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3 Card Poker

Abstract:

3 Card Poker Game is created using the C++ programing language. The main focus of this project is to improve the knowledge of backend programming. It’s console base game meaning players compete against the house (dealer). I have used the concept of class, structure, function, arrays and pointers for the coding of this game.

Coding:

In the coding I have created mainly 3 classes: one for the Rank, one for the Suits, and one to generate the card using random function, and Rank and Suits as inheritance. This class generate total of 6 cards and distribute the first three to the user and the remaining three to the house using the function. Then once it’s done another function will select out only the ranks from the card for both user and house and encrypt it with special integer number so that it will help out later to find out the winning card. Once that is done user can either bet if they have a good hand or fold or show.

How to win:

If the player get either one of the following hand the automatically wins.

* Mini Royal is a suited Ace, King and Queen.
* Three of a Kind is a hand that contains three cards of the same rank. For example, a player having three Kings in their hand would have Three of a Kind. Higher-valued Three of a Kind defeat a lower-valued Three of a Kind.
* A Straight is a hand that contains three cards of sequential rank in at least two different suits, e.g. Nine, Eight, Seven in two or more suits. Two straights are ranked by comparing the highest card of each. Two straights with the same high card are of equal value, as suits are not used to separate them.
* A Pair is a hand that contains two cards of one rank (e.g. two Kings), plus one card which are not of this rank or the same as each other. Higher ranking pairs defeat lower ranking pairs. If two hands have the same pair, the Kickers are compared in descending order to determine the winner.
* High Card is a poker hand made of any three cards not meeting any of the above requirements. Essentially, no hand is made, and the only thing of any meaning in the player's hand is their highest card.

Conclusion:

Though the 3 Card Poker game is simple game code, it still uses the concept of high-level coding like the use of classes, inheritance, pointer as function return type, encryption, etc. the main concept of this project is the focus of the backend programming not the front end as we know C++ is not mostly used as an frontend programming language.