**PROG1781 – Programming Concepts Fall 2020**

**Assignment 5**

**~~This is a great exercise to exercise and practice your team and communication skills.~~**~~Possible task split:~~**~~1 -~~** ~~Main program  (this can be focused on by multiple members)~~**~~2~~**~~- Creating the class (separate file in same project)~~

~~-All work must be done in one project~~~~-Each group~~ **~~MUST~~** ~~include in the comments what each member did.~~**~~-Note: Each team member is responsible for reviewing, and if complete testing, the final agreed upon submission.  
-Work must be unique to each group (no copying or shared work across groups)~~  
~~[Maximum points: 30]~~**

**~~This Assignment Builds on the concepts you learnt about Classes and Arrays~~**

~~You are required to create a C# Console Application project. The project name should be A4<Group\_#>P1. For example group #10 would name the project A4Group10P1.~~

~~Create a C# console program that creates and records information for~~ **~~multiple~~** ~~students.~~

~~When the program is run:~~

**~~First prompt the user for the number of Students to be entered in the Database (This will determine your array size).~~**~~Then following main menu is then displayed:~~

1. ~~Add a new student~~
2. ~~Edit an existing student record~~
3. ~~Display the name, age, and address of the student (if one already exists)~~
4. ~~Exit the program~~

~~After a choice from the main menu is selected:~~

* + ~~The program must accurately perform the necessary operation and returns to the main menu unless option "D" is selected.~~
  + **~~For option "A"~~**~~:  
    The program displays "student record already exists" when a student has previously been created. Otherwise, the program prompts the user to input the following information and stores the information:~~
    - ~~Name~~
    - ~~age~~
    - ~~address~~

~~The user must be able to enter multiple students up to the max number or enter “QUIT” to return to the main menu.~~

* + **~~For option B:  
    A~~**~~llow the user to edit an existing record by requesting the students name. Display the records and allow the user to edit each field at a time (Name age address). If the record does not exist notify the user.~~
  + **~~For option "C":~~**~~Prompt the user for the student name, the program must display the name, age, and address of the student. The program displays "No student record exists" when no student has previously been added.~~

~~In case of an invalid input, the user is prompted to re-enter the value until a valid value has been entered OR “QUIT” to return to the main menu.~~

~~If a valid entry is made (record found) the student data (name, age, and address) is displayed, the user is them prompted to press enter/any key to return to the main menu~~

**~~Note the following Carefully:  
Class:~~**

~~In your program, you must create and use a C# class that represents the student record using appropriate fields and methods. Your class~~ *~~must not~~* ~~have any public fields. You~~ **~~must~~** ~~create this file as~~ **~~a separate file~~**~~.~~

~~Your class has, at a minimum, two public methods with the following names:~~

* ~~DisplayStudentInformation~~
* ~~EditStudentInformation~~

~~Your class have a non-default constructor that is used to initialize the student record information.~~

~~Your class have a default constructor (even if it is not used by your program)~~

**Array:**

* ~~For each object that is created based on the class, use an array to store the Object name and use the “.” Notation to access properties and methods as required for example Studentarray[i].EditStudentInformation~~

**~~Note: The purpose of this assignment is to apply your knowledge of C# classes. If your program does not contain a separate class for the Student record no credit is given for this assignment.~~**

~~Adhere to coding and assignment submission standards/guidelines. Marks will be taken off, if these standards/guidelines are not followed. The format for submitting the assignment is as follows:~~

1. **~~Upload~~**
   1. ~~txt of your C# source code, both the Main menu source code and the Student class source code.~~
   2. ~~A single compressed (.zip format) archive file containing the folder of your program submitted to eConestoga;~~
2. **Demonstration of program in class**: Please have your program running on your desktop when you are ready to demonstrate your work and all hard copies of program ready to be signed.