Assignment 3 – Fall 2013: Graphical User Interface with File Dialogs, Linked Lists (25 pts)

Create a GUI which:

* **provides a File Chooser dialog to open** a text file – it should
  + provide a default directory (c:\users)
  + limit the types of files shown to files ending with .txt
* Your program should :
  + handle the case where the user cancels instead of choosing a file without crashing
  + assume that the .txt file chosen will have the following format, where the GPA is a float and the firstName, lastName, and Major are strings.  
      
    firstName,lastName,GPA,Major
  + read the data from the file and print it, one record per line, into a LinkedList of Students.
* **provides a File chooser dialog to save** a text file
  + the default directory should be the one they selected when they opened the file OR, if they didn’t select a file, the default can be c:\users
  + allow the user to type the name of the file where the data will be stored, and make sure that the default extension is .txt  
    NOTE: if the LinkedList is empty, print a message to the user and don’t attempt to write to the file.
  + save all of the data from the linked list (including any newly added items) to the file that they’ve chosen.
* provides 4 labels and 4 text boxes along with a SUBMIT button to allow the user to type new data to append to the linked list.
* provides a JTextArea and a DISPLAY ALL STUDENTS button which should display all of the student data in thelist (one record per line) in the JTextArea

BONUS—5 pts: Sort the data in the linked list before displaying it and before writing it out to the file using the Collections’ SORT method.