



48024

Programming 2

Assignment 2 Guide

Aim:

This assignment focuses on building a graphical user interface to the logic from assignment 1.

Suggested Work Plan:

First note that the internal structures of the Agency model have been adjusted a little to make GUI building a little easier, so use the code skeleton given as a starting point, rather than trying to adapt your own assignment. If you do this, you can complete the assignment without modifying this part of the code at all, leaving only the GUI components to complete.

This assignment is also less linear from the perspective of which bit of the code to work on - there are several groups of classes and FXML objects that are usefully developed "in parallel". There is, however, a sensible meta-level order in which to approach the assignment:

1. Build the three main windows (Login, Menu and Display window): these are the foundation for the rest of the windows.
2. Build empty or partial windows for everything else: so, when you click a button in the main window, something appears, even if it's a rudimentary or empty window.
3. Add the close buttons.
4. Add the components that don't require lists or tables. You should be able to complete the Menu window and other windows entirely at this point.
5. Once you have a good idea about how to handle lists and tables (Lab 10 and Lab 11), complete the Flights, Destinations, and filters windows. You can also partially complete many of the other windows without worrying about disabling and enabling the buttons at this point.
6. About this time, you should also know how to select an item in a list or a table, this will allow you to complete the windows with a table, the filter by country, except for enabling and disabling buttons.
7. In week 11, you will have seen all the components necessary to complete the assignment. In particular you should now be able to implement at least the table-based windows, and you should now be able to implement the error message window.
8. By the last week, polish off the last few touches remaining on the other windows (setting the properties to allow buttons to be enabled and disabled).



Implementation:

There are a few windows to implement, by approaching the assignment in terms of GUI functionality across windows, you actually only have a limited number of tasks.

- A. The login and menu windows.
- B. The Flights and Destinations Window shows table view.
- C. The Add/Remove Windows can add and update flights and destinations.
- D. The Flight Filter window and the Destination Filter window.
- E. The Trip view window which supports multiple line selection in a list.
- F. The buttons enabling and disabling.
- G. The Error window and the "Add Connecting Flights" button are done and can verify the text fields in the windows.

If you break it down this way, you then only have about 7-8 things to develop (depending on your precise classification), along with some careful renaming.

Wrapping up:

The final piece of advice is, again, to pay attention to the study modules and the labs, they have everything you need in them. Some things are obvious, some require some effort to uncover, but it's all there.