**Week 5, Intro to Building Your Own Classes –**

Things to do:

* Reading Quizzes 4 and 5
* Read chapter 12 in the C# text.
* Read the lecture notes - classes.
* Complete Reading Quizzes 4 and 5. 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.
* Lab 4
* Complete exercise 12 - 1 (Parts 1 - 4 only.  Parts 5 - 14 are part of lab 5).  Write a console application to test the Customer class.
* Complete the Card class as discussed in class.  Write a console application to test the Card class.
* Participate in the forum - Lab 4 Questions as necessary.
* Complete a peer evaluation for your work in lab 4.  Make any corrections necessary based on your peer evaluation.
* Submit lab 4.
* Lab 5
* Complete exercise 12 - 1 (Parts 5 - 14).
* Re-write the concentration game from lab 3 so that it uses your Card class.
* Participate in the forum - Lab 5 Questions as necessary.
* Complete a peer evaluation for your work in lab 5.  Make any corrections necessary based on your peer evaluation.
* Submit lab 5.

**Lab 4 Instructions -**

The objective of this lab is to familiarize you with creating your own classes in C#.  This information is in chapter 12 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 12 - 1 (parts 1 - 4) on page 393 of the text.  (Parts 5 - 14 are part of [lab 5](https://classes.lanecc.edu/mod/assign/view.php?id=1285023).  Exercise 12 - 2 is EXTRA CREDIT.)  Create a console application that tests every property and method in the Customer class.
* Create a Card class.  The specifications for the class were developed as part of our discussion in class.  Create a console application that tests every property and method in the Card class.

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 4.  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
* Upload the peer evaluation document you created in moodle.

**Lab 5 Instructions –**

The objective of this lab is to allow you to create object oriented applications using classes that you created in [lab 4](https://classes.lanecc.edu/mod/assign/view.php?id=1285017).  This information is in chapter 12 of the text.

Complete the programming problems described below.  For each of the problems, use the visual studio solutions from labs 3 and 4 as a starting place:

* Exercise 12 - 1 (parts 5 - 14) on page 393 and 394 of the text. Exercise 12 - 2 is EXTRA CREDIT.
* Concentration (or Memory) - Modify your game from [lab 3](https://classes.lanecc.edu/mod/assign/view.php?id=1285008) to use the Card class you created in [lab 4](https://classes.lanecc.edu/mod/assign/view.php?id=1285017).

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:

* Complete the implementation, test and debug the application in Visual Studio.
* Download the peer evaluation form for lab 5.  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 event handlers and variable declarations that you wrote in each problem
* Upload the peer evaluation document you created in moodle.