

**MS-3803**  
**Program #5**  
**Blackjack**

**Date: Wednesday, January 25, 2006**

**Due: Wednesday, February 1, 2006**

**Introduction**

The purpose of the assignment is to simulate the card game 'Blackjack'. The user will be the 'Player' and the computer will be the 'Dealer'. For now, only a two-player version of the game is to be implemented. Keep the basic game of Blackjack simple. No splitting pairs or 'doubling down'; just let the players pick as many cards as they request until they stop or go over 21 points (if a player goes over 21 points, they 'bust', and thus lose that game). All cards have their 'face' value in points. Jacks, Queens, and Kings are worth 10 points and Aces are either 1 or 11 points. The general rule on Aces is to value them at 11 points unless that would cause the player to break 21 (in this case, count Aces as only one point). The user can take as few or as many cards as they like, but the Dealer (the computer) must take a hit on 16 points or less and must stay on hands of 17 points or more. The player goes first and the dealer always goes last.

**Design**

The game should have one computer player and one player as the user of the program. Basically, it's the computer (the Dealer or "the House") against the user. The computer will need to act as the Dealer, so it will need to have a method to 'shuffle' the cards and one to 'deal' the cards, as well as one to 'play' the game (i.e. tell the user their total and let them know if they've 'won', 'lost', or 'broke' (went over 21 points)). You can also keep track of the points for the dealer's and player's hand and a running total of the number of games won and lost for the user.

For now, the User Interface (UI) can be console-based I/O of text messages between the user and the game. Later on, we'll redo the UI to utilize the JFC/Swing graphics class library to make it a graphical game.

For a basic primer on the rules of Blackjack, read section 2.0 of the following web page:

<http://www.blackjackinfo.com/bjrules.htm>