Trianta Ena Writeup

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1. General

Based on how we have written our Blackjack program, there are not too many changes we have to make. Our Card, and card Value and Suit classes do not need to be changed to work with this new game. The only class that requires major changes is our Game class.

1. Changes We Would Make
   1. Player & Dealer
      1. Add isBanker boolean field and another Player constructor to indicate who’s the banker. If one becomes the banker, we triple the initial money it has. And we also need a setBanker() method so that we can easily switch the banker after each round.
      2. Each player has one hand rather than an ArrayList of hands, and get rid of the spilt() and doubleup().
      3. We do not need the Dealer class using this structure
   2. Winning Condition
      1. Set static win value variable in Game to 31
      2. Since the game has multiple players, we need to loop through each of them and update the money.
      3. We can use our isNaturalBlackJack() directly since we have changed the static value to 31.
      4. Add money lost by player to bankers money
      5. Take money won by player from banker
   3. Calculation of Ace
      1. Change handValue() in Hand to only set one ace from 11 to 1. This can be easily done because we loop through the aces while subtracting value; change this to only be done once.
   4. Deck
      1. Change draw() method to shuffle if the deck is empty
   5. Game
      1. Change init() to read in the number of players, starting money, and position of banker
      2. Change how the startGame() and end() methods work; these are the methods that run our Blackjack game so they must be changed to take input for Trianta Ena
         1. Ask player for bet before dealing 2nd and 3rd card
         2. At end of round, ask wealthiest non-banker player if they would like to be banker; if no, defer to next wealthiest player
         3. Exclude banker from player loop; have them play their hand at the end
      3. Add ArrayList of players to allow more players
      4. Change how we print the players (because we now have more than one) in game to show all hands
      5. Because each player only has one hand, change the loop through hands to a loop through players of the game
      6. When a player quits, remove them from player ArrayList rather than end the game
         1. Only quit when playerList.size() <= 1 at end of round
2. What Changes We Would Make On BlackJack Game
   1. Put player printing into a method
   2. Write steps of startGame() in separate methods that are more generic (e.g. nextRound(), playerInput(Player p), etc.) for adaptability to other games
3. Estimated Effort Of The Implementation
   1. Approximately 1 ~ 3 hours