**PROJECT 1 REQUIREMENTS**

This project builds on the code we've been working on in class. You are allowed to use Python or C++.

Design a class called "card" that lets the user create any one of 53 playing cards. That's right, 53!!!! We will assume that "joker" is an allowable card. The class must have a method called "display" that displays the value of the card.

Design a class called "deck" that creates a deck of cards. The software should allow the user to specify the number of cards in the deck, and whether or not jokers should be included. The deck class should have the following methods: shuffle (shuffle the deck), deal (display a card and remove it from the deck), and show\_status (display how many cards are left in the deck).

Design a class called "hand" which represents a card player's hand. The hand class should have a method called "deal\_to\_me" which makes the "deck" deal five cards to the hand. The hand class should also have a method called "display" which shows the five cards in the hand.

*Anything that I haven't specified, you are allowed to determine for yourself.*

Submit a single .py or .cpp file through Canvas. Code must be well documented. I recommend working on the code in Cloud 9 and then uploading your source code to Canvas when you're done.

**Scoring**

The card class is worth 20 points: 15 points if you can get it working with 52 cards and another 5 points if you get it working with the joker as well

The deck class is worth 15 points: 10 points if you can get it working without allowing the user to specify number of cards or jokers. Another five points if you allow user to specify number of cards and joker. shuffle, deal, and show\_status are equally weighted in terms of points

The hand class is worth 5 points.

Documentation is worth 5 points.

**Update #1**

Your code should allow the following commands to be executed in main [Python code shown here - do something equivalent if you're working in C++]

In the "main" of your program, you should be able to execute:

myDeck = deck(27,joker = False)  # the number can be any value between 1 and 52 (or 53 if joker is True); the joker flag can be True or False.   
myDeck.shuffle()  
  
myHand = hand()  
myHand.deal\_to\_me( myDeck )  
  
myDeck.show\_status()  
myHand.display()