

Blackjack Specification - Object Oriented Model design

Classes used

1. BlackJackAdmin

main(String[])

2. BlackJackGame

start()
initialize_game()
play_game()
stand(int)
check_winner(int)
end_game()

3. Gamer

initialize_gamer()
clear_gamer_hand()

4. Player

initialize_player()
calculate_player_sum()
show_player_sum()
hit(int)
show_player()
split_player()
show(int)
clear()

5. Hand

Initialize_hand()
show_initial_hand_dealer()
show_initial_hand_player()
set_values()
calculate_sum()
add_one()
show_all()
allow_split()
clear_hand()

6. Dealer

initialize_dealer()
calculate_dealer_sum()
show_dealer_sum()
show_dealer()
hit()
new_dealer_initialize()
clear()

Relation between Classes

A Dealer/Player is a Gamer.

A BlackJackGame has one Dealer and one Player.

A BlackJackAdmin has a BlackJackGame.

A Dealer/Player has a hand.

Behaviors of Entities

- BlackJackAdmin starts a BlackJackGame, runs the game and ends the game.
- BlackJackGame is basically a round of the game. Gets the bet amount, lets the player choose the functions (1.HIT 2.STAND 3.DOUBLE DOWN 4.SPLIT) for the round.
- The player and dealer classes inherit the gamer class.
- The hand class initializes the hand of the dealer and player i.e. deals cards, sets values (for face cards and ace) and clears the hand after each round.
- Player places bet, and makes decisions in each single round of play.