
ISTM233P: Lesson 2 Assignment

Creating GUIs with Tkinter

Background:

The purpose of this lab is to design a functional Graphical User Interface in Python using Tkinter.

Instructions:

You will design a functions Order Entry form in Python using Tkinter. You are free to create a layout of your own design including positioning, coloring, fonts, etc. making sure the presentation is “professional” and “non-astonishing”.

Vocabulary

In the CAE community, the term “non-astonishing” means that GUIs or User Interfaces (UI) should not be created in such a way that the user would have difficulty understanding what they were looking at or with how the application works. Items should be clearly identified and functions should be intuitive or “typical” to what a user would expect.

The Form:

For credit, the form should be made up of at least 2 Frames. In one frame, all of the item data entry widgets will be placed. In the second frame, order item totals and order accumulators (number of items and total value of the order) will be displayed.

In the first frame, you will use static Labels and Entry widgets to prompt for and receive user input. Input items will be:

- Item name
- Item price per unit
- Item quantity

Note: Inclusion of data validation is optional. If data validation is used, be sure to create a methodology of getting information back to the user for correction. This can be with a pop-up window, or special message labels on the form.

You will also place TWO buttons. One button will be named “Submit” and is used to accept user input, and one button to clear user input. The second button will be named “Reset” and is used to clear user data in the first frame only.

In the second frame you will create static Labels to identify item cost, total order cost, and total number of unique items in the order. You will then use three dynamic labels to display calculated or accumulated values.

Submission

Follow the instructions in the video “How to submit homework” to complete your homework solution.

Save this document for your records.

Remember, your Python code MUST have your name and identification banner as described in the lectures.

Value

This assignment is worth 50 points.

Note: there are various ways of creating GUIs for Python beyond Tkinter. However, because this lesson is about using Tkinter, any other solution will receive a zero score even if functional.

Note: This document was checked for ADA Accessibility on July 20, 2020.