

Finals task 4. Designing Tkinter GUI using OOP

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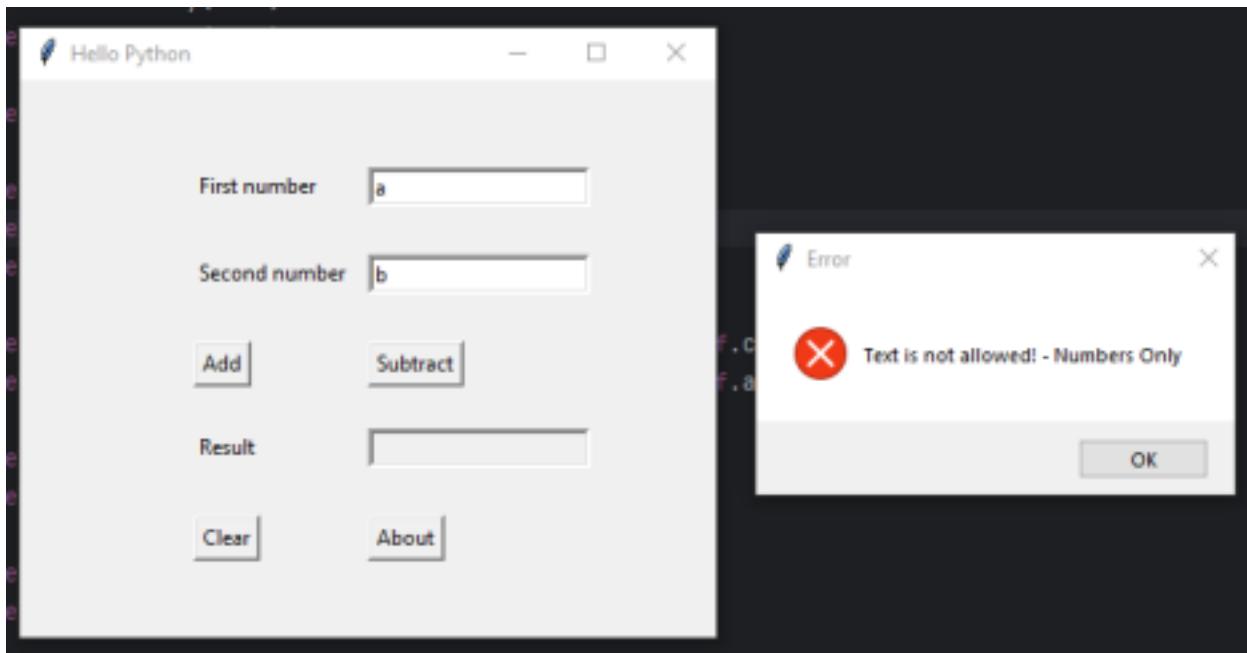
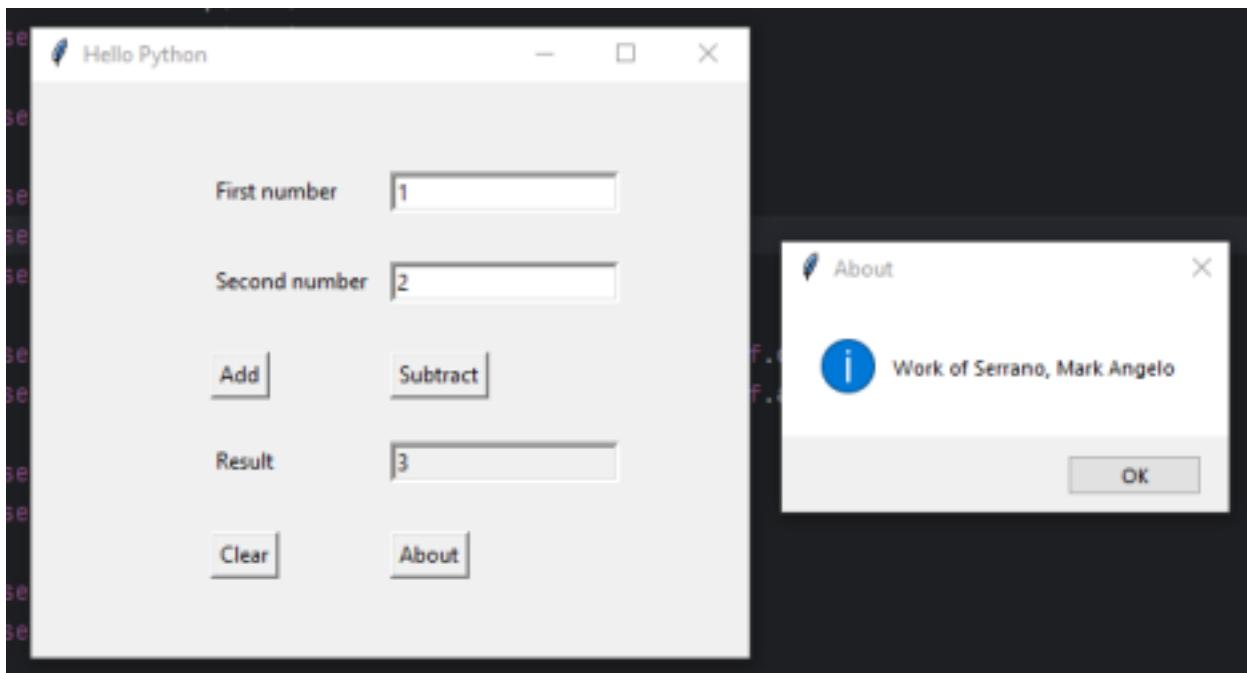
20 points

Due Tomorrow, 11:59 PM

INSTRUCTIONS:

0. See and download the attached code simpleCalc.py and understand its coding style (it is actually in OOP code form).
1. Modify the program and add the following functionality:
  - 1.1 CLEAR or RESET button that will clear the contents of the entry field.
  - 1.2 Add an ABOUT button to display a MessageBox that will display your name, i.e. "Work of your Name".
  - 1.3 Create a VALIDATION CODE (try-except block) that will prevent the USER from typing text entry and display the message "Text is not allowed! - Numbers Only".
  - 1.4 Make the Result text entry as READONLY/VIEW only

See attached code as guide.



```
from tkinter import *
from tkinter import messagebox

class MyWindow:
    def __init__(self, win):
        self.lbl1 = Label(win, text='First number')
        self.lbl2 = Label(win, text='Second number')
        self.lbl3 = Label(win, text='Result')

        self.t1 = Entry(bd=3)
        self.t2 = Entry(bd=3)

        self.t3 = Entry(bd=3, state="readonly")

        self.b1 = Button(win, text='Add', command=self.add)
        self.b2 = Button(win, text='Subtract')
        self.b2.bind('<Button-1>', self.sub)

        self.b_clear = Button(win, text='Clear', command=self.clear_all)
        self.b_about = Button(win, text='About', command=self.about_msg)

        self.lbl1.place(x=100, y=50)
        self.t1.place(x=200, y=50)

        self.lbl2.place(x=100, y=100)
        self.t2.place(x=200, y=100)

        self.b1.place(x=100, y=150)
        self.b2.place(x=200, y=150)

        self.lbl3.place(x=100, y=200)
        self.t3.place(x=200, y=200)

        self.b_clear.place(x=100, y=250)
        self.b_about.place(x=200, y=250)

    def add(self):
        try:
            num1 = int(self.t1.get())
            num2 = int(self.t2.get())
            result = num1 + num2
            self.show_result(result)
        except:
            messagebox.showerror("Error", "Text is not allowed! - Numbers Only")

    def sub(self, event):
        try:
            num1 = int(self.t1.get())
            num2 = int(self.t2.get())
            result = num1 - num2
            self.show_result(result)
        except:
            messagebox.showerror("Error", "Text is not allowed! - Numbers Only")
```

```
def show_result(self, value):
    self.t3.config(state="normal")
    self.t3.delete(0, 'end')
    self.t3.insert(END, str(value))
    self.t3.config(state="readonly")

def clear_all(self):
    self.t1.delete(0, 'end')
    self.t2.delete(0, 'end')
    self.t3.config(state="normal")
    self.t3.delete(0, 'end')
    self.t3.config(state="readonly")

def about_msg(self):
    messagebox.showinfo("About", "Work of Serrano, Mark Angelo")

if __name__ == '__main__':
    window = Tk()
    mywin = MyWindow(window)
    window.title('Hello Python')
    window.geometry("400x320+10+10")
    window.mainloop()
```