NAME: SORIANO, DEXTER G.
YEAR & SECTION: BSCS - C204

Finals Lab Task 4. Python GUI using TKINTER

Note: Write your code following OOP code construct, you may use the attached simpleCalc.py program as guide.

Instructions: READ AND UNDERSTAND THE PROBLEM FIRST BEFORE DOING THE ACTUAL PROGRAM.

1. Design the form below
2. Problem Statement: The cost of a long Distance call is based on the destination, the time of day the call was made, as well as the distance of the call. The rates as as follows:

DAYTIME CALLS		NIGHTTIME CALLS	
1. American Region	P 50 every 3 minutes	1. American Region	P 45 every 3 minutes
2. Asian Region	P 30 every 2 minutes	2. Asian Region	P 27 every 2 minutes
3. African Region	P 40 every 3 minutes	3. African Region	P 36 every 3 minutes
4. European Region	P 35 every 2 minutes	4. European Region	P 30 every 2 minutes

3. Make a program that will Allow the user to **Select Destination Code (between 1 – 4)** using ComboBox widget, A Time Code using radio buttons, And the Duration Of The Call in minutes and output the **TOTAL CHARGE.** – Validate user inputs by using **TRY EXCEPT block – Only numeric**
values are accepted.

4. **Compute Button** should compute for the **TOTAL CHARGE.**

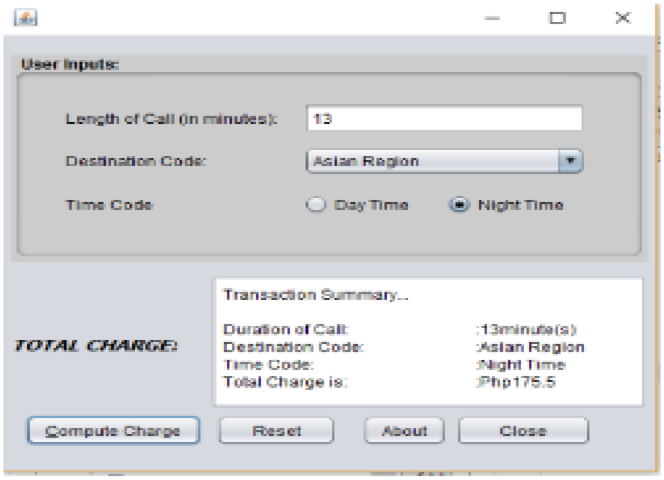
   4.1 Computations should be based on the table rates shown above. (The total charge is based on **Length of Calls, Destination Code** and **Time Code**)

   4.2. You may use the get () method of the comboBox to capture the selected option in your comboBox

5. **Reset Button** should clear the Radio Button Selection and the Text field entries should be cleared as well

6. **About button** should display a dialog with the message: "Hello I'm your Name"

7. See sample output below:



Length of Call (in minutes): 13

Destination Code: Asian Region

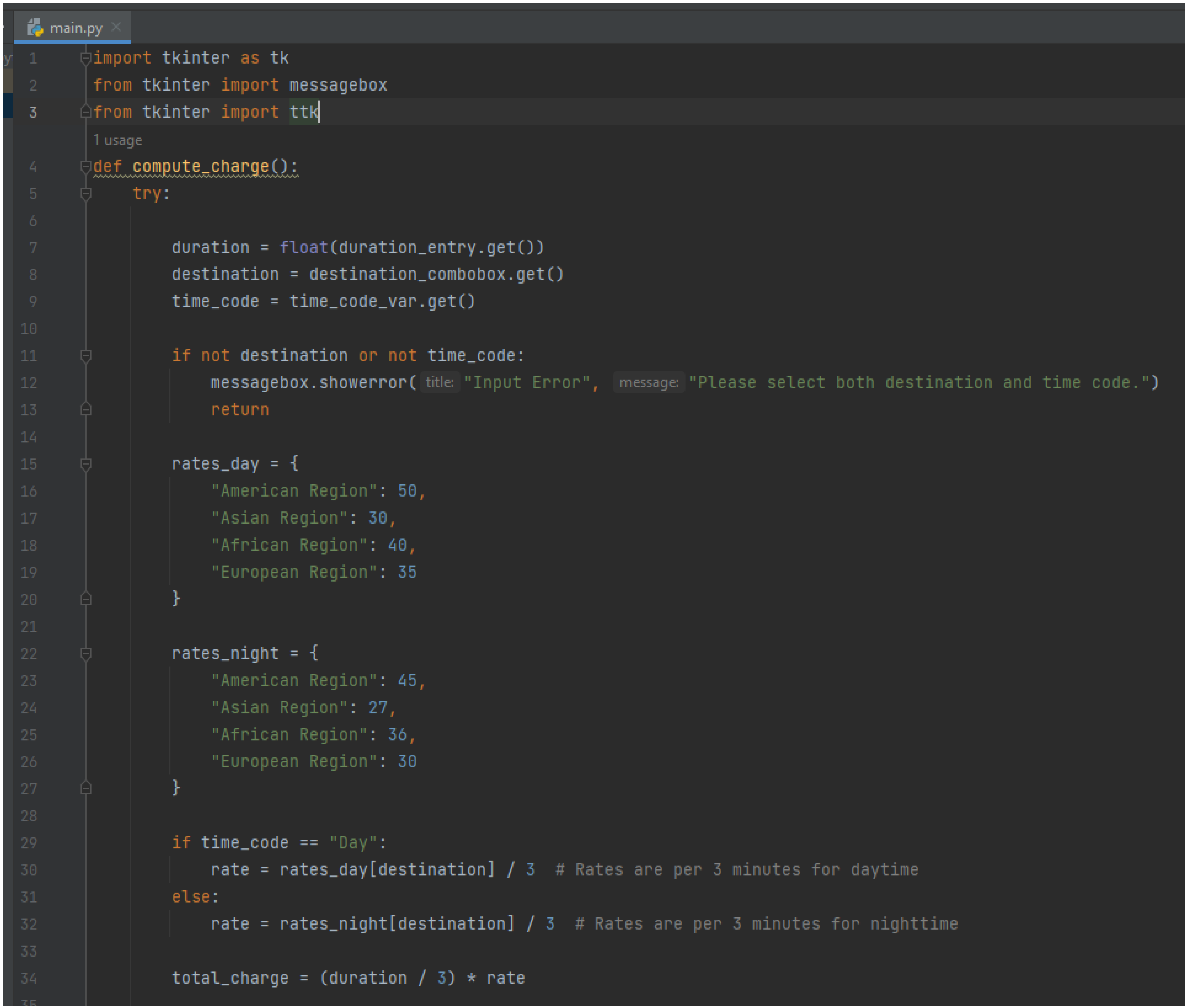
Time Code ○ Day Time ● Night Time

TOTAL CHARGE:

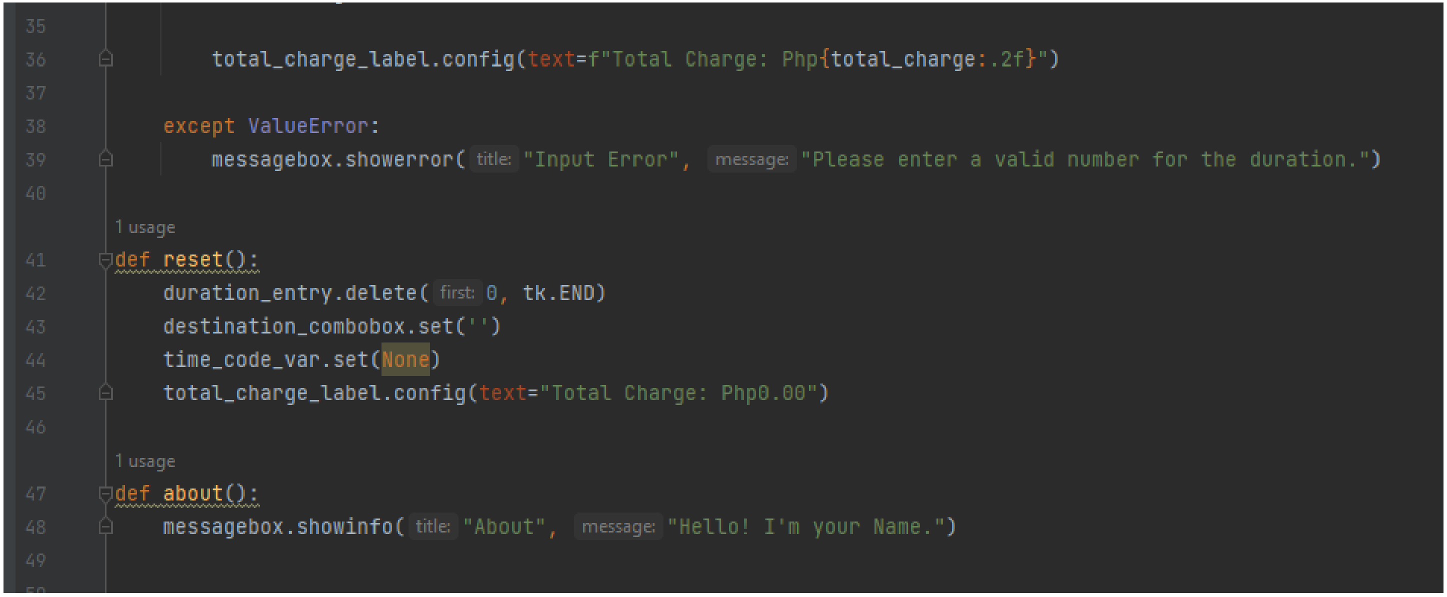
```
Transaction Summary...

Duration of Call:          :13minute(s)
Destination Code:          :Asian Region
Time Code:                 :Night Time
Total Charge is:           :Php175.5
```

Rubrics: Form Design and Layout : 10 points
Program Correctness : 40 points (Reset – 5 pts., About – 5 pts. , Compute – 30 pts.)

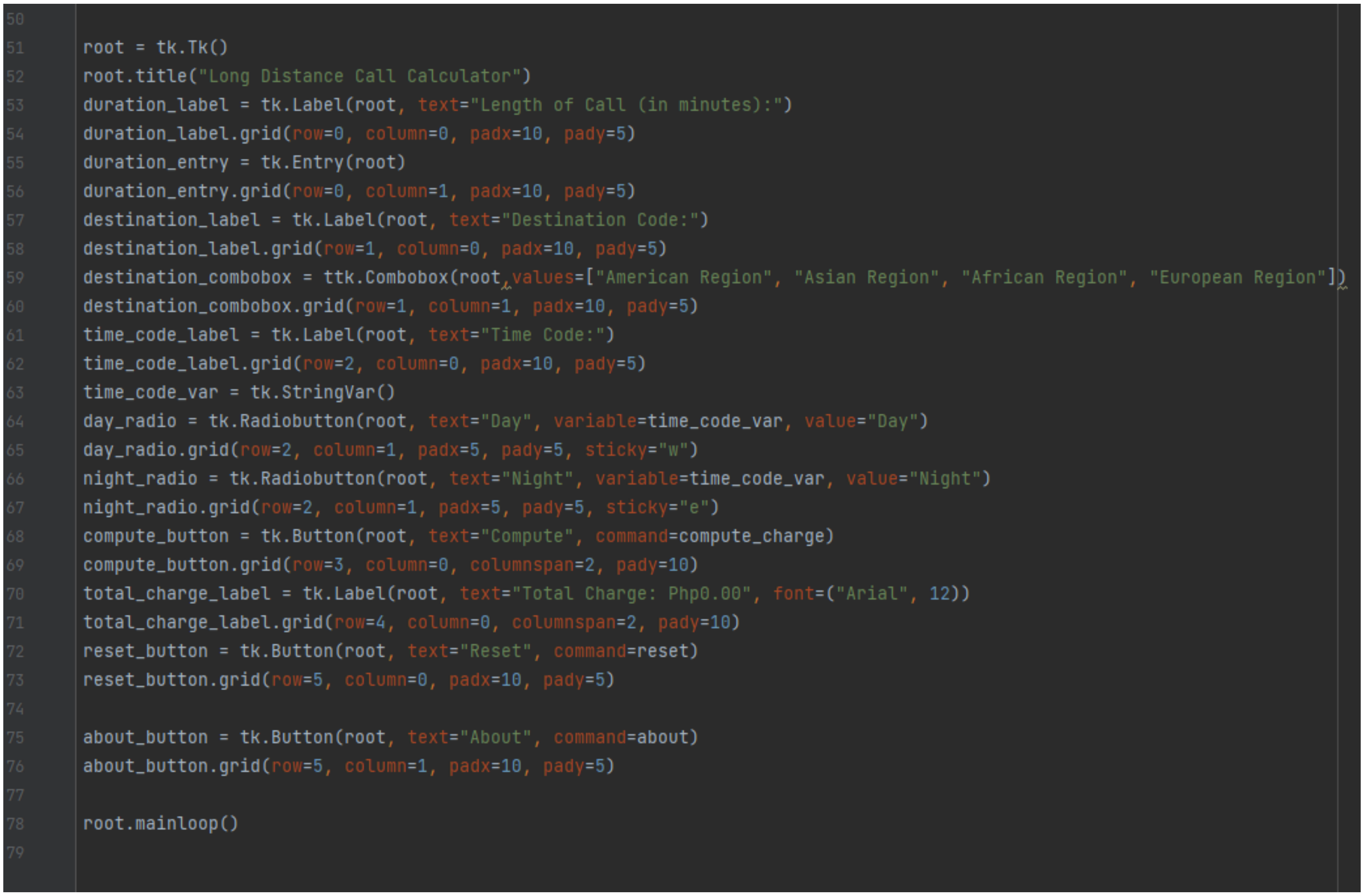
SAMPLE CODE:



```
import tkinter as tk
from tkinter import messagebox
from tkinter import ttk
1 usage
def compute_charge():
    try:

        duration = float(duration_entry.get())
        destination = destination_combobox.get()
        time_code = time_code_var.get()

        if not destination or not time_code:
            messagebox.showerror( title: "Input Error",  message: "Please select both destination and time code.")
            return

        rates_day = {
            "American Region": 50,
            "Asian Region": 30,
            "African Region": 40,
            "European Region": 35
        }

        rates_night = {
            "American Region": 45,
            "Asian Region": 27,
            "African Region": 36,
            "European Region": 30
        }

        if time_code == "Day":
            rate = rates_day[destination] / 3  # Rates are per 3 minutes for daytime
        else:
            rate = rates_night[destination] / 3  # Rates are per 3 minutes for nighttime

        total_charge = (duration / 3) * rate
```

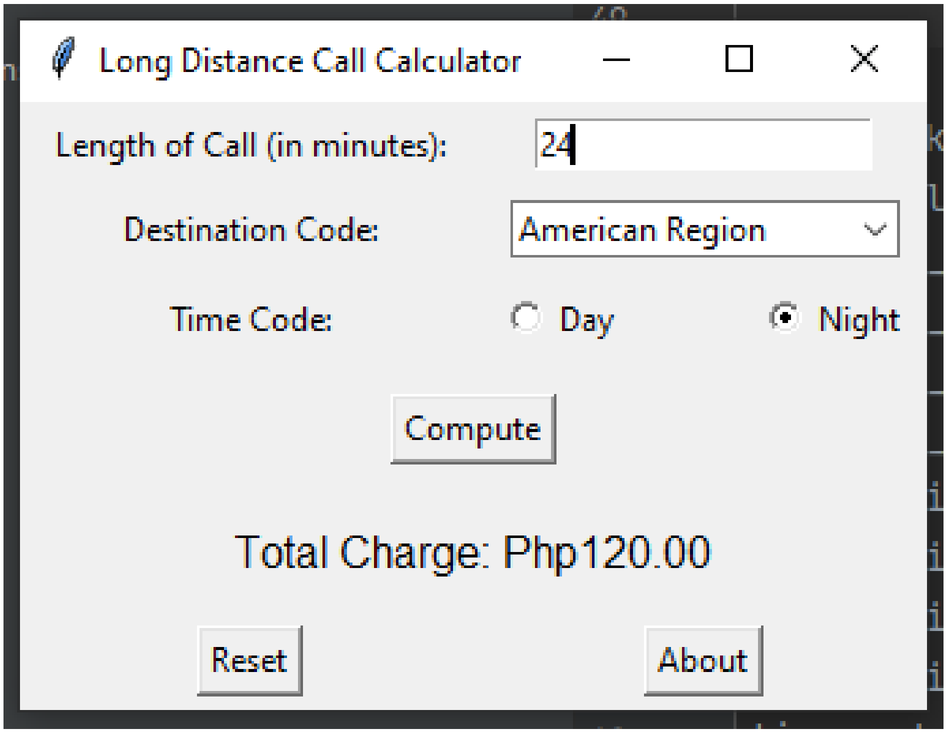


```

        total_charge_label.config(text=f"Total Charge: Php{total_charge:.2f}")

    except ValueError:
        messagebox.showerror( title: "Input Error",  message: "Please enter a valid number for the duration.")

1 usage
def reset():
    duration_entry.delete( first: 0, tk.END)
    destination_combobox.set('')
    time_code_var.set(None)
    total_charge_label.config(text="Total Charge: Php0.00")

1 usage
def about():
    messagebox.showinfo( title: "About",  message: "Hello! I'm your Name.")

```



```
root = tk.Tk()
root.title("Long Distance Call Calculator")
duration_label = tk.Label(root, text="Length of Call (in minutes):")
duration_label.grid(row=0, column=0, padx=10, pady=5)
duration_entry = tk.Entry(root)
duration_entry.grid(row=0, column=1, padx=10, pady=5)
destination_label = tk.Label(root, text="Destination Code:")
destination_label.grid(row=1, column=0, padx=10, pady=5)
destination_combobox = ttk.Combobox(root,values=["American Region", "Asian Region", "African Region", "European Region"])
destination_combobox.grid(row=1, column=1, padx=10, pady=5)
time_code_label = tk.Label(root, text="Time Code:")
time_code_label.grid(row=2, column=0, padx=10, pady=5)
time_code_var = tk.StringVar()
day_radio = tk.Radiobutton(root, text="Day", variable=time_code_var, value="Day")
day_radio.grid(row=2, column=1, padx=5, pady=5, sticky="w")
night_radio = tk.Radiobutton(root, text="Night", variable=time_code_var, value="Night")
night_radio.grid(row=2, column=1, padx=5, pady=5, sticky="e")
compute_button = tk.Button(root, text="Compute", command=compute_charge)
compute_button.grid(row=3, column=0, columnspan=2, pady=10)
total_charge_label = tk.Label(root, text="Total Charge: Php0.00", font=("Arial", 12))
total_charge_label.grid(row=4, column=0, columnspan=2, pady=10)
reset_button = tk.Button(root, text="Reset", command=reset)
reset_button.grid(row=5, column=0, padx=10, pady=5)

about_button = tk.Button(root, text="About", command=about)
about_button.grid(row=5, column=1, padx=10, pady=5)

root.mainloop()
```

SAMPLE OUTPUT:



Length of Call (in minutes): 24

Destination Code: American Region

Time Code: ○ Day ● Night

Total Charge: Php120.00