Nicholas Barinaga

Homework 1 Summary

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Farkle Program

As I begin writing this summary my assignment is currently overdue. I made the mistake of thinking that this assignment was due on September 23rd. I must have mixed up the date with another assignment. In its current state the purpose of this program is to simply allow a user to participate in one round of Farkle. A round correlates to one roll of a hand and one formation of a meld. So, if all is going well when the program starts the player, we see 6 values corresponding to a hand of dice. If there is farkle the game will end, and it will tell the player. If it is not a farkle the player will then have the opportunity to choose which dice to take from the hand and add to the meld. When the user is ready, they can bank their meld, end the round a see the score of their meld. The program will also return to the user the dice from the hand that were not used in the meld.

I designed this program to work as needed. The Farkle object makes a call to a Round object which essentially does all the work. It contains a hand and a Meld object, and it also does the communication with the user. The Round object makes all the appropriate calls to the FarkleHand and Meld objects which will in turn make calls to appropriate methods and classes. My Meld class makes use of the Abstract Combo Class which I have extended with classes for the different scoring combinations. My Hand Class contains objects of type Die, and I have created a default amount of 6 for use in farkle, though different amounts can be used when

creating hand. This will later be useful when programming further rounds of Farkle. The player only roles with six dice on the first roll of a turn and in the event of a hot hand, but I will often need to be able to create a hand of anywhere from 1 to 5 dice. I ran into a problem with VS code where it wouldn't let me define the subclasses of Combo in the same file and so for now all of the different Combo classes are on their own files.

I would say my most significant design issue so far is a sense of arbitrariness. I have some difficulty establishing the responsibilities of class especially when it comes to user interface. As you can see my round object does all the lifting there, but it almost feels as if I need a menu object. I would also say that much of my code seems basic. With time and more attention, I think it can become more efficient and more coherent.

If I had more time, I would have taken more care in producing high quality code. I made use of magic numbers, commented at the end, and in general didn't take too much time to make things "pretty". This is because I was mistaken about the due date and so honestly have rushed it. The program does work as required, but I am intent on improving it for homework 2.

(UML Below)