

CSCI 201L Spring 2014 – Section 2
Midterm - Programming
12.0% of course grade

Create a program that behaves as a specialized word processor and spreadsheet application based on different tabs. The program should open to the word processor and have a tab, as well as a menu item and a checkbox, which allows changing to the spreadsheet application.

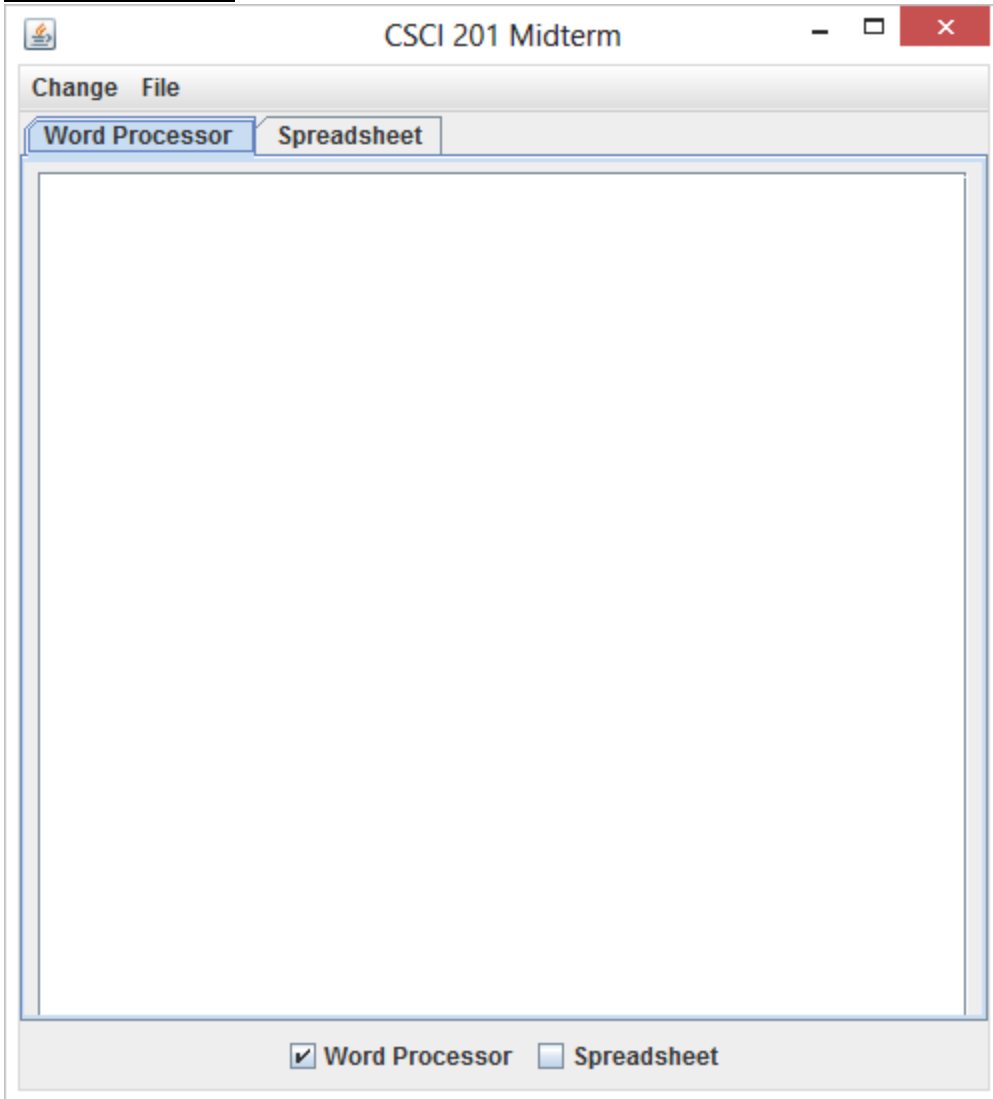
Your graphical user interface should look like the screenshots in the Sample Execution section below. There will be a menu called “Change” with menu items “Word Processor” and “Spreadsheet”. The checkboxes that are displayed at the bottom of the frame should change based on which interface is currently shown. Only one checkbox should be able to be selected at a time.

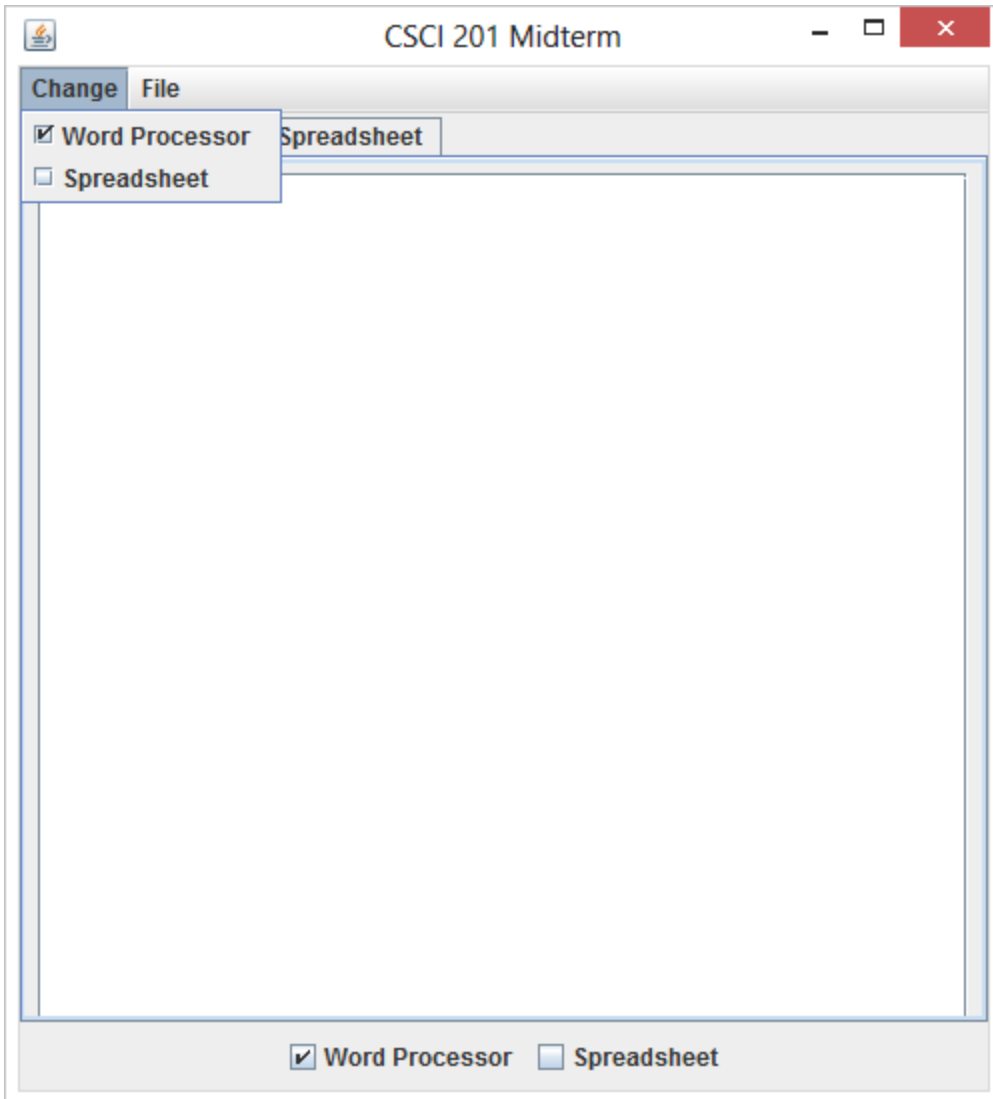
When the word processor is displayed, there should also be a “File” menu that allows the user to open a file to display in the word processor or exit the program. When a file is opened, a file chooser dialog box should be displayed, and the content of the file selected should be displayed in the word processor. When the “Exit” menu item is selected, it should perform the same action as the X in the corner of the window and close the application.

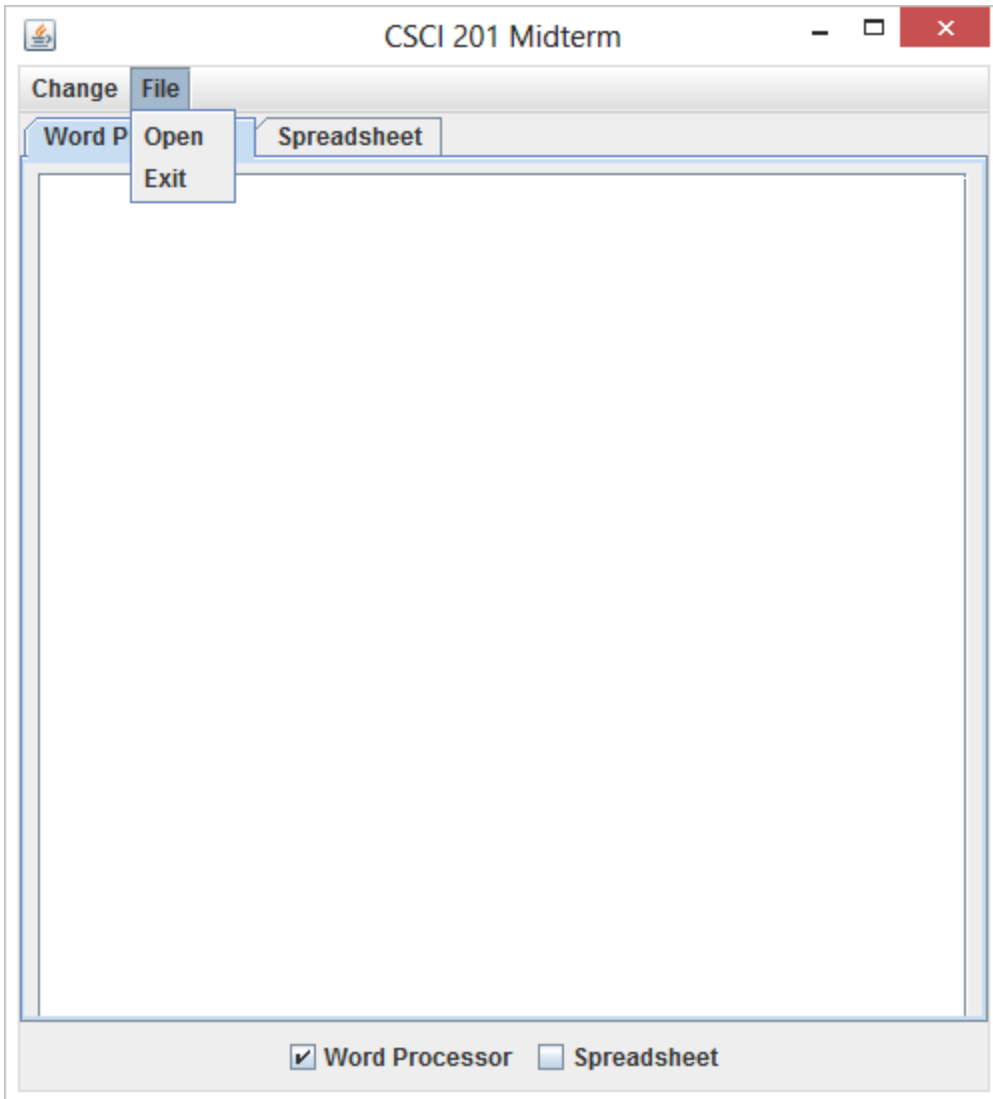
When the spreadsheet is displayed, there should still be a “File” menu, but the “Open” menu item will not be displayed. The “Exit” menu item will still be there. In addition, there should be a “Table” menu displayed. The “Table” menu should have a “Column Width” menu item that will display a pop up box allowing the user to change the column width in the spreadsheet. The user will have an open text field in which to type in that dialog box, so you need to make sure you have appropriate checks in place to ensure a valid numerical value is entered. This dialog box is shown below.

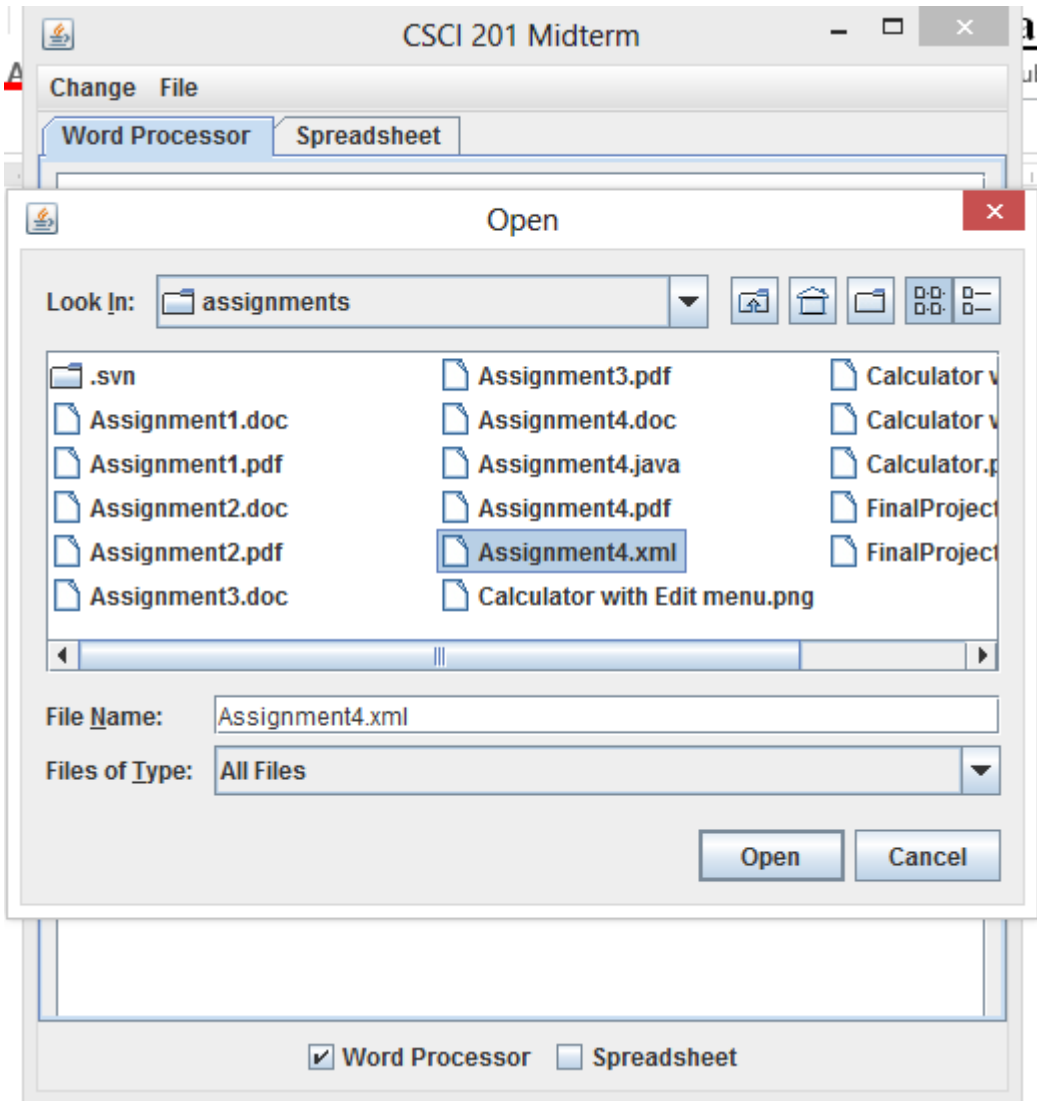
With the menu items on the “Change” menu and the checkboxes on the GUI, the same action listener should be used.

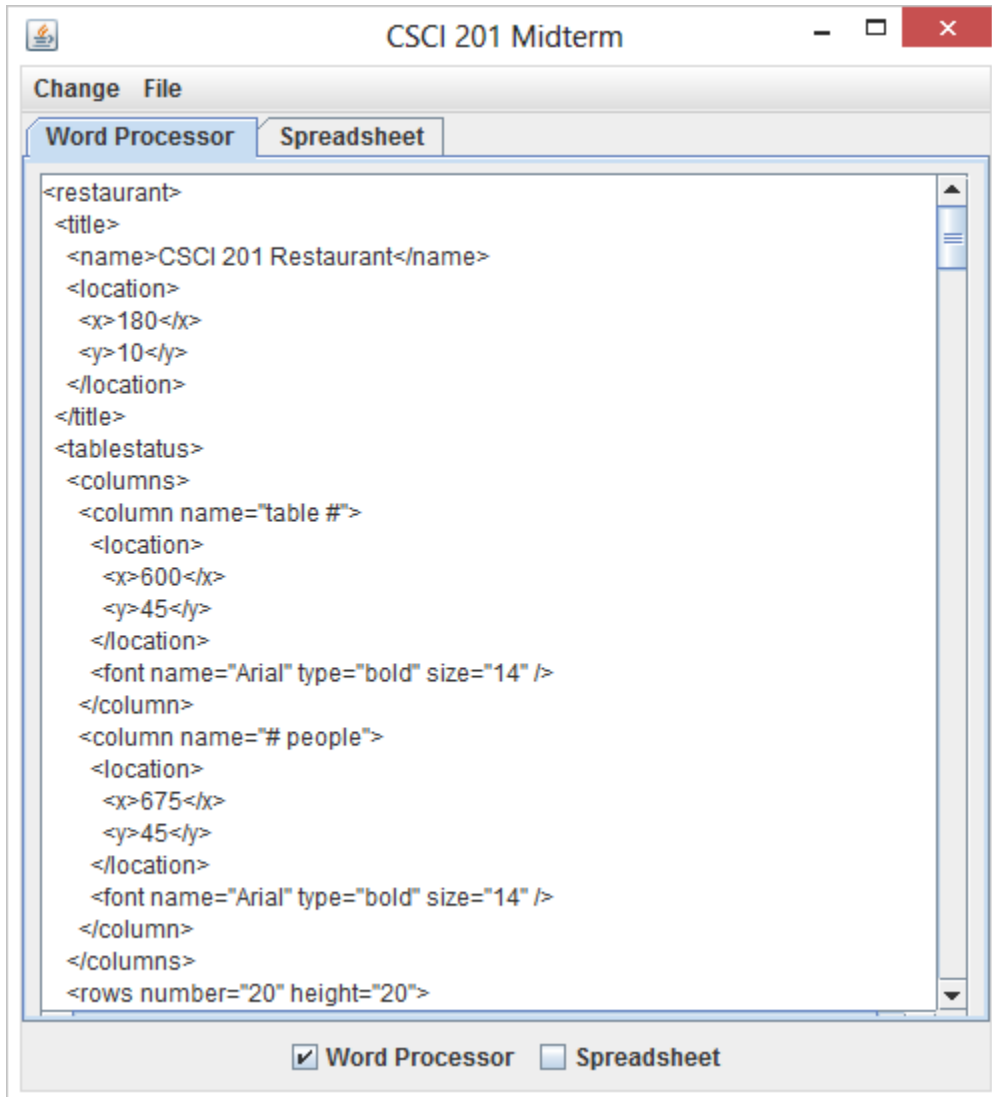
Sample Execution

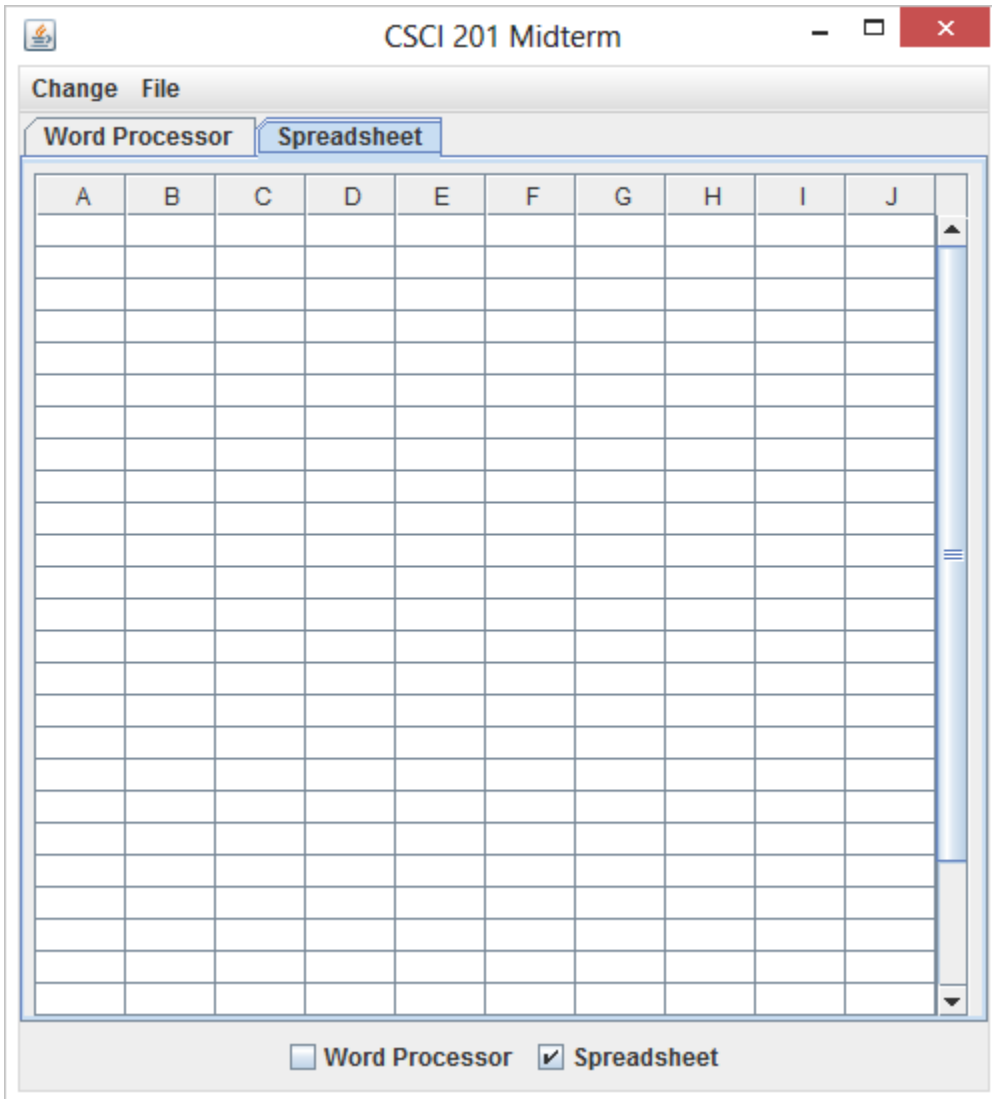


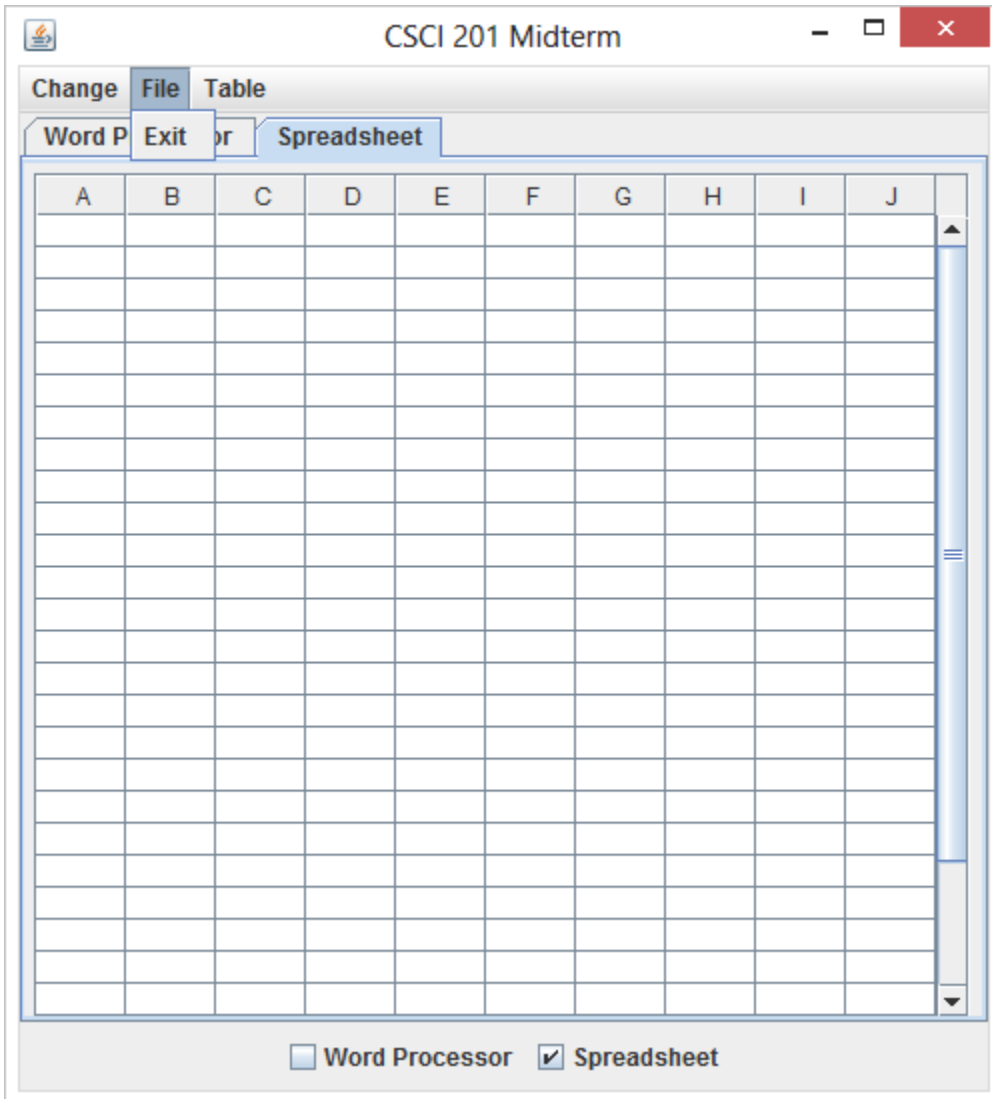


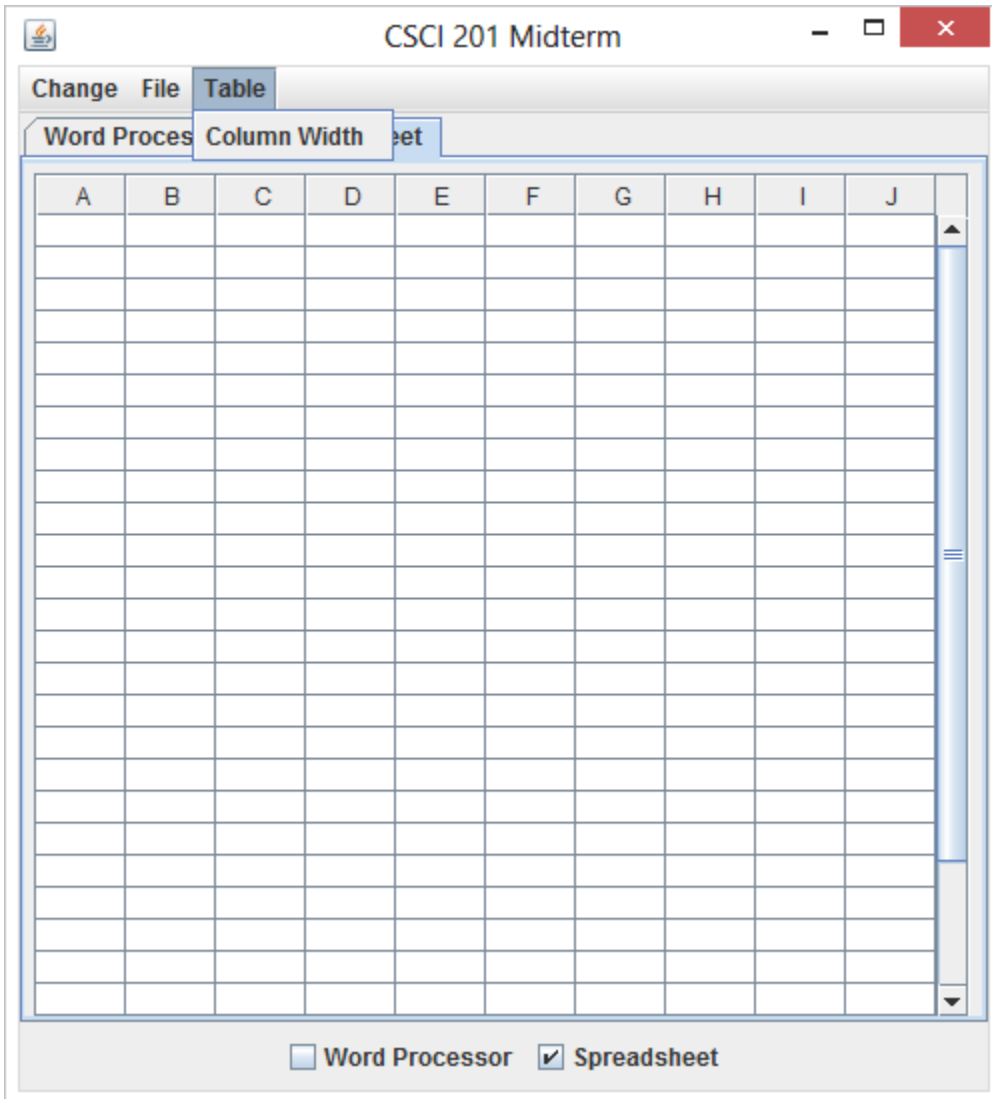


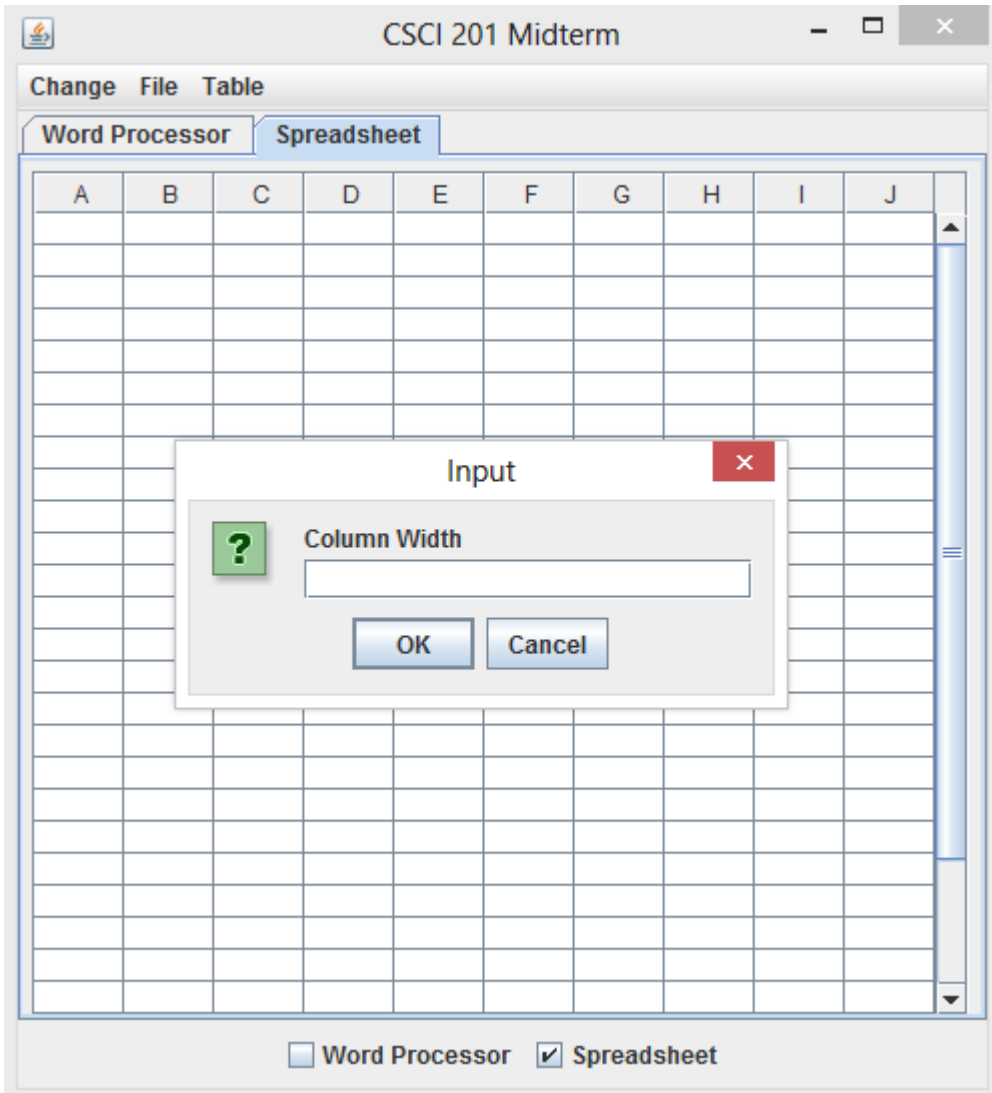












Grading Criteria

% of Final Grade	Criteria
1.0%	Menu bar and menu items correct for word processor
1.0%	Menu bar and menu items correct for spreadsheet
1.0%	Menu items for switching between word processor and spreadsheet work properly
1.0%	Checkboxes for switching between word processor and spreadsheet work properly (including only one of them able to be selected at a time)
1.0%	Open menu item displays a file chooser dialog box
1.0%	File chooser dialog box correctly opens a file and displays it in the word processor
1.0%	Column width dialog box displays as shown
1.0%	Column width menu item works correctly for spreadsheet
1.0%	Column width dialog box does not allow invalid input to crash the program
1.0%	GUI looks the same for word processor, including scroll bars
1.0%	GUI looks the same for the spreadsheet, including scroll bar
1.0%	Exit menu item works correctly