# Object-Oriented Programming Using C++

**Course 605.604**

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A simple blackjack card game consists of a player and a dealer. A player is dealt cards, called a hand. Each card in the hand has a point value. The objective of the game is to get as close to 21 points as possible without exceeding 21 points. A player that goes over is out of the game. The dealer deals cards to itself and a player. The dealer must play by slightly different rules than a player. A game proceeds as follows: A player is dealt two cards face up. If the point total is exactly 21 the player wins immediately. If the total is not 21, the dealer is dealt two cards, one face up and one face down. A player then determines whether to ask the dealer for another card (called a "hit") or to "stay" with his/her current hand. A player may ask for several "hits." When a player decides to "stay" the dealer begins to play. If the dealer has 21 it immediately wins the game. Otherwise, the dealer must take "hits" until the total points in its hand is 17 or over, at which point the dealer must "stay." If the dealer goes over 21 while taking "hits" the game is over and the player wins. If the dealer's points total exactly 21, the dealer wins immediately. When the dealer and player have finished playing their hands, the one with the highest point total is the winner. If the dealer and player tie, nobody wins. Play is repeated until the player decides to quit.

Identify candidate classes for the blackjack game, including attributes and methods.