

Like the previous version of this program, it demonstrates a single round of the game farkle, in which you are given 6 dice and are ordered to make melds out of them, which are specific combinations of dice that give points to the player. If there are no points possible, your turn is over and you are awarded no points. I implement this through 3 classes: the Die, Meld, and Combos class. I have added the feature that displays a game banner, allows the user to input a name for themselves, the player can quit before adding all meldable dice, they can reroll unmelded dice, and the system detects a hot hand when one occurs.

To implement these features I created another while loop that nests the original one, this outer loop serves to let the user reroll the unmelded dice. Previously, the user would enter the dice then the turn would end; now, the user can stop adding dice and reroll the remaining dice. I do this by taking the input to continue or stop, which either loops through the out while loop or breaks the loop. To change the number of dice rolled when rerolling, I chose to look through the array that takes the leftover hand, looks for 0's where there used to be values, and for each 0, the number of rerolled dice is subtracted by 1. I detect hot hands in a similar way, but instead, I look for the number of 0's in the hand, and if there are six 0's that means that 6 dice were used in 1 hand and the user has a hot hand, the number of dice is then set to 6. For banking points, I ask the user if they want to calculate their score or continue adding dice, if they choose to calculate the score, they're asked if they want to keep their points or end their turn based on their input. The banner is a simple console output.

The major issue I had was calculating the score after the user had rerolled. This was due to the Combo class not resetting the local score to 0 when making it's calculations and was pretty hard to find as all my outputs looked good instead of the score and I was overthinking things. Once I outputted the local score in the Combo class I figured it out quickly but getting to that step took a while.

In retrospect, I would move some of the console displays from main and put them as functions because my main is starting to get cluttered, but most of it are just System.out

commands. There are also a few snippets of code that I could make functions to make main a little less messy, such as checking for a hot hand and changing the number of dice to reroll.

