SGD 213 - Project 1

REQUIREMENTS DOCUMENT

Application title: Poker Game

Purpose: This application will function similar to a game of poker. The

program will deal out 2 five card hands and determine what each hand

contains.

Program
Procedures:

The program will create a standard deck of 52 playing cards. It will shuffle the deck then "deal" 5 cards to "The computer" and "The player". The program will evaluate what each hand has and display the cards graphically as well as printing the value of the hands (as defined below).

Algorithms, Processing and Conditions:

- 1. The application must be implemented as a Windows C# console program.
- 2. There should be at least three classes (one in each class file) defined for the project. One of the classes will be called Card. Another class will be called DeckOfCards.
- 3. You should use a minimum of 3arrays: 1 for the deck of cards, 1 for the player's hand, one for the computer's hand.
- 4. You should display each hand graphically (using the example from Chapter 8 posted in Moodle).
- 5. You should use a random number to shuffle the deck.
- 6. The hands are evaluated as follows:
 - a. Four of a kind (e.g. 4 Aces)
 - b. Full House (2 of and kind and 3 of a kind in same hand)
 - c. Flush (all 5 cards of the same suit)
 - d. Straight (all 5 cards face values in sequence (2,3,4,5,6)
 - e. Three of a Kind.
 - f. 2 Pairs
 - g. Pair

Notes and Restrictions:

You should add read-only properties to the Card class to get the face and suit of each card.

Comments:

- 1. You should submit the Visual Studio project in a zipped file in Moodle
- 2. All variables and objects must have meaningful names and should use lower camel casing. All classes, properties and methods

should have meaningful names and should use upper camel casing. If you are unsure of the proper naming method to use, consult the instructor.

Grading:

40% - Console program runs

20% - Properly state what each hand holds (flush, full house, etc.)

10% - Proper creation and use of card value and suit property in the Card class.

10 % - State the correct winner of the game (computer or player)

10% - Proper naming of classes, methods, properties and variables.

10% - Documentation of code (header comment and use of sufficient comments throughout code)