Blackjack Game UML

Player → Hand: has a hand of cards

Deck → Card: has multiple cards (52-card set)

Deck → (Card): generates cards for the deck

Player → Deck: draws cards from the deck

Dealer → Player: inherits Player class

CardCountingPlayer → Player: inherits Player class

Dealer → Hand: has a hand of cards

CardCountingPlayer → Hand: has a hand of cards

CardCountingPlayer → Dealer: updates the count based on card values

CardCountingPlayer → Deck: draws cards from the deck

CardCountingPlayer → Game: plays a round in the game

Game → Player: manages multiple players

Game → Deck: manages a deck of cards

Game → Dealer: manages dealer behavior

Game → Hand: manages player hands

Player uses a strategy based on card counting

Dealer plays based on standard rules (hit on 16)

Player has chips and a hand of cards

Game runs multiple rounds, tracks player winnings

Deck is shuffled and drawn from multiple times