CS 222a HFrancis

## Object-Oriented Programming II Project Assignment Sheet: H 13.1 – Writing a GUI

University of Pikeville Fall 2020

Assignment: Write a graphical user interface to your collection project so that it can be used without BlueJ interaction.

This can be as simple as making use of a text input box to read commands (using part of your UI from H 14.1) and another text box to display the results – please note that this version can't earn an E. Of more interest would be to make buttons or menu commands for some of the functionality instead. You can use either the "hasa" (like image viewer) or "isa" (like music player) version of implementing a JFrame.

For an M, the user must be able to perform these actions:

- list all of the items in the collection\*
- add an item to the collection\*
- show an about page
- perform a search based on one search key\* (this can always be for the same field)
- exit/quit the program

For an E, you'll need to implement at least four more commands. Here are some examples:

- perform a search based on two (or more) search keys
- remove an item (or items) from a collection
- save a collection to a file\*\*
- load a collection from a file\*\*
- start a new collection
- add items to a collection from a CSV file\*\*

You might come up with other ideas as well. \*\*We will learn how to do this in Chapter 14.

## Related Learning Outcomes:

- J 13.1: Write a JFrame component
- J 13.2: Put components into a container
- J 13.3: Write a menu and menu item with appropriate inner class action listener
- J 13.4: Write code to use a layout manager
- J 13.5: Write code to implement a button with appropriate action listener

Due Date/Time: as posted on Canvas

<sup>\*</sup>You should already have methods in your project to perform these tasks.