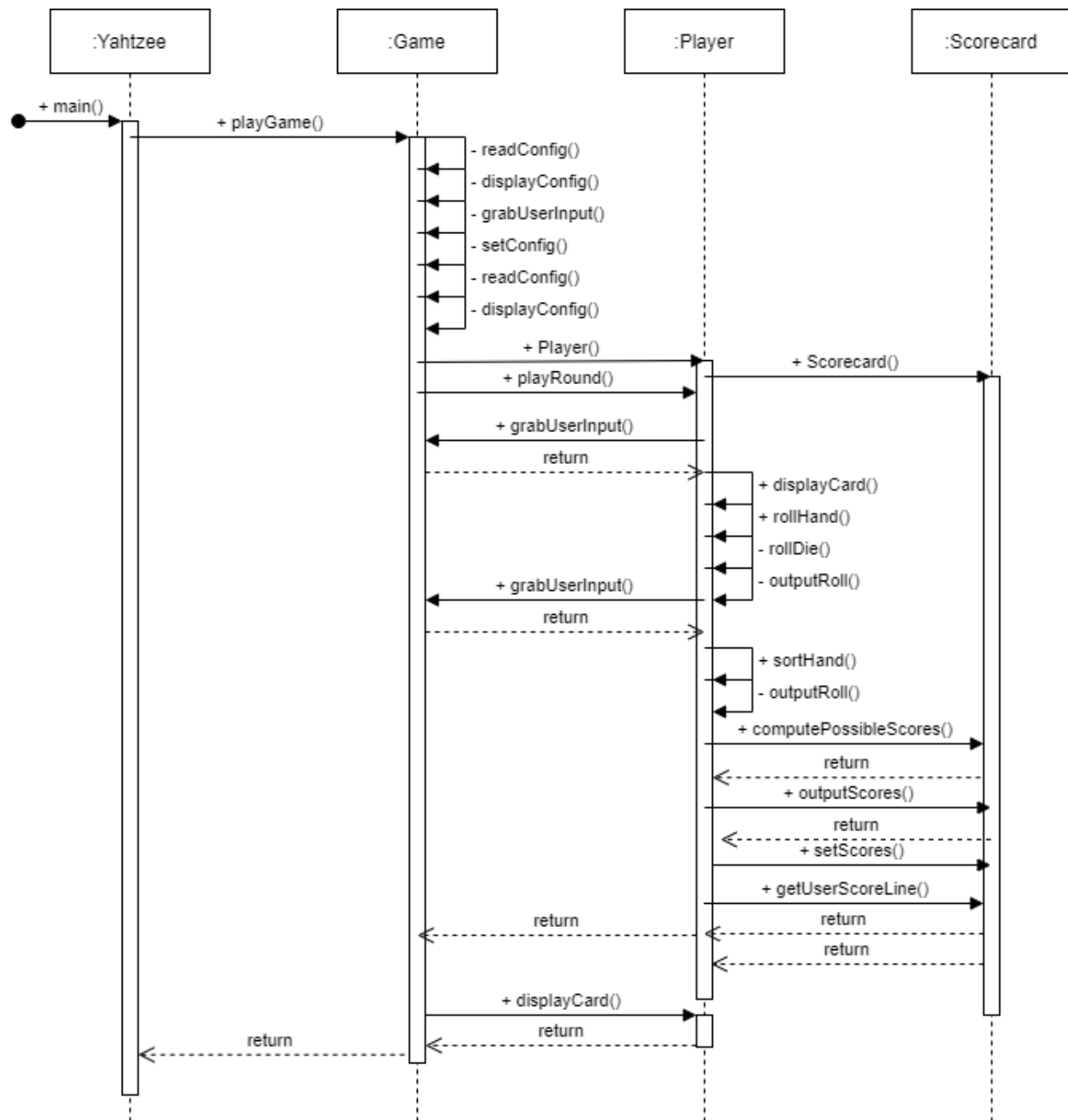


## Homework 3 Summary

As with the previous developments of the project, the goal of this program is to implement Yahtzee. This specific assignment involved tracking a user's score over the course of the game, in a sense, reaching single-player games of Yahtzee. The general design of my implementation builds around the player object. Most of the actions happen at the player level, as evident by my sequence diagram. The game class simply is called in Yahtzee however many times the player wants to play a game. By calling the `playRound()` method, the game object references the player object to loop through as many rounds as the player sets. Similarly, the scorecard is created using the `Scoreline` class to track information specific to each line. Due to the presence a single scorecard and possibly a player object in each round, the scorecard needs to track an actual score and display the possible score in each round played.





The primary challenge this time around was tracking scores throughout the game. To solve this problem, the Scoreline class was made to store fields like a line name, actual score, possible score, user code, and even whether it has been used to store the score of a particular hand. Also, there are still some minor bugs with recognizing specific instances of hand types related to the scorecard. If I had been given more time, I would have optimized the scorecard class to only perform methods specific to the card itself, not the individual lines.