**C# Project 4 – Student System in GUI format**

Purpose: Create a C# GUI application that allows maintenance of student records.

This application should be able to add, change and delete students.

Students can be either a dorm student or a commuter student. All students will have a student ID and name. If the student is a dorm student, they will also have a dorm location (Oak, Trustee, Wapello, Appanoose, Mahaska) and meal plan type (B – basic, M – Medium, H – High).

\*\* Keep in mind that as part of the change process, a student can switch from dorm to commuter, or commuter to dorm. \*\*

Define a Student base class (ID and name) with a child class of DormStudent (dorm location, meal plan type). The Student class should implement the IComparable interface so the students can be sorted by student ID. Classes should use properties, constructors and ToString override.

Students will be maintained in a data file. Upon application startup, the students in the file should be read in and stored in a Student list. This list should be used by the program when adding, changing and deleting students. Upon application exit, the list should then be written back out to the file. Serialization and de-serialization will be used for writing/reading the student objects. Object manipulation will be required when converting object types.

* Design the user interface as you see fit.
* Adhere to good design techniques.
  + Layout
  + Validation / error handling
  + Confirmations
* Use a basic main form/sub form type setup.

Project is worth 50 points.