

## AI Strategy

### *Bidding*

The AI makes a bid by evaluating the potential of its hand. The code creates separate ArrayLists for each Suite: (Kings, Hearts, Clubs, and Spades). It then evaluates the potential of each list by taking in account the number of face cards and low cards in each suite. The AI then evaluates the potential of each one, and chooses a suite and then a bid based on the number of high/low cards.

### *Making Moves*

The AI makes moves by evaluating three possible scenarios:

1. The AI is responsible for the VERY FIRST move of the game
  - a. If this is the case, then the AI looks at the suite that it evaluated in the bidding section above and plays the lowest card it has. The point of this strategy is to preserve high cards for when you need them.
2. The AI is responsible for a brand new round with an already chosen trump card
  - a. If this is the case, the AI evaluates all cards that have been previously played and finds the average value of the trump cards that have been played. If the average is high, then the AI places a high card because high trump cards have already been played. If it's low, it plays a low card as long as it's not a face or 10
3. The AI is responsible for a move after other players have put cards on the table
  - a. The AI pretty much repeats the process above with the other caveat of examining the other cards that players have put on the table. If there are any

opportunities to grab 10s or face cards, it will play a high trump in order to get them.