Requirements:

Your team is to design and implement a small class-roll maintenance system. For each student, the following data is needed:

* Name (up to 40 characters)
* USF ID (10 characters)
* Email (up to 40 characters)
* Grade of the presentation (numerical value from 0 (F) to 4 (A))
* Grade of essay (numerical value from 0 (F) to 4 (A))
* Grade of the term project (numerical value from 0 (F) to 4 (A))

The capabilities the system must support are:

* Read/write student data
* Add/delete students
* Retrieve student data based on a search by name, ID or email
* Update any or all data fields

The system consists of the main routine and various functions supporting the capabilities. There is no need (time) to implement a complicated user interface; a simple console-based text interface would be perfectly acceptable. The way the data is stored in a file must be made transparent to the user!

Input/Output Data:

StudentData.txt contains the input and output for the program and is a newline delimited file.

The same file is used in order to save added students during the program execution. The program writes to the file in a way so it can reread the data upon next execution.

Ex:

Robert Cunningham

U123456789

[rcunningham@mail.usf.edu](mailto:rcunningham@mail.usf.edu)

2

3

4

John Doe

U987654321

[jdoe@mail.usf.edu](mailto:jdoe@mail.usf.edu)

4

4

4

…

Flow Diagram of Functionality:

