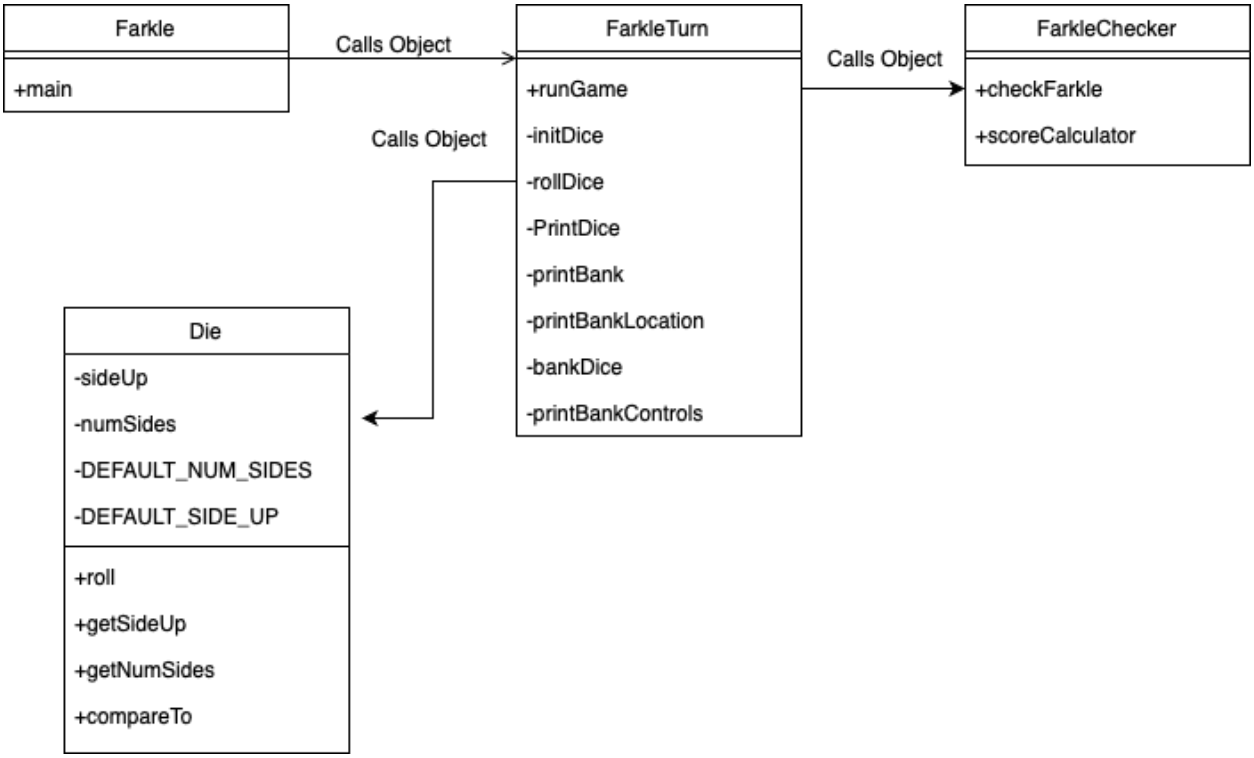
The goal of this program is to simulate a single turn of the game Farkle. It does so by virtually rolling the dice and by checking for a farkle, and then allowing the player to make melds and get a score. All is done through classes and functions in java.

The general design that I choose for my program is that one public function is called from main from the class FarkleTurn, runGame(), and the game is ran from that function. This function then calls in other private functions from this class or functions from other classes in order to run-through the turn. These different functions set up the dice, print them, put them in the meld, and more. They also call a class called FarkleChecker that checks for a farkle and also calculates the score of the meld.



One of the major problems I ran into was how to state if a dice was in the meld or not. I struggled with figuring this out, and tried using functions to do it. This did not work, and I ran into another wall. I then tried modifying the die class to have a in meld bool attribute. This just didn't seem right to me however. I then came up with using a bool array list that is used throughout the turn. It is dynamically set up to the number of dice in the game, and worked very well for me. I addressed it this way as I can dynamically allocate each turn based on how many dice there are, and it allows to be updated throughout the game.

One thing I might do different if I had more time would be make more functions and classes. I have a lot of work run in my runFarkle function that I think could be done in their own functions. This would also require the creation of more classes, but in the end would make easier to run/understand code. Another thing I would do differently is add

more tests. I only really made three tests for this first homework, so I think for future development I will write more tests.