Rules:

Cards are shuffled in beginning of game until all cards are used. There are 52 cards in each deck, Hearts Spades Clubs, Diamonds

* This can be implemented at a later time, chips and if players gamble away all their chips they win, if they make a profit, the ultimate winner after a certain number of rounds will win etc: In the beginning, players will put their chips which must be lower or equal to the limit of chips
* The dealer will deal one card (removeCard()) to each player face up then one card to the dealer face down
* The dealer will deal one card to each player face up then one card to the dealer face up
* If a player receives two cards of same value (card 2 – card 1 = 0), player will split. All other players will not split. This can be changed later.
* If dealer’s [points] is 21 total, then dealer gets blackjack
  + If player score is lower than 21, player loses
  + If player score equals 21, player will push (tie)
* If Dealer’s [points] is lower than 21 then
  + If player score equals 21, player gets blackjack
  + If player score of first two cards are the same, player can split and play two hands at \*
* \*Dealer will then ask each player if they wish to hit or step
  + If hit, dealer will deal one more face up card
    - If below 21, then dealer will ask again hit or step, loops to previous
    - If score is above 21, then player loses
    - If player is 21, dealer will move on.
  + If step, dealer does nothing to player, player score remain the same
* Dealer will then deal dealer's hand face up and flip dealer's face down card, so it is not hidden
  + If dealer’s [points] are below or equal to 16, dealer will with draw another card until dealer’s [points] are equal to or above 17
* If player’s [points] are equal to dealer’s [points], player draws,
  + If player is below dealer’s [points], player loses,
  + If player is above dealer’s [points], player wins
* Round is over

If cards from main deck has 7 or less cards, the deck is refilled (refillDeck()), then the deck will be shuffled (shuffleDeck()). If the round is over (round = false), a new round will begin.

Main.java

 Main class where blackjack is played from

|  |  |
| --- | --- |
| **public** **void** round(**int** p1Chips, **int** p2Chips, **int** p3Chips, **int** p4Chips, **int** p5Chips, **int** dealerChips) | Round is where the game is played. Method variables are chips which will be implemented in the future. In a separate method because recursive methods! |

Player.java

|  |  |
| --- | --- |
| public Player() |  |
| **public** void displayHand(String card) | Displays the cards the player has. |
| **public void** addToHand(String card) | Adds a card to the player’s cards. Also adds the points those cards have to the player’s total points. |
| **public int** getPoints() | Returns the total points the player has |
| **private** **int** getCardPoints(String card) | PRE-CONDITIONS: CARD MUST NOT BE CONVERTED  TODO: Move to deck and change everything in player. For the future. |

Deck.java

|  |  |
| --- | --- |
| **public** Deck() | constructor |
| **public** **void** refillDeck() | Any cards there before removed and replaced with the default 52 card deck, fully organized in an ArrayList |
| **public** **void** shuffleDeck() | Shuffles the deck randomly |
| **public** String removeCard() | Removes a card from the bottom of the deck and returns the name of the card |
| **private** **boolean** checkDeckEmpty() | if deck is empty then |
| **public** String convertCard(**int** index) | this will take an index in the deck, and it will then be converted to the name of the card (rank, suit, color) |
| **public** String toString() | THIS IS FOR DEBUGGING PURPOSES  this will println all cards in the arraylist |

I want to move get card points from player to deck but player has an arraylist of cards not a deck so I’ll move that later. //TODO