**M06 Assignment: Status 2/28/2024**

**Currently Completion**: Created a rough draft of code that is now needing to be searched through for errors and basic syntax issues to be able to actually run the calculator. I found that it would be extremely hard to program an actual calculator but I can make a simple one that adds, multiplies, subtracts, and divides.

**In the works:** Fixing basic code syntax errors as well as trying to make sure parents are working properly. Have to wait until code is runnable to get this issue solved.

**Bigger Problems:** Setting up Github… I have a hard time everytime I’m on the site in setting up my links, hoping I do it correctly. Creating a user manual, last step that I have not started drafting yet.

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# Date written: 02/28/2024

# Assignment: This creates a tkinter application that gives a simple calculator that can be used.

import tkinter

# Code in order to run an addition soltion

def add():

    result = float(e1.get()) + float(e2.get())

    result = round(result, 4)

    label\_text.set(result)

# Code in order to run an subtraction soltion

def subtract():

    result = float(e1.get()) - float(e2.get())

    result = round(result, 4)

    label\_text.set(result)

# Code in order to run an muiltiplication soltion

def multiply():

    result = float(e1.get()) \* float(e2.get())

    result = round(result, 4)

    label\_text.set(result)

# Code in order to run an division soltion

def divide():

    result = float(e1.get()) / float(e1.get())

    result = round(result, 4)

    label\_text.set(result)

def exitCode():

    exit()

#GUI part completed

#What the application will look like...

window = Tk()

label\_text = StringVar()

#Found how to add "grid" in tkinter through a video so I am using what I have learned

#title and labels

title\_label = ttk.label(master = window, text = 'Simple Calculator')

Label(window, text="Enter first Number:").grid(row=0, column=0, sticky=W)

Label(window, text="Enter second Number:").grid(row=1, column=0, sticky=W)

Label(window, text="Result:").grid(row=3, column=0, sticky=W)

Label(window, text="", textvariable=label\_text).grid(row=3, column=1, sticky=W)

e1 = Entry(window)

e2 = Entry(window)

e1.grid(row=0, column=1)

e2.grid(row=1, column=1)

# Buttons should actually work, found I need five altogether

button1 = Button(window, text="Add", width=10, command=add)

button1.grid(row=0, column=2, padx=5, pady=5, sticky=W)

button2 = Button(window, text="Subtract", width=10, command=subtract)

button2.grid(row=0, column=3, padx=5, pady=5, sticky=W)

button3 = Button(window, text="Multiply", width=10, command=multiply)

button3.grid(row=1, column=2, padx=5, pady=5, sticky=W)

button4 = Button(window, text="Divide", width=10, command=divide)

button4.grid(row=1, column=3, padx=5, pady=5, sticky=W)

button5 = Button(window, text="Quit", width=10, command=exitCode, bg="red")

button5.grid(row=2, column=2, padx=5, pady=5, sticky=W)

#Will run with this

window.mainloop()

Update: 3/6/2024

Validation Testing is run. A couple issues first took place when I had created the calculation coding in which I went too in depth with coding. This issue meant that when a calculation was run with a negative or decimal number the code would result in an error. I had to erase the code and create an extremely basic explanation through some research into similar coding

I had several issues as the quit pop up would not appear which resulted in some issues with my second window not appearing. I finally realized that the tkinter code only allowed one window to pop up so the error was solved.

Though it is a basic program I had unfortunately many difficulties in how I was going to create a workable program, I had ideas that I would write and scrap, this is the one that stuck and I felt I was capable of creating.