**Arrays and Lists as Instance Variables.  Indexers, Delegates and Events.**

Things to do

* **Reading Quizzes 6 and 7**
* Read chapter 13 in the C# text.
* Complete Reading Quiz 6. Each reading quiz consists of 10 multiple choice questions taken from the topic. You may take the reading quiz 4 times and the average of your scores will be used in the calculation of your grade. Each quiz is open book but because you only have 40 minutes to complete each attempt, you won't complete the quiz if you haven't read the materials prior to attempting the quiz.
* Complete Reading Quiz 7.
* **Lab 6**
* Complete exercise 13 - 1 (parts 2 - 3, 5, 8, 10 and 11).  Modify the console application you wrote to test the customer class to include tests for the validation you wrote for the properties.  Add code to the tester to test the indexer, count, add, remove, fill and save methods as well as the + and - operators.
* ~~Complete the Deck class as discussed in class.  Write a console application to test the class.~~
* ~~Complete the Hand class as discussed in class.  Write a console application to test the class.~~
* ~~Participate in the forum - Lab 6 Questions as necessary.~~
* Complete a peer evaluation for your work in lab 6.  Make any corrections necessary based on your peer evaluation.
* Submit lab 6.
* **Lab 8 (Prep)**
* BEGIN to create a GUI for blackjack as discussed in class.  The GUI for BlackJack is part of your last lab, lab 8 BUT you may want a break from all of your work creating classes.  Creating the GUI in Visual Studio should be "light" and will give you a start onlab 8.

**Lab 6 Instructions –**

The objective of this lab is to familiarize you with creating classes that involve arrays and lists in C#.  This information is in chapter 13 of the text…

Complete the programming problems described below.  For each of the problems, a Visual Studio project containing at least one form has been provided in the starting files for the lab:

* Exercise 13 - 1 (parts 2 - 3, 5, 8) on page 420 and 421 of the text.  (Parts 4, 6, 7, 9 are part of lab 7).  Test the validation in the Customer class as well as the complete implementation of the CustomerList class in your console app from lab 4.
* Create a Deck class and a Hand class.  Add the classes to your project from lab 4.  The specifications for the classes were developed as part of our discussion in class.  Create a console application that tests every property and method in each class.
* Deck
* Deck()
* NumCards
* IsEmpty()
* Card Deal()
* Shuffle()
* string ToString()
* Hand
* Hand()
* NumCards
* Add(Card)
* Card GetCard(index)
* int IndexOf(Card)
* int IndexOf(value)
* int IndexOf(value, suit)
* bool HasCard(Card)
* bool HasCard(value)
* bool HasCard(value, suit)
* Card Discard(index)
* string ToString()

A maximum of 20 points will be awarded for the lab:

* The problems completed as a group in class will earn a maximum of 12 points.
* All problems will earn a maximum of 20 points.

In class section students should:

* Sketch a class diagram that illustrates the specification of the class.
* Complete the implementation, test and debug the class in Visual Studio.  Add a class diagram
* Download the peer evaluation form for lab 6.  Complete the peer evaluation with a classmate using the form as a guide.  Include with the peer evaluation document:
* screen shots illustrating the functionality of the application in problem
* the source code for the classes and test programs that you wrote in each problem
* class diagram for each class you wrote
* Upload the peer evaluation document you created in moodle.