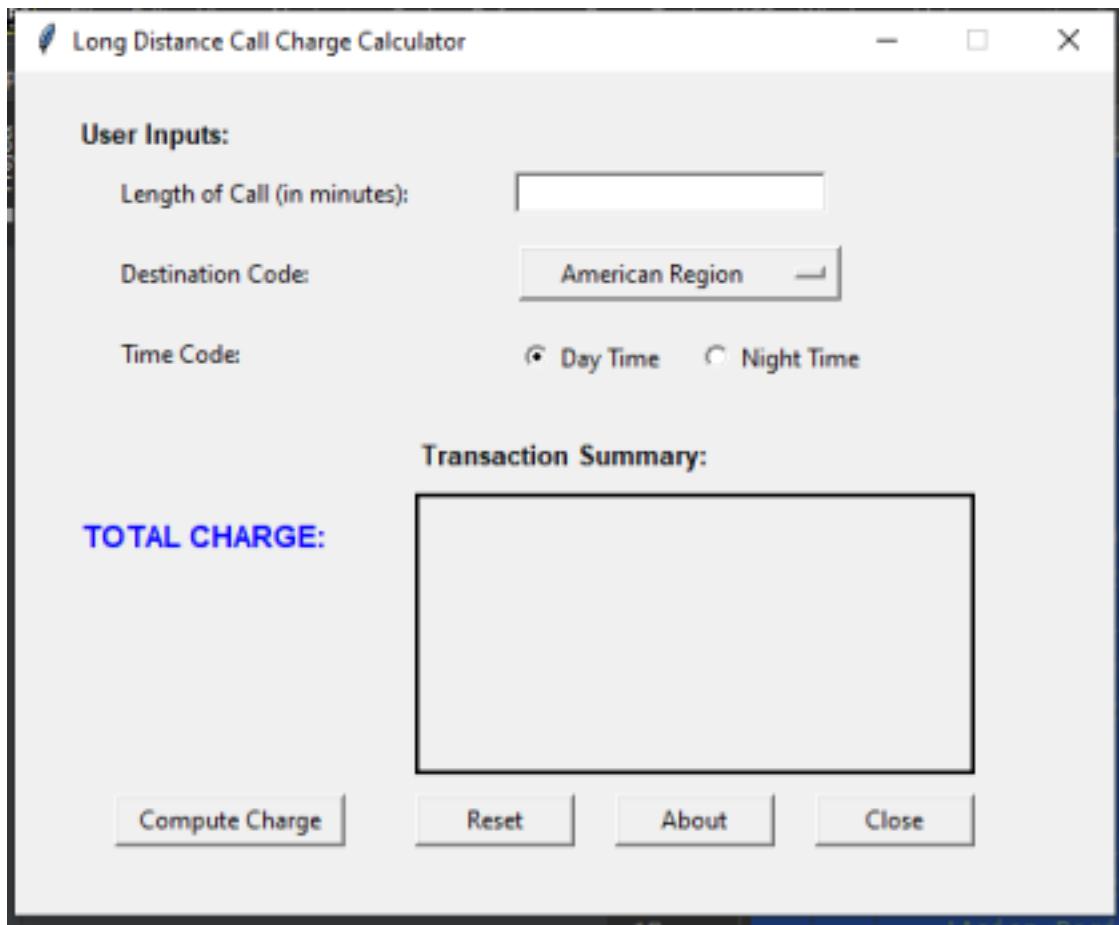
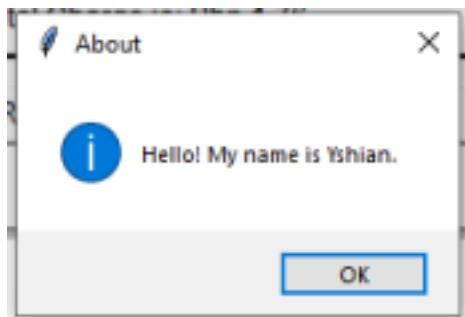
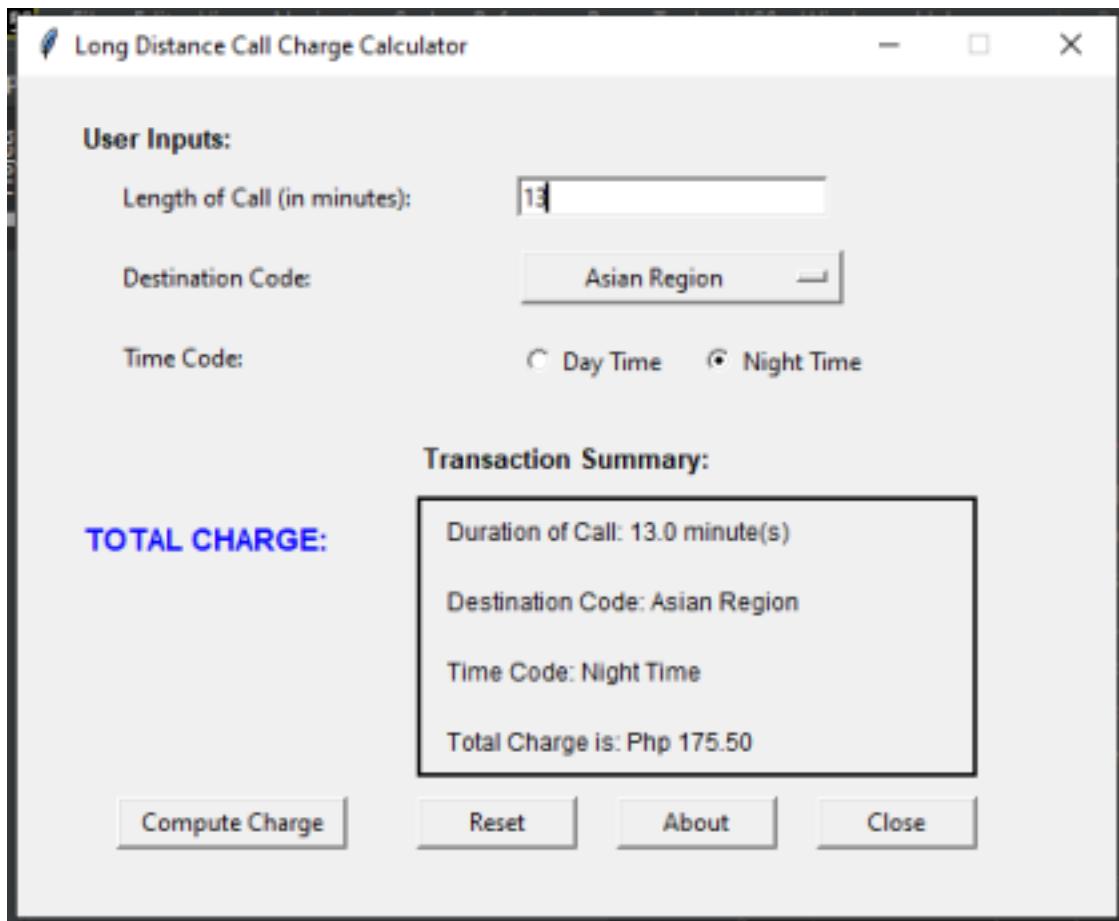


Finals Lab Task 4. Python GUI using TKINTER

UI Menu



Sample Output



python_gui_using_tinker.py (Source Code)

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

```
class CallChargeCalculator:
    def __init__(self, win):
        self.daytime_rates = {
            'American Region': (50, 3),
```

```

        'Asian Region': (30, 2),
        'African Region': (40, 3),
        'European Region': (35, 2)
    }

self.nighttime_rates = {
    'American Region': (45, 3),
    'Asian Region': (27, 2),
    'African Region': (36, 3),
    'European Region': (30, 2)
}

self.lbl_header = Label(win, text='User Inputs:', font=('Arial', 10, 'bold'))
self.lbl_header.place(x=30, y=20)

self.lbl_length = Label(win, text='Length of Call (in minutes):')
self.lbl_length.place(x=50, y=50)
self.entry_length = Entry(win, bd=2, width=25)
self.entry_length.place(x=250, y=50)

self.lbl_destination = Label(win, text='Destination Code:')
self.lbl_destination.place(x=50, y=90)

self.destination_var = StringVar()
self.destination_options = ['American Region', 'Asian Region', 'African Region',
                           'European Region']
self.destination_var.set(self.destination_options[0])

self.combo_destination = OptionMenu(win, self.destination_var,
                                     *self.destination_options)
self.combo_destination.config(width=20)
self.combo_destination.place(x=250, y=85)

self.lbl_timecode = Label(win, text='Time Code:')
self.lbl_timecode.place(x=50, y=130)
self.time_var = StringVar()
self.time_var.set('Day Time')

self.radio_day = Radiobutton(win, text='Day Time', variable=self.time_var,
                            value='Day Time')
self.radio_day.place(x=250, y=130)

self.radio_night = Radiobutton(win, text='Night Time', variable=self.time_var,
                               value='Night Time')
self.radio_night.place(x=340, y=130)

```

```
self.lbl_summary = Label(win, text='Transaction Summary:', font=('Arial', 10, 'bold'))
self.lbl_summary.place(x=200, y=180)
```

```
self.lbl_total = Label(win, text='TOTAL CHARGE:', font=('Arial', 11, 'bold'), fg='blue')
self.lbl_total.place(x=30, y=220)
```

```
# Summary Display Frame
self.frame_summary = Frame(win, bd=2, relief='solid', width=280, height=140)
self.frame_summary.place(x=200, y=210)
self.frame_summary.pack_propagate(False)
```

```
self.lbl_duration = Label(self.frame_summary, text='', anchor='w', justify='left', font=('Arial', 9))
self.lbl_duration.place(x=10, y=5)
```

```
self.lbl_dest = Label(self.frame_summary, text='', anchor='w', justify='left', font=('Arial', 9))
self.lbl_dest.place(x=10, y=40)
```

```
self.lbl_time = Label(self.frame_summary, text='', anchor='w', justify='left', font=('Arial', 9))
self.lbl_time.place(x=10, y=75)
```

```
self.lbl_charge = Label(self.frame_summary, text='', anchor='w', justify='left', font=('Arial', 9))
self.lbl_charge.place(x=10, y=110)
```

```
self.btn_compute = Button(win, text='Compute Charge', command=self.compute_charge, width=15)
self.btn_compute.place(x=50, y=360)
```

```
self.btn_reset = Button(win, text='Reset', command=self.reset_fields, width=10)
self.btn_reset.place(x=200, y=360)
self.btn_about = Button(win, text='About', command=self.show_about, width=10)
self.btn_about.place(x=300, y=360)
```

```
self.btn_close = Button(win, text='Close', command=win.quit, width=10)
self.btn_close.place(x=400, y=360)
```

```
def compute_charge(self):
    try:
        length = float(self.entry_length.get())
```

```

if length <= 0:
    messagebox.showerror('Invalid Input', 'Length of call must be greater than 0')
    return

destination = self.destination_var.get()
time_code = self.time_var.get()

if time_code == 'Day Time':
    rate, interval = self.daytime_rates[destination]
else:
    rate, interval = self.nighttime_rates[destination]

total_charge = (length / interval) * rate

self.lbl_duration.config(text=f"Duration of Call: {length} minute(s)")
self.lbl_dest.config(text=f"Destination Code: {destination}")
self.lbl_time.config(text=f"Time Code: {time_code}")
self.lbl_charge.config(text=f"Total Charge is: Php {total_charge:.2f}")

except ValueError:
    messagebox.showerror('Invalid Input', 'Please enter a valid numeric value for length of call')
except Exception as e:
    messagebox.showerror('Error', f'An error occurred: {str(e)}')

def reset_fields(self):
    self.entry_length.delete(0, END)
    self.destination_var.set(self.destination_options[0])
    self.time_var.set('Day Time')
    self.lbl_duration.config(text='')
    self.lbl_dest.config(text='')
    self.lbl_time.config(text='')
    self.lbl_charge.config(text='')

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

if __name__ == '__main__':
    window = Tk()
    calculator = CallChargeCalculator(window)
    window.title('Long Distance Call Charge Calculator')
    window.geometry("550x420+10+10")
    window.resizable(False, False)
    window.mainloop()

```