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Pitch AI

There are 2 actions that the AI has to decide upon, what to bet and what to play.

Decision on bet.

First the AI decides what is their best suit to bet on. It goes through their hand and looks for an ace and or a king of a suit as well as a Jack and a 2 or a 3 of a certain suit. The suit that meets the most of these requirements is then passed to a function that decides a reasonable amount of points to bet. The way it chooses the bet value is:

1. Go through hand and see if you have ace and or king of the suit chosen previously if so add one to the bet decided
2. Look for a 2 and or a 3 of that suit and if they have it add increment the bet decision.
3. Look for a Jack of that suit, if so increment bet again.
4. If the hand meets all 3 conditions then bet 5. If it meets 2 of the following and the 10 of the suit bet 4. Otherwise bet whatever value was calculated so far.

Decision to play a card.

- If the AI is going first and has a trump card in its hand play it. If it has multiple trump cards in its hand then play the highest one with the goal to get the other trump cards out of other players' hands and play freely the other lower value trump cards with no worry.

- If no trump card play the highest value card in the hand with a hope that no one else has a trump card.
- If not first then try to answer the first played suit and check if there is a card in hand that can beat the first played card. if there is then play that.
- If it cannot answer the suit then check if the first played card was not a trump card then check hand for trump card. If there is a trump card in the hand then play it.
- Otherwise play the lowest value card in hand.

Unfortunately at the current state of the game the real player always plays first leading to the AI to not meet their bet predictions most of the time and drive their score in the negatives :(

NOTE: To play the game run Game.java