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C204

Final Lab Task 4 : Python & Tkinter GUI program

Sample Code :

```
from tkinter import *
from tkinter import ttk
from tkinter import messagebox


class CallChargeApp:
    def __init__(self, window):
        self.window = window
        self.window.title("Long Distance Call Charge")
        self.window.geometry("500x420")
        self.window.resizable(False, False)


        self.frame_inputs = LabelFrame(window, text="User Inputs:", padx=10,
pady=10)
        self.frame_inputs.pack(padx=10, pady=10, fill="x")


        Label(self.frame_inputs, text="Length of Call (in
minutes):").grid(row=0, column=0, sticky="w")
        self.txt_minutes = Entry(self.frame_inputs, width=25)
        self.txt_minutes.grid(row=0, column=1, pady=5, sticky="w")


        Label(self.frame_inputs, text="Destination Code:").grid(row=1,
column=0, sticky="w")

        self.destinations = {
            "American Region": 1,
            "Asian Region": 2,
            "African Region": 3,
            "European Region": 4
        }

        self.cbo_destination = ttk.Combobox(self.frame_inputs, width=23,
state="readonly")
        self.cbo_destination["values"] = list(self.destinations.keys())
        self.cbo_destination.grid(row=1, column=1, pady=5, sticky="w")


        Label(self.frame_inputs, text="Time Code:").grid(row=2, column=0,
sticky="w")

        self.time_code = StringVar()
        self.time_code.set(None)

        Radiobutton(self.frame_inputs, text="Day Time",
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variable=self.time_code, value="Day").grid(row=2, column=1, sticky="w")
        Radiobutton(self.frame_inputs, text="Night Time",
variable=self.time_code, value="Night").grid(row=3, column=1, sticky="w")


        self.frame_summary = LabelFrame(window, text="Transaction Summary:",
padx=10, pady=10)
        self.frame_summary.pack(padx=10, pady=5, fill="x")

        self.txt_summary = Text(self.frame_summary, height=7, width=55)
        self.txt_summary.pack()


        self.frame_buttons = Frame(window)
        self.frame_buttons.pack(pady=10)

        Button(self.frame_buttons, text="Compute Charge", width=15,
command=self.compute_charge).grid(row=0, column=0, padx=5)
        Button(self.frame_buttons, text="Reset", width=10,
command=self.reset_all).grid(row=0, column=1, padx=5)
        Button(self.frame_buttons, text="About", width=10,
command=self.show_about).grid(row=0, column=2, padx=5)
        Button(self.frame_buttons, text="Close", width=10,
command=self.window.destroy).grid(row=0, column=3, padx=5)


    def compute_charge(self):
        try:
            minutes = int(self.txt_minutes.get())
            if minutes <= 0:
                raise ValueError
        except:
            messagebox.showerror("Invalid Input", "Please enter a valid
number for minutes.")
            return

        if self.cbo_destination.get() == "":
            messagebox.showwarning("Missing Input", "Please choose a
destination.")
            return

        if self.time_code.get() == "" or self.time_code.get() == "None":
            messagebox.showwarning("Missing Input", "Please choose a time
code.")
            return

        dest = self.cbo_destination.get()
        code = self.destinations[dest]


        day_rates = {1: 50, 2: 30, 3: 40, 4: 35}
        night_rates = {1: 45, 2: 27, 3: 36, 4: 30}

        if self.time_code.get() == "Day":
            rate = day_rates[code]
        else:
            rate = night_rates[code]
```

```
        blocks = minutes / 3
        total = blocks * rate


        self.txt_summary.delete("1.0", END)
        self.txt_summary.insert(END, f"Duration of Call: {minutes}
minute(s)\n")
        self.txt_summary.insert(END, f"Destination Code: {dest}\n")
        self.txt_summary.insert(END, f"Time Code: {self.time_code.get()}
Time\n")
        self.txt_summary.insert(END, f"Total Charge is: ₱{total:.2f}")


    def reset_all(self):
        self.txt_minutes.delete(0, END)
        self.cbo_destination.set("")
        self.time_code.set(None)
        self.txt_summary.delete("1.0", END)


    def show_about(self):
        messagebox.showinfo("About", "Hello I'm Fei")



window = Tk()
app = CallChargeApp(window)
window.mainloop()
```

Sample Output: