

Finals task 4. Designing Tkinter GUI using OOP

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 ff: 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

SAMPLE CODE :

```
from tkinter import *
from tkinter import messagebox

class MyWindow:
    def __init__(self, win):
        self.title = Label(win, text ="GUI CALCULATOR", fg="#00ff00",bg="black", font=("courier", 20, "bold"))
        self.title.pack(padx=5)
        self.number1 = Label(win, text ="NUMBER #1:", fg="#00ff00",bg="black", font=("courier", 10, "bold"))
        self.number1.place(x=89, y=50)
        self.number2 = Label(win, text="NUMBER #2:", fg="#00ff00", bg="black", font=("courier", 10, "bold"))
        self.number2.place(x=89, y=80)
        self.numEn1 = Entry(win, bg="#383B39", fg="#00ff00", justify="center")
        self.numEn1.place(x=185, y=50)
        self.numEn2 = Entry(win, bg="#383B39", fg="#00ff00", justify="center")
        self.numEn2.place(x=185, y=80)
        self.res = Label(win, text ="RESULT", fg="#00ff00",bg="black", font=("courier", 20, "bold"), pady=10)
        self.res.place(x=150, y=100)
        self.resEn = Entry(win,fg="#00ff00",readonlybackground="#383B39", justify="center", font=("courier", 10, "bold"),state="readonly")
        self.resEn.place(x=116,y=148)
        self.add = Button(win, text ="+", fg="#00ff00",bg="#383B39", font=("courier", 10, "bold"), command = self.a)
        self.add.place(x=116, y=180)
        self.div = Button(win, text="/", fg="#00ff00", bg="#383B39", font=("courier", 10, "bold"), command = self.d)
        self.div.place(x=246, y=180)
```

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        self.sub = Button(win, text=" - ", fg="#00ff00", bg="#383B39", font=("courier", 10, "bold"), command =
self.s)
        self.sub.place(x=159.5, y=180)
        self.mul = Button(win, text=" x ", fg="#00ff00", bg="#383B39", font=("courier", 10, "bold"), command =
self.m)
        self.mul.place(x=202.5, y=180)
        self.clir = Button(win, text=" CLEAR ", fg="#00ff00", bg="#383B39", font=("courier", 10, "bold"),
command = self.clr)
        self.clir.place(x=166, y=214)
        self.abt = Button(win, text=" ABOUT ", fg="#00ff00", bg="#383B39", font=("courier", 12, "bold"),
command = self.about)
        self.abt.place(x=158, y=255)

    def about(self):
        messagebox.showinfo(title="ABOUT ME", message="HI I AM THE DEVELOPER\nKARL FRANCIS
CUYUGAN")

    def clr(self):
        self.resEn.config(state="normal")
        self.resEn.delete(0, 'end')
        self.resEn.config(state="readonly")
        self.numEn1.delete(0, 'end')
        self.numEn2.delete(0, 'end')

    def a(self):
        value1 = self.numEn1.get()
        value2 = self.numEn2.get()
        if value1.isalpha() or value2.isalpha():
            messagebox.showerror(title="ERROR!!", message="TEXT IS NOT ALLOWED\nNUMBERS ONLY!!")
        else:
            self.resEn.config(state="normal")
            self.resEn.delete(0, 'end')
            self.resEn.config(state="readonly")
            n1 = int(self.numEn1.get())
            n2 = int(self.numEn2.get())
            reslt = n1 + n2
            self.resEn.config(state="normal")
            self.resEn.insert(END, str(reslt))
            self.resEn.config(state="readonly")

    def s(self):
        value1 = self.numEn1.get()
        value2 = self.numEn2.get()
        if value1.isalpha() or value2.isalpha():
            messagebox.showerror(title="ERROR!!", message="TEXT IS NOT ALLOWED\nNUMBERS ONLY!!")
        else:
            self.resEn.config(state="normal")

```

```

    self.resEn.delete(0, 'end')
    self.resEn.config(state="readonly")
    n1 = int(self.numEn1.get())
    n2 = int(self.numEn2.get())
    reslt = n1 - n2
    self.resEn.config(state="normal")
    self.resEn.insert(END, str(reslt))
    self.resEn.config(state="readonly")

def m(self):
    value1 = self.numEn1.get()
    value2 = self.numEn2.get()
    if value1.isalpha() or value2.isalpha():
        messagebox.showerror(title="ERROR!!", message="TEXT IS NOT ALLOWED\nNUMBERS ONLY!!")
    else:
        self.resEn.config(state="normal")
        self.resEn.delete(0, 'end')
        self.resEn.config(state="readonly")
        n1 = int(self.numEn1.get())
        n2 = int(self.numEn2.get())
        reslt = n1 * n2
        self.resEn.config(state="normal")
        self.resEn.insert(END, str(reslt))
        self.resEn.config(state="readonly")

def d(self):
    value1 = self.numEn1.get()
    value2 = self.numEn2.get()
    if value1.isalpha() or value2.isalpha():
        messagebox.showerror(title="ERROR!!", message="TEXT IS NOT ALLOWED\nNUMBERS ONLY!!")
    else:
        self.resEn.config(state="normal")
        self.resEn.delete(0, 'end')
        self.resEn.config(state="readonly")
        n1 = int(self.numEn1.get())
        n2 = int(self.numEn2.get())
        reslt = n1 / n2
        self.resEn.config(state="normal")
        self.resEn.insert(END, str(reslt))
        self.resEn.config(state="readonly")

from tkinter import *
from simpleCalcu import MyWindow

if __name__ == '__main__':
    window=Tk()
    mywin=MyWindow(window)

```

```
window.title('TEST CALCULATOR')
window.resizable(False,False)
window.geometry("400x300+10+10")
window.configure(bg="black")
window.mainloop()
```

SAMPLE OUTPUT



