

## **Criteria A**

### **Problem Statement**

My tutor is currently considering about using the other program for his student list since he is having difficulty organizing his student.

### **Description of Scenario**

Mr. Randy, the tutor, have been teaching both ISB students and non-ISB students for past 15 years. On the spreadsheet, he listed and organized the name of students, E-mail address of students, nationality of students, and more. Since he has many information to organize, he is having difficulty in keep tacking on his lists. Also, he wants to record his students information offline because he felt that loading time of online spreadsheet is relatively slow.

Basically, what he is demanding is simple, efficient, and better appearance offline spreadsheet program. My JAVA program allows him to add the student's information without scrolling many rows and columns.

### **Rationale for the Proposed Product**

I thought using JAVA application is the best solution for this problem. Personally, I have learned how to create the list of the particular string in the table; therefore, I understood how to program the basis of this solution. JAVA gives my client simplified version of spreadsheet. By using the text fields and buttons, he is no longer required to scroll down or search the name of student to make modification. In addition, JAVA allows him to modify and change his students list without connecting with wireless networks. So he can check students' E-mail address or phone number anywhere unless he forget to bring his computer.

When I talked with my client, he wanted not to use google spreadsheet because he is often work with his students where Wi-Fi connection is unstable. In that case, he required to use tazerling with his mobile-phone. We have discussed that the solution for this issue is by using the JAVA program which can be used in offline.

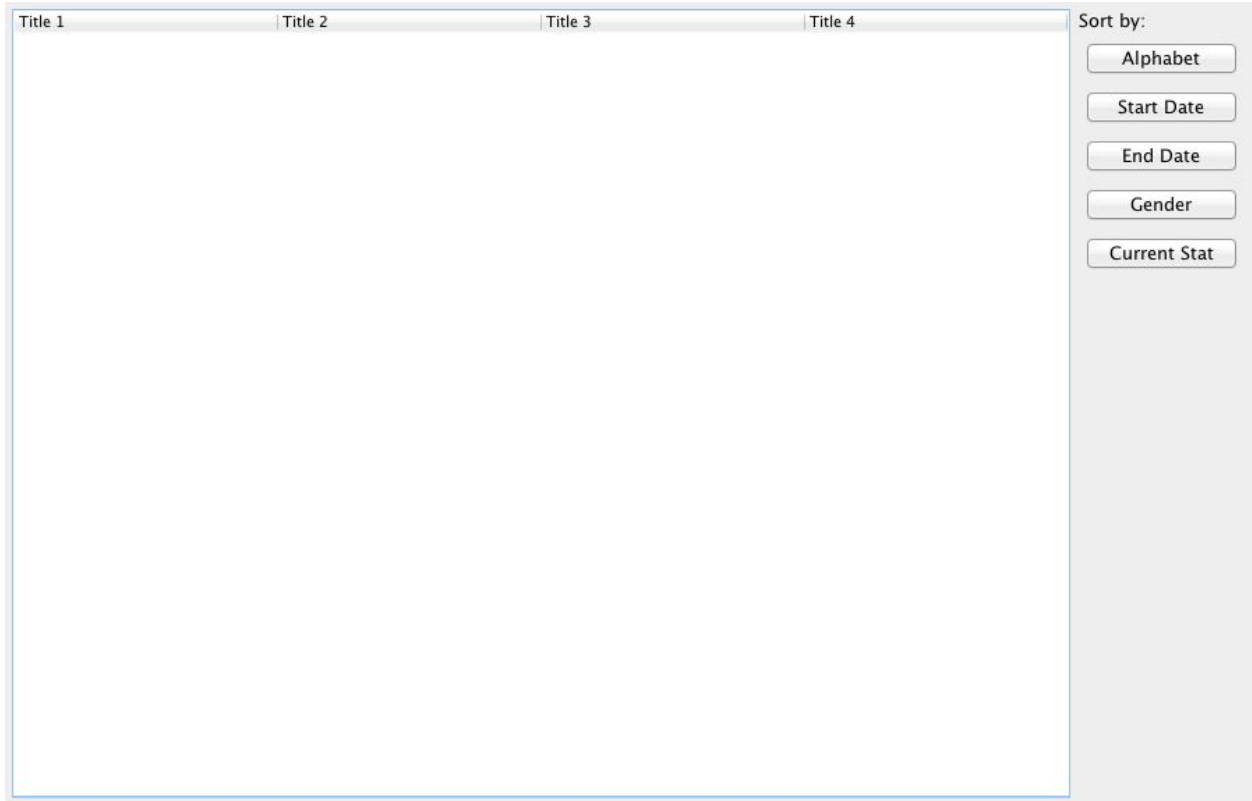
## Prototype of the Product

The image shows a software prototype interface for a student management system. It consists of several key components:

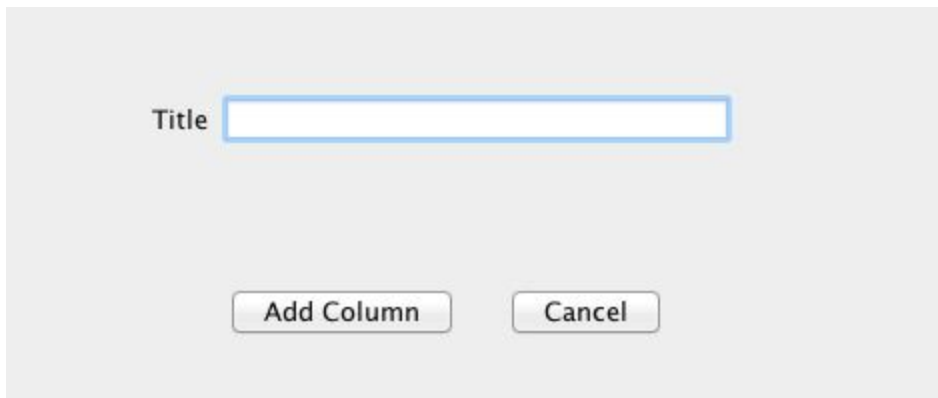
- Top Section:** An "Add Row" section with a text input field, a "Student Name" dropdown menu, an "Add to Table" button, and a "Help" button.
- Main Table:** A large table with four columns labeled "Title 1", "Title 2", "Title 3", and "Title 4".
- Right Side:** A "Sort by:" section with buttons for "Alphabetical", "Gender", "Current Stat", "Start Date", and "End Date". Below these are "Add Column" and "Preview" buttons.
- Bottom Section:** A search section with a "Student Name" dropdown menu, a text input field, and "Search" and "Refresh" buttons. A smaller version of the table is also present in this section.

This is the first page that shows when the client opened the JAVA.

- This page allows the client to edit the students list. An add Row text field allows client to add new rows on the selected column, which is the combo box located above the large table.
- Table can be sorted by the button that is placed on right side of the program.
- The client can search specific items from the table by using second combobox and another text field. When the client pressed the search button, any items that matches with user's input will appear on the small table.
- Small table is the place where the client can edit the student information and apply on the large table by pressing the "refresh" button.



This page shows up when the client pressed the button named “preview” in first page. This page is non-editable page, but the client can sort the table by the buttons on the right part.



This page shows up when the client pressed the button named “add column” in first page. It allows the client to add new column on the tables. The new column will be appeared on the first pages’s combo box; therefore, the client can add new information in added column’s row.

### **Success Criteria for Product**

- ✓ Create the database
  - ✓ Display table
  - ✓ Sorting (alphabetical order, number order, gender order)
  - ✓ Searching
  - ✓ Add / Delete column / row using button
- ✓ Utilize multiple GUI
- ✓ Combo boxes & other GUI elements themselves
- ✓ Create local file / save and load data from local file
- ✓ User friendly design
- ✓ Help button - pop-up
- ✓ Multiple tables that synchronize
- ✓ Searching by letters (words) and numbers.
- ✓ The button that allows client to add new row and column in tables.

Criteria A Word Count: 569