## **GUI**

The GUI is responsible for all the business logic implemented in our system

## **Imports**

```
import tkinter as tk
import tkinter.ttk as ttk
import classes
from tkinter import simpledialog as sd, messagebox
from datetime import date
```

## **UI** initialization function

```
class GUI
  def __init__(self, master=None):
    # build ui
    self.main = tk.Tk() if master is None else tk.Toplevel(master)
    self.main.configure(
      height=320,
      highlightbackground="#686868",
      relief="flat",
      width=480)
    self.main.title("OOP")
    self.Employee = ttk.Labelframe(self.main)
    self.Employee.configure(height=241, text='Employee', width=480)
    label1 = ttk.Label(self.Employee)
    label1.configure(
      compound="center",
      relief="flat",
      takefocus=False,
      text='Name')
    label1.grid(column=0, ipadx=10, padx=20, row=0, sticky="w")
    self.name = ttk.Entry(self.Employee)
    self.name.grid(column=1, ipadx=30, ipady=5, row=0, sticky="w")
    label2 = ttk.Label(self.Employee)
    label2.configure(
      compound="center",
      relief="flat",
      takefocus=False,
      text='Age')
```

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label2.grid(column=2, padx=20, row=0, sticky="w")
self.age = ttk.Entry(self.Employee)
self.age.grid(column=3, ipadx=30, ipady=5, row=0, sticky="w")
label3 = ttk.Label(self.Employee)
label3.configure(
  compound="center",
  relief="flat",
  takefocus=False,
  text='Salary')
label3.grid(column=2, padx=20, row=1, sticky="w")
label4 = ttk.Label(self.Employee)
label4.configure(
  compound="center",
  relief="flat",
  takefocus=False,
  text='Department')
label4.grid(column=0, padx=20, row=1, sticky="w")
self.depart = ttk.Entry(self.Employee)
self.depart.grid(
  column=1,
  ipadx=30,
  ipady=5,
  pady=10,
  row=1,
  sticky="w")
label5 = ttk.Label(self.Employee)
label5.configure(
  compound="center",
  relief="flat",
  takefocus=False,
  text='Passport No.')
label5.grid(column=0, padx=20, row=2, sticky="w")
self.passport = ttk.Entry(self.Employee)
self.passport.grid(column=1, ipadx=30, ipady=5, row=2, sticky="w")
self.salary = ttk.Entry(self.Employee)
self.salary.grid(column=3, ipadx=30, ipady=5, row=1, sticky="w")
label6 = ttk.Label(self.Employee)
label6.configure(
  compound="center",
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relief="flat",
  takefocus=False,
  text='Job Title')
label6.grid(column=2, padx=20, row=2, sticky="w")
self.job = ttk.Combobox(self.Employee)
self.job.grid(column=3, ipadx=28, ipady=5, row=2)
self.Employee.pack(fill="both", side="top")
frame1 = ttk.Frame(self.main)
frame1.configure(height=200, width=200)
self.emp_add_btn = ttk.Button(frame1)
self.emp_add_btn.configure(text='Add')
self.emp_add_btn.grid(column=0, ipadx=10, padx=10, row=0, sticky="w")
self.emp_search_btn = ttk.Button(frame1)
self.emp_search_btn.configure(text='Search')
self.emp_search_btn.grid(column=1, ipadx=10, padx=10, row=0)
self.emp_delete_btn = ttk.Button(frame1)
self.emp_delete_btn.configure(text='Delete')
self.emp_delete_btn.grid(column=2, ipadx=10, padx=10, row=0)
self.emp_modify_btn = ttk.Button(frame1)
self.emp_modify_btn.configure(text='Modify')
self.emp_modify_btn.grid(column=3, ipadx=10, padx=10, row=0)
frame1.pack(fill="both", side="top")
self.labelframe1 = ttk.Labelframe(self.main)
self.labelframe1.configure(height=241, text='Car', width=250)
label7 = ttk.Label(self.labelframe1)
label7.configure(
  compound="center",
  relief="flat",
  takefocus=False,
  text='Name')
label7.grid(column=0, padx=20, row=0, sticky="w")
self.car_name = ttk.Entry(self.labelframe1)
self.car_name.grid(
  column=1,
  ipadx=30,
  ipady=5,
  padx=20,
  row=0,
  sticky="w")
```

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label8 = ttk.Label(self.labelframe1)
label8.configure(
  compound="center",
  relief="flat",
  takefocus=False,
  text='Model')
label8.grid(column=2, padx=20, row=0, sticky="w")
self.car_model = ttk.Entry(self.labelframe1)
self.car_model.grid(column=3, ipadx=30, ipady=5, row=0, sticky="w")
label10 = ttk.Label(self.labelframe1)
label10.configure(
  compound="center",
  relief="flat",
  takefocus=False,
  text='Price')
label10.grid(column=0, padx=20, row=1, sticky="w")
self.car_price = ttk.Entry(self.labelframe1)
self.car_price.grid(
  column=1,
  ipadx=30,
  ipady=5,
  padx=20,
  row=1,
  sticky="w")
label11 = ttk.Label(self.labelframe1)
label11.configure(
  compound="center",
  relief="flat",
  takefocus=False,
  text='ID No.')
label11.grid(column=0, padx=20, row=2, sticky="w")
self.car_id = ttk.Entry(self.labelframe1)
self.car_id.grid(
  ipadx=30,
  ipady=5,
  padx=20,
  row=2,
  sticky="w")
```

```
label12 = ttk.Label(self.labelframe1)
label12.configure(
  compound="center",
  relief="flat",
  takefocus=False,
  text='Type')
label12.grid(column=2, padx=20, row=1, sticky="w")
self.car_type = ttk.Combobox(self.labelframe1)
self.car_type.grid(column=3, ipadx=28, ipady=5, pady=10, row=1)
self.labelframe1.pack(fill="both", side="top")
frame2 = ttk.Frame(self.main)
frame2.configure(height=200, width=200)
self.car_add_btn = ttk.Button(frame2)
self.car_add_btn.configure(text='Add')
self.car_add_btn.grid(column=0, ipadx=10, padx=10, row=0, sticky="w")
self.car_search_btn = ttk.Button(frame2)
self.car_search_btn.configure(text='Search')
self.car_search_btn.grid(column=1, ipadx=10, padx=10, row=0)
self.car_delete_btn = ttk.Button(frame2)
self.car_delete_btn.configure(text='Delete')
self.car_delete_btn.grid(column=2, ipadx=10, padx=10, row=0)
self.car_modify_btn = ttk.Button(frame2)
self.car_modify_btn.configure(text='Modify')
self.car_modify_btn.grid(column=3, ipadx=10, padx=10, row=0)
frame2.pack(fill="both", side="top")
self.labelframe2 = ttk.Labelframe(self.main)
self.labelframe2.configure(height=241, text='Sale', width=250)
label17 = ttk.Label(self.labelframe2)
label17.configure(
  compound="center",
  relief="flat",
  takefocus=False,
  text='Employee Id')
label17.grid(column=0, padx=20, row=0, sticky="w")
label18 = ttk.Label(self.labelframe2)
label18.configure(
  compound="center",
  relief="flat",
  takefocus=False,
```

```
text='car Id')
    label18.grid(column=2, padx=20, row=0, sticky="w")
    combobox4 = ttk.Combobox(self.labelframe2)
    combobox4.grid(column=1, ipadx=30, ipady=5, row=0, sticky="w")
   combobox5 = ttk.Combobox(self.labelframe2)
    combobox5.grid(column=3, ipadx=30, ipady=5, row=0, sticky="w")
    self.labelframe2.pack(fill="both", side="top")
    frame3 = ttk.Frame(self.main)
   frame3.configure(height=200, width=200)
    self.sale_add_btn = ttk.Button(frame3)
   self.sale_add_btn.configure(text='Add')
   self.sale_add_btn.grid(column=0, ipadx=10, padx=10, row=0, sticky="w")
   self.sale_search_btn = ttk.Button(frame3)
   self.sale_search_btn.configure(text='Search')
    self.sale_search_btn.grid(column=1, ipadx=10, padx=10, row=0)
    frame3.pack(fill="both", side="top")
   self.mainwindow = self.main
 def run(self):
   self.mainwindow.mainloop()
if ___name___ == "___main___":
 app = GUI()
 app.run()
```