

CSCI/CMPE 4341 Topics: Programming in Python

Assignment #6

Instructor: Dr. Xiang Lian
Due Date: See the course Web page

Write a program with a graphical user interface (GUI) for a calculator. In the calculator, you need to create a text box, and 16 buttons (with 19 digits 0 ~ 9, period (.), and operators (+, -, *, /, %, and =)). Note that, please also **add another button "C"** to clear results (which is not included in the example of the screen capture in the Appendix).

In addition, you also need to implement the arithmetic operations by writing click events of buttons (like normal calculator).

- When a digit, period, or arithmetic operator button is clicked, the corresponding text should be displayed (appended) on the text box.
- In the case that an arithmetic operator (e.g., +) button is clicked, if the textbox contains a complete expression with an operator, then the textbox is parsed and evaluated; otherwise, append this arithmetic operator to the textbox.
- When an equality "=" button is clicked, you need to parse the text in the textbox, and report the result (if the text is not a complete expression, then do nothing).
- When button "C" is clicked, clear the textbox.

It is recommended that you use Python 3.X to implement this assignment.

Please submit:

1. Program listing (the entire package for GUI applications and a readme file to explain how to run your programs step by step), and
2. The screen captures (as given in the Appendix)

Please submit all files in a compressed *.zip file.

- Your program should begin with a comment section that would include the following:

PROGRAMMERS NAME: _____

STUDENT ID: _____

CLASS: _____ ASSIGNMENT #: _____

DATE DUE: _____ DATE TURNED IN: _____

- Upload the *.zip file you created to the Blackboard. The subject of the submission must include the following information:
[CSCI 4341] [Assignment #] [Your Name Here] [Your Student ID Here]

- **Appendix: Examples of Screen Captures**

Note: please also add a "C" button below:

