**Summary of decision-making approaches in Poker Tournament**

**Team 7**

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## Decision-making approaches in Betting round 1

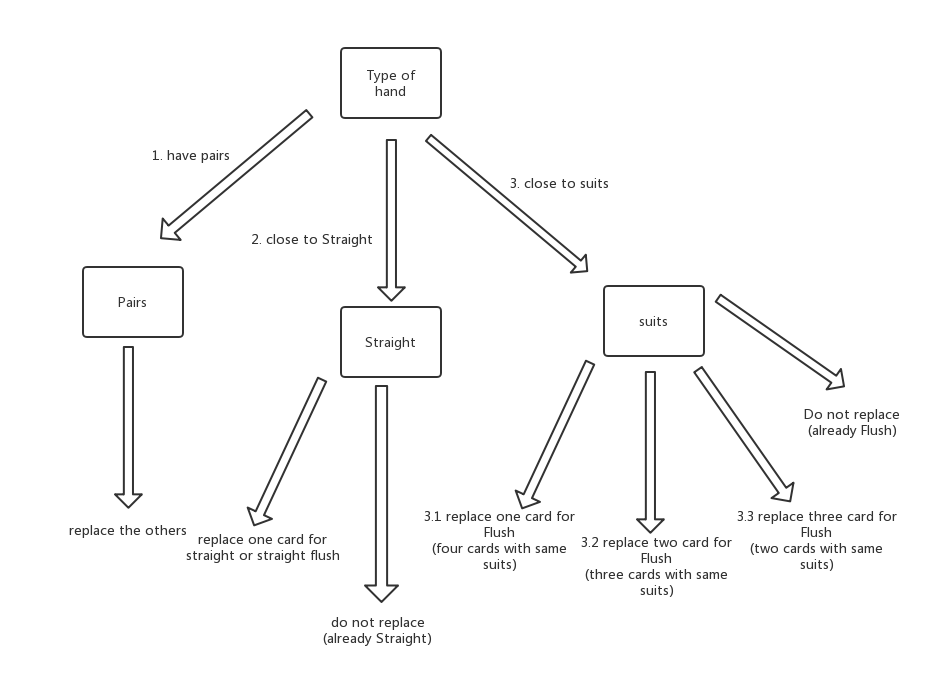
## Decision-making approaches in Draw

The draw method, the decision-making process is achieved by setting conditions for branches.

The first check is to check whether the player has some pair in hand (like One Pair, Two Pair, Three of a Kind, Four of a Kind, Full House). We are doing this because we want our AI to play safely so the AI won’t try to break their hand which already has formed a kind of hand that is better than High Card. If the player has this kind of hand, then the AI will replace the rest of the cards that don’t consist of those hands mentioned above.

If the player doesn’t have a hand that meets the first condition, the second check is to check whether the player has a potential for straight (like only need to replace one card to get a straight). If does, then the AI will replace it. If the player already has a straight or straight flush, the hand value will very close to straight. So, the AI will not replace at all.

If the player doesn’t have a hand that meets the second condition, the third check is to check whether the player has a hand that contains the same suits. If the player has a hand that contains cards with the same suits, then the AI will replace the others to get a Flush or maybe Straight Flush and Royal flush. Because of the drawer principle, every hand must have two cards with the same suits.

So, the three conditions will cover all the situations.****

Decision-making in Draw

## Decision-making approaches in Betting round 2