

Final Project

CS190: Java, Winter 2008

Instructor: Andy Mroczkowski

Due: 19 March 2008

1. Description

Our final project will be a simple Blackjack game. The game will have a dealer and a single player. The deck need not be more than a standard 52 card deck. Cards 2-10 will be worth their face value. Jacks, Queens, and Kings are worth 10. Aces are worth 11, unless they cause the player to bust, in which case they are worth 1.

The dealer and player will initially be dealt two cards, one face-down and one face-up. The player will go first and have the option to hit or stay. The player can continue to hit as long as he doesn't bust. When the player decides to stay, the dealer will have the option to hit or stay also. If the dealer doesn't bust, the player with the highest hand is the winner. There is no betting in our simplified Blackjack game. Nor are their advanced rules such as splitting or doubling-down.

You are required to implement the game model and the basic game logic. A player should be able to start a game of Blackjack. During the game, he should be able to hit or stand. If at any time he busts, the game is over. If the player decides to stand, the dealer then plays. If the dealer busts, the game is over. If the dealer stands, the two hands are compared and the a winner is determined. Its up to you how to handle tie games. You game should also track wins and losses of the player.

Some skeleton classes and a complete console interface will be provided to get you started. You are not required to use these classes but doing so will make adding a GUI to your application much easier.

If you are unfamiliar with Blackjack you can review the basics of the game at:

<http://en.wikipedia.org/wiki/Blackjack>

A good working example that matches all the features you are required to implement is:

<http://www.cs.unc.edu/~clark/courses/comp14-spr04/Blackjack/Blackjack.html>

2. Extra Credit and Special Circumstances

There are many opportunities for earning extra credit or building a more advanced project if you wish. Please contact me directly to work out the details.