PlayerHand

Suit
+Name: String

ChipStack
+Amount: Integer

Player

Card
+Value: Integer

Deck
+/ RemainingCards: Integer

Game
+Pot: Integer

Bet
+Amount: Integer

DealerHand
+SizeofHand: Integer

Dealer

Player ▲wields PlayerHand (1, 1)

PlayerHand contains▼ Card (1, 0..2)

Card ▲member of Suit (27..52, 1)

ChipStack owns▼ Player (1, 1)

Player makes▼ Bet (1, 1...*)

Player ▲played by Game (2...10, 1)

Game manages▼ Bet (1, *)

Deck contains▲ Card (1, 0,2,3,4,5 ▲contains)

Dealer ▲wields DealerHand (1, 1)

Game dealt by▼ Dealer (1, 1)

The Game class represents the entire poker game. The Game class has one attribute, Pot, which describes the amount of money currently in play. The Game manages Bets, because there are rules in the game that specify the amounts that a bet can be based on game states.

A Dealer wields one DealerHand. In Texas Hold 'Em Poker, the DealerHand consists of zero to five Cards depending on the round in the game. Therefore, SizeofHand is an attribute of DealerHand. SizeofHand is always zero, three, four, or five based on Texas Hold 'Em play.

A Deck contains all the Cards that are not currently in play. The number of cards in the Deck is an attribute of Deck called RemainingCards. The Deck will always contain between 27 and 52 Cards, because the largest number of Cards that can be in play is 25 (two for each Player and five for the Dealer).

A Player wields one PlayerHand, which contains zero to two Cards, depending on the round of the poker game. At the beginning of the game, the Player has zero cards. Throughout the rest of the game, the Player will have two cards. A Player also owns one Stack, which has an attribute of Amount. Amount is an integer representing the amount of money with which the Player can use to bet. The Player makes Bets. Since the Player must make a Bet at the beginning of the poker game, the Player must make at least one Bet. The Bets have an attribute, Amount, which represents the amount of money the Player bet.