



Adamson University
College of Engineering
Computer Engineering Department



OBJECT-ORIENTED PROGRAMMING

Laboratory Activity No. 3

GUI in Python (Common Widgets)

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<TTH- 2 pm – 3 pm > / <58002>

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Submitted to:

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I. Objectives

In this section, itemize what are your goals in this laboratory in bulleted form.

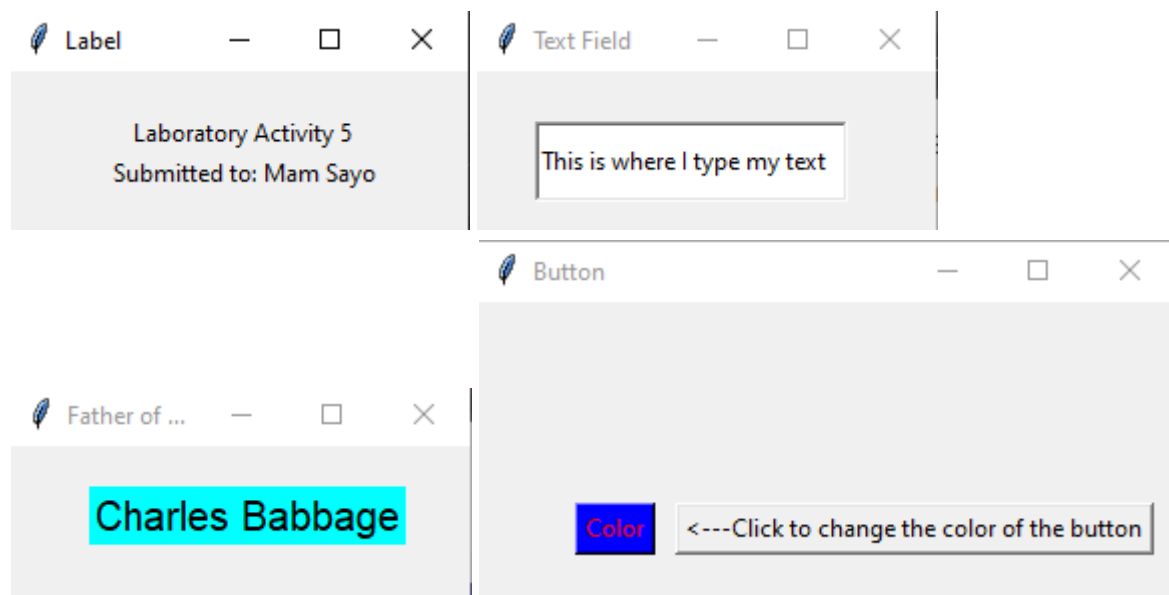
- To create a program that has 4 windows with 1 window only opening after the one before it is closed
- Create a window where only text is displayed
- Create a window where the user can input text in a text box
- Create a window where only text with a coloured background is displayed
- Create a window where the colour of the background of a text is changed from blue to yellow and vice versa.

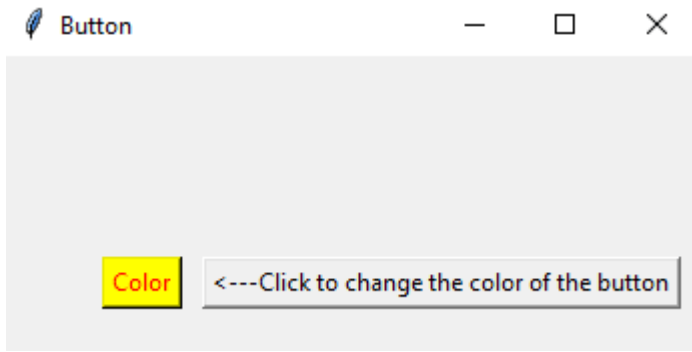
II. Methods

<pre>from tkinter import * window1 = Tk() window1.geometry("230x80") window1.title("Label") lbl1 = Label(window1, text="Laboratory Activity 5") lbl1.place(x=60, y=20) lbl2 = Label(window1, text="Submitted to: Mam Sayo") lbl2.place(x=50, y=40) window1.mainloop()</pre>	<p>This section of the program simply displays the text in a window with a grid of 230x80. This is achieved by changing the values under line 4 inside the double quotations and the text in the window is changed or can be accessed through the double quotations in “lbl1” and “lbl2”.</p>
<pre>window2 = Tk() window2.geometry("230x80") window2.title("Text Field") txt1 = Entry(window2, bd=2, width=25) txt1.place(x=30, y=25, height=40) txt1.insert(0, "This is where I type my text") window2.mainloop()</pre>	<p>Similar to the first window, window 2 shares similar aspects to it as they both share the same aspect ratio, in this window however the user has the ability to enter text and edit said text. This is achieved by using “Entry” and “.insert”.</p>

<pre> window3 = Tk() window3.geometry("230x80") window3.title("Father of Computer") lbl1 = Label(window3, text="Charles Babbage", font="Arial, 15", bg="cyan") lbl1.place(x=40, y=20) window3.mainloop() </pre>	<p>In this window, we displayed text with background colour. The text, background colour and text font can be changed through editing the values under lbl1.</p>
<pre> class ColorChanger: def __init__(self, win): self.button1 = Button(win, text="Color", bg="Blue", fg="Red") self.button1.place(x=50, y=100) self.button2 = Button(win, text="<---Click to change the color of the button") self.button2.place(x=100, y=100) self.button2.bind('<Button-1>', self.change) def change(self, event): color = self.button1.cget("background") if color == "blue": self.button1.config(bg="yellow") else: self.button1.config(bg="blue") </pre>	<p>This section of the program is responsible for the changing of colour in the button. This is achieved by using the “if-else” statement and defining the values of the button. To change the colour that is displayed in the window you would need to change the assigned colour in lines 49 and 51.</p>

III. Results





IV. Conclusion

In conclusion the experiment was successful and we were able to accomplish our objectives of: To create a program that has 4 windows with 1 window only opening after the one before it is closed. Create a window where only text is displayed. Create a window where the user can input text in a text box. Create a window where only text with a coloured background is displayed. Create a window where the colour of the background of a text is changed from blue to yellow and vice versa.