

## Homework 4 Summary

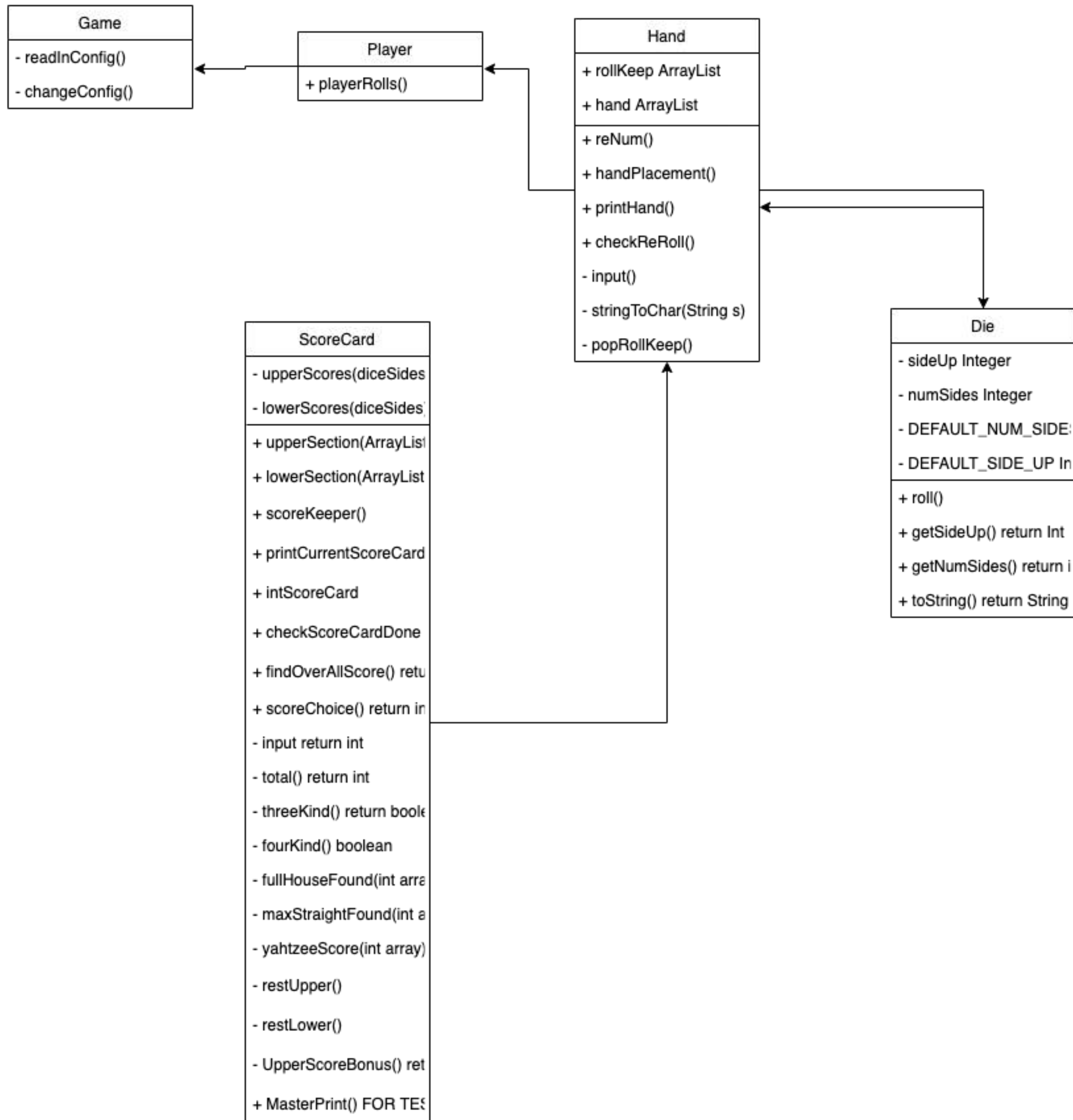
The goal of this project was to build a functional graphical user interface for our Yahtzee game and to learn about java swift. What I have learned doing this is that GUIs are really hard, like really really hard. Doing this project was huge learning experience for me. I learned I needed to start this a while before it was due, as Crandall said -\_- , but also in the way of designing the GUI. From learning how to use controllers to make items do get displayed when a button is pressed to disabling buttons to prevent users from reentering the same score.

An overview of the general design of my GUI was to have everything layout out vertically instead of horizontally like a flow chart. Along with using a grid layout on the main frame and then adding buttons, dropdowns, and so forth to it. I also wanted to break things down but when it came to adding the main game to the GUI I got overloaded and quite breaking things down, like I should have.

Major issues were, just figuring out the GUI and how to lay it out on the frame. I overcame this hurdle by laying out the GUI on a piece of paper and drawing where I wanted things to be. I left the center border layout empty in case I needed to put something in it that I did not see at the time of drawing the GUI out. Another hurdle I had was adding listeners. I am still trying to figure out how to implement them and seeing ways that they can be used. The last hurdle I had was getting the dice images to be of a smaller size. I had to google this problem and stackoverflow had the answer for me. I had to resize them using the smooth scaling. The reason I wanted to change the size of the images was because of how big they were in proportion to everything else in the project. I wanted to downscale them to make them look better and fit into the project instead of just sticking out.

Had I had more time to complete (i.e. started sooner) I would have finished linking up the game to the GUI and making it playable out of the GUI. Another thing I would have done is learn more about implementations, such as saying a class implements a JFrame. I will enjoy digging into this deeper during the team project and having a fully working GUI.

## Yahtzee



User

Yahtzee GUI

Yahtzee Game

User

Starts up game

Shows Start Menu

Selects Start

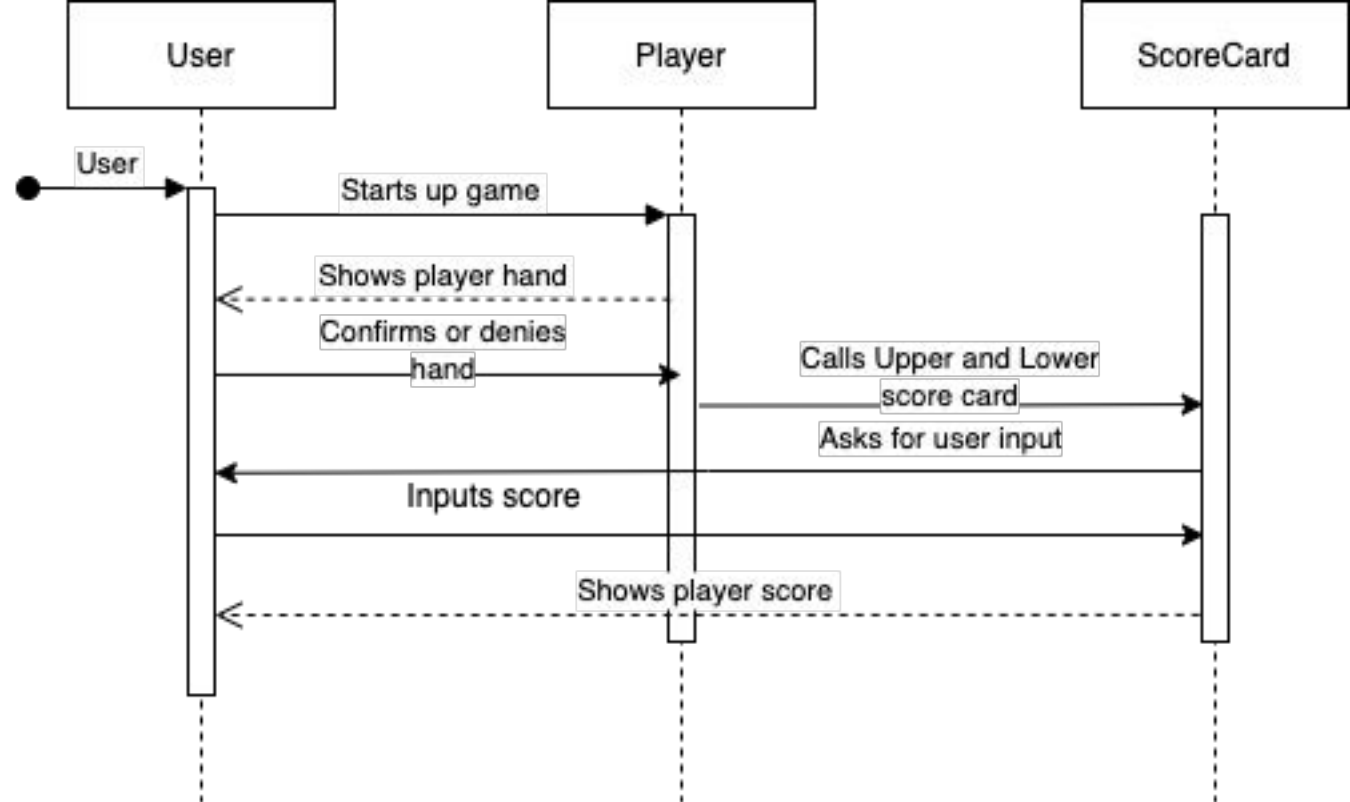
Starts up Yahtzee game  
process

Shows user a hand  
and asks for dice  
selection

Selects button  
with wanted score

Shows user a new  
hand

Game is finished, shows  
score



Process repeats till totalScoreCard is full