**Airline Reservations System Group Project**

Due: May 1, 2018 no later 11:59 pm

**Purpose: (Airline Reservations System)**

A small airline has just purchased a computer for its new automated reservations system. You have been asked to develop a new system. You are to write an application to assign seats on each flight of the airlines only plane (capacity: 10 seats)

Your application should display Radio Buttons that allow the user to choose **First Class** or **Economy**. If the user selects **First Class**, your application should assign a set in the first-class section (seats 1-5). If the user selects **Economy**, your application should assign a seat in the economy section (seats 6-10). Your application should then display a boarding pass indicating the person's seat number and whether it is located in the first-class or economy section of the plane.

Use a one-dimensional array of type Boolean to represent the plane's seating chart. All the elements of the array are initially **FALSE** to indicate that the seats are empty. As each seat is assigned, set the corresponding elements of the array to **TRUE** to indicate that the seat is no longer available.

Your application should never assign a seat that has already been assigned. When the economy section is full, your application should ask if the person if it is acceptable to be placed in the first-class section (and vice-versa). If yes, make the appropriate assignment. If no, display the message "Next flight leaves in 3 hours."

This is a group project. We will discuss the formation of groups and decide on groups in class on 4/17/2018. Groups will consist of no more than two people. You will be graded on the following:

1. Planning
2. Execution of Planning
3. Completeness of Solution
4. Correctness of Solution
5. Testing
6. Documentation

The materials that will need to be tuned in with this final project are:

1. **Planning** – Your pseudo code and general plan of attack. This should be a Word document, single-spaced, with font size no larger than 12 point. Please use standard margins. This document should be at least two pages long.
2. **Execution of Planning** – Based on your planning document in number 1 above, you should split your major functionality into a checklist. Also, add to that checklist, the pseudo code, document management, testing, etc. Assign each task to one or more team members. This can be done in either Excel or Word. Date each task when completed. It is ok to have a primary programmer, as long as the other group members contribute materially to the project.
3. **Programming Code** – A zip file as we have been producing all term including all your code, which would be able to be compiled and run.
4. **Testing Log** – You will need to again split up your major functionality up and put it on a checklist.
    - Test each piece of functionality and date when completed. Again, this can be done in either Excel or Word.

Documentation – Your code documentation will be evaluated, in addition to writing at least one-two pages of documentation on your system for new users. The documentation should be doubles spaced, 12-point font size, with Times New Roman as the font.