```
1 from distutils import command
 2 from tkinter import *
 3 from tkinter import ttk
 4 from typing_extensions import _AnnotatedAlias
 5 from PIL import Image, ImageTk
 6 import os
 7 import pickle
8 import mysql.connector as sql
9 from tkinter import messagebox
10 from datetime import date
11 from datetime import time
12 from datetime import *
13 import requests
14 from bs4 import BeautifulSoup
15 import time
16 import dashboard
17 import csv
18 import regist_depart
19
20 def depart_screen():
21
       def click_delete_department():
22
           """when clicked delete departments, it will require to select the departments and after
    selecting and
23
           performing the delete method, it will ask the admin either they are sure they want to
   delete that department
24
           or not if yes then department containing that id in department table is deleted."""
25
           try:
26
               #obj_department_registration_database = Model_class.department_registration.
   GetDatabase('use cms;')
27
               #db_connection.create(obj_department_registration_database.get_database())
28
               a=load_data()
29
               host=a[0]
30
               username = a[2]
31
               password = a[3]
32
               port=a[1]
33
34
               spec=sql.connect(host=host,user=username,password=password,port=port,database="sms"
35
               mycur=spec.cursor()
36
37
               department_view_content = department_tree.focus()
38
               department_view_items = department_tree.item(department_view_content)
39
               department_view_values = department_view_items['values'][0]
40
               ask = messagebox.askyesno("Warning",
41
                                            f"Are you sure you want to delete department having id
   {department_view_values}")
42
               if ask is True:
43
                   query = f"delete from department where department_id={department_view_values};"
44
                   mycur.execute(query)
45
                   spec.commit()
46
                   #db_connection.delete(query, (department_view_values,))
47
                   messagebox.showinfo("Success", f" department id {department_view_values}
   deleted Successfully")
48
49
                   click_view_all()
50
               else:
51
                   pass
52
53
           except BaseException as msg:
54
               print(msg)
55
               messagebox.showerror("Error",
56
                                        "There is some error deleting the data\n Make sure you have
    Selected the data")
```

```
57
 58
 59
        def click_clear_button():
 60
            department_code_entry.delete(0, END)
            department_name_entry.delete(0, END)
 61
 62
 63
 64
        def load_data():
 65
            f=open("Credentials.csv", "r")
            s=csv.reader(f,delimiter="-")
 66
            d=[]
 67
 68
            for i in s:
 69
                d.append(i)
 70
            a=d[::-1]
 71
            return (a[0])
 72
 73
        def click_go_to_dashboard():
            """returns AdminDashboard class when clicked go to dashboard"""
 74
 75
            dashboard.dashboard()
            root.withdraw()
 76
 77
 78
        def click_view_all():
 79
                 """it will show all the data contains on the department table of cms database,
    when clicked by default this method
 80
                is called while initializing the class ManageDepartment. Exception is handled to
    avoid run time error which may
 81
                cause by user."""
 82
                try:
                    #obj_student_database = Model_class.student_registration.GetDatabase('use cms
 83
 84
                    #db_connection.create(obj_student_database.get_database())
                    a=load_data()
 85
                    host=a[0]
 86
 87
                    username = a[2]
 88
                    password = a[3]
 89
                    port=a[1]
 90
 91
                     spec=sql.connect(host=host,user=username,password=password,port=port,database=
    "sms")
 92
                    mycur=spec.cursor()
 93
                    query = "select * from department;"
 94
                    mycur.execute(query)
 95
 96
                    data = mycur.fetchall()
 97
                    # print(data)
 98
                    department_tree.delete(*department_tree.get_children())
99
                    for values in data:
100
                         data_list = [values[0], values[1], values[2], values[3]]
101
                         # print(data_list)
                         department_tree.insert('', END, values=data_list)
102
103
104
                except BaseException as msg:
105
                    print(msg)
106
107
108
        def updatebutton():
109
            def tree_event_handle():
110
111
                try:
112
                     #obj_department_database = Model_class.department_registration.GetDatabase('
    use cms;')
113
                    #db_connection.create(obj_department_database.get_database())
114
```

```
115
                     tree_view_content = department_tree.focus()
116
                    tree_view_items = department_tree.item(tree_view_content)
117
                    # print(tree_view_items)
118
                    tree_view_values = tree_view_items['values']
                    tree_view_id = tree_view_items['values'][0]
119
120
                    list_of_tree.clear()
121
                    # print(tree_view_id)
122
                    get_id.clear()
123
                    get_id.append(tree_view_id)
124
                    for i in tree_view_values:
125
                         list_of_tree.append(i)
126
127
                    ask = messagebox.askyesno("Confirm",
128
                                             f"Do you want to Update Student having id {
    tree_view_id}")
129
                    if ask is True:
130
                         pass
131
132
                except BaseException as msg:
133
                    print(msg)
134
                    messagebox.showerror("Error",
                                          "There is some error updating the data\n Make sure you
135
    have Selected the data")
136
137
            tree_event_handle()
138
139
            def up_dep():
140
                try:
                    #obj_department_database = Model_class.department_registration.GetDatabase('
141
    use cms;')
142
                    #db_connection.create(obj_department_database.get_database())
143
144
                    #get_id = ManageDepartment.get_id
145
                    data_id = get_id[0]
146
                    # print(data_id)
147
148
                    a=load_data()
149
                    host=a[0]
150
                    username = a[2]
151
                    password = a[3]
152
                    port=a[1]
153
154
                    spec=sql.connect(host=host,user=username,password=password,port=port,database=
    "sms")
155
                    mycur=spec.cursor()
                    #obj_department_database = Model_class.department_registration.
156
    DepartmentRegistration(
157
                         #department_code_entry.get(),
158
                         #department_name_entry.get(),
159
                         #req_date)
160
                     query = f"update department set department_code='{department_code_entry.get()}
161
    ',department_name='{department_name_entry.get()}' where department_id={data_id}"
162
                    mycur.execute(query)
163
                    spec.commit()
                    click_view_all()
164
165
166
                    #values = (obj_department_database.get_code(), obj_department_database.
    get_name(), data_id)
167
168
                    #db_connection.update(query, values)
169
170
                    ask = messagebox.askyesnocancel("Success",
```

```
171
                                             f"Data having \n department Name={
   department_code_entry.get()} \n Updated Successfully\n"
172
                                             f"Do you want to Go Department Dashboard")
173
                 if ask is True:
174
                     pass
175
                     #win = Toplevel()
176
                     #Frontend.manage_department.ManageDepartment(win)
177
                     #window.withdraw()
178
                     #win.deiconify()
179
180
              except BaseException as msg:
181
                 print(msg)
182
                 messagebox.showerror("Error", f"Error due to{msg}")
183
184
185
186
          a = list_of_tree
187
          # print(a)
188
189
190
          global department_code_entry,department_name_entry
191
192
          root = Toplevel()
193
          root.title('DEPARTMENT REGISTRATION FORM - COLLEGE MANAGEMENT SYSTEM')
194
          root.geometry('1067x600')
195
          root.config(bg="#f29844")
196
          root.resizable(False, False)
197
198
          199
          #db_connection = Backend.connection.DatabaseConnection()
200
201
          # creating frame for Register
202
          # img = img
203
          # dummylabel = Label(root, image=img)
204
          # dummylabel.place(x=30, y=30)
205
          reg_frame = Frame(root, bg="#ffffff", width=1000, height=560)
206
207
          reg_frame.place(x=30, y=30)
208
209
210
211
212
          heading = Label(reg_frame, text="Department Registration Form", font=('yu gothic ui',
   20, "bold"), bg="white",
213
                               fg='black',
214
                               bd=5,
215
                               relief=FLAT)
216
          heading.place(x=200, y=0, width=600)
217
          #slider()
218
          #heading_color()
219
220
          dept_frame = LabelFrame(reg_frame, text="Department Details", bg="white", fg="#4f4e4d"
   , height=380,
221
                                      width=800, borderwidth=2.4,
222
                                      font=("yu gothic ui", 13, "bold"))
223
          dept_frame.config(highlightbackground="red")
224
          dept_frame.place(x=100, y=90)
225
226
          227
          228
          229
          #root.bind("<Return>", click_enter_submit)
230
```

```
231
232
         233
         # ============Department Code label
    _____
234
235
236
         department_code_label = Label(dept_frame, text="Department Code ", bg="white", fg="#
   4f4e4d",
237
                                      font=("yu gothic ui", 13, "bold"))
238
         department_code_label.place(x=160, y=80)
239
240
         department_code_entry = Entry(root, highlightthickness=0, relief=FLAT, bg="white", fg=
   "#6b6a69",
241
                                     font=("yu gothic ui semibold", 12))
         department_code_entry.place(x=450, y=227, width=295) # trebuchet ms
242
243
244
         department_code_line = Canvas(root, width=295, height=1.5, bg="#bdb9b1",
   highlightthickness=0)
245
         department_code_line.place(x=450, y=249)
246
247
         248
         249
         250
251
         department_name_label = Label(dept_frame, text="Department Name ", bg="white", fg="#
   4f4e4d",
252
                                     font=("yu gothic ui", 13, "bold"))
253
         department_name_label.place(x=160, y=140)
254
         department_name_entry = Entry(root, highlightthickness=0, relief=FLAT, bg="white", fg=
255
   "#6b6a69",
256
                                     font=("yu gothic ui semibold", 12))
257
         department_name_entry.place(x=450, y=287, width=295) # trebuchet ms
258
259
         department_name_line = Canvas(root, width=295, height=1.5, bg="#bdb9b1",
   highlightthickness=0)
260
         department_name_line.place(x=450, y=309)
261
262
         req_date = time.strftime("%Y/%m/%d")
263
264
265
266
         267
         # ------
268
269
         submit_img = ImageTk.PhotoImage(file='Pics\\submit.png')
270
         submit = Button(dept_frame, image=submit_img,
                            font=("yu gothic ui", 13, "bold"), relief=FLAT,
271
   activebackground="white"
272
                            , borderwidth=0, background="white", cursor="hand2",command=
   up_dep)
273
         submit.image = submit_img
274
         submit.place(x=90, y=267)
275
276
         clear_img = ImageTk.PhotoImage(file='Pics\\clear.png')
277
         clear_button = Button(dept_frame, image=clear_img,
278
                               font=("yu gothic ui", 13, "bold"), relief=FLAT,
   activebackground="white"
279
                               , borderwidth=0, background="white", cursor="hand2",
280
                               command=click_clear_button)
281
         clear_button.image = clear_img
282
         clear_button.place(x=250, y=270)
283
```

```
back_img = ImageTk.PhotoImage(file='Pics\\back.png')
284
285
           back_button = Button(dept_frame, image=back_img,
                                    font=("yu gothic ui", 13, "bold"), relief=FLAT,
286
   activebackground="white"
                                    , borderwidth=0, background="white", cursor="hand2")
287
288
          back_button.image = back_img
289
          back_button.place(x=410, y=270)
290
291
292
          exit_img = ImageTk.PhotoImage(file='Pics\\exit.png')
293
          exit_button = Button(dept_frame, image=exit_img,
                                    font=("yu gothic ui", 13, "bold"), relief=FLAT,
294
   activebackground="white"
295
                                     , borderwidth=0, background="white", cursor="hand2",
   command=exit)
296
          exit_button.image = exit_img
297
          exit_button.place(x=570, y=270)
298
          try:
299
300
              department_code_entry.insert(0, a[1])
301
              department_name_entry.insert(0, a[2])
302
          except IndexError as msg:
303
304
              print(msg)
305
306
307
       list_of_tree = []
       get_id = []
308
309
310
       root = Toplevel()
311
       root.geometry("1067x600")
       root.title("Manage Department - College Management System")
312
313
       #root.iconbitmap('images\\logo.ico')
314
       root.resizable(False, False)
315
316
317
       manage_student_frame_r = Image.open('Pics\\student_frame.png').resize((1067,600),Image.
   ANTIALIAS)
       manage_student_frame = ImageTk.PhotoImage(manage_student_frame_r)
318
319
       image_panel = Label(root, image=manage_student_frame)
320
       image_panel.image = manage_student_frame
321
       image_panel.pack(fill='both', expand='yes')
322
323
324
       heading = Label(root, text="Department Management Dashboard", font=('yu gothic ui', 20, "
325
   bold"), bg="white",
326
                             fg='black',
327
                             bd=5,
328
                             relief=FLAT)
329
       heading.place(x=420, y=23)
330
331
332
       333
       334
       335
336
       #left frame
       left_view_frame = Frame(root, bg="white")
337
338
       left_view_frame.place(x=35, y=89, height=470, width=250)
339
340
       #tree view frame
341
```

```
tree_view_frame = Frame(root, bq="white")
342
343
     tree_view_frame.place(x=301, y=90, height=473, width=730)
344
345
     346
     347
     348
349
     personal_frame = LabelFrame(left_view_frame, text="Batch Management Options", bg="white",
  fg="#4f4e4d",height=460,width=240, borderwidth=2.4,font=("yu gothic ui", 12, "bold"))
350
     personal_frame.config(highlightbackground="red")
351
     personal_frame.place(x=5, y=8)
352
353
354
     355
     356
     357
     add_department_r = Image.open('Pics\\add_department.png').resize((225,25),Image.ANTIALIAS)
358
359
     add_department = ImageTk.PhotoImage(add_department_r)
360
     add_department_button = Button(personal_frame, image=add_department, relief=FLAT,
  borderwidth=0,
361
                             activebackground="white", bg="white", cursor="hand2",
  command= regist_depart.regist_depart)
362
     add_department_button.image = add_department
363
     add_department_button.place(x=8, y=100)
364
     # add_student_button.place(x=36, y=295)
365
366
     367
     368
     369
370
     update_department_r = Image.open('Pics\\update_department.png').resize((225,25),Image.
  ANTIALIAS)
371
     update_department = ImageTk.PhotoImage(update_department_r)
372
     update_department_button = Button(personal_frame, image=update_department, relief=FLAT,
  borderwidth=0,
373
                               activebackground="white", bg="white", cursor="
  hand2",command=updatebutton)
374
     update_department_button.image = update_department
375
     update_department_button.place(x=8, y=165)
376
     # update_student_button.place(x=36, y=355)
377
378
     379
     380
     381
382
     delete_department_r = Image.open('Pics\\delete_department.png').resize((225,25),Image.
  ANTIALIAS)
383
     delete_department = ImageTk.PhotoImage(delete_department_r)
     delete_department_button = Button(personal_frame, image=delete_department, relief=FLAT,
384
  borderwidth=0,
385
                               activebackground="white", bg="white", cursor="
  hand2",command=click_delete_department)
386
     delete_department_button.image = delete_department
387
     delete_department_button.place(x=8, y=230)
388
     # delete_student_button.place(x=36, y=405)
389
390
     391
     392
     # ------
393
394
     goto_dashboard_r = Image.open('Pics\\goto_dashboard.png').resize((225,25),Image.ANTIALIAS)
395
     goto_dashboard = ImageTk.PhotoImage (goto_dashboard_r)
```

```
396
       goto_dashboard_button = Button(personal_frame, image=goto_dashboard, relief=FLAT,
   borderwidth=0,activebackground="white", bg="white", cursor="hand2",command=
   click_go_to_dashboard)
397
       goto_dashboard_button.image = goto_dashboard
398
       qoto dashboard button.place(x=5, v=295)
399
400
      # ------
401
       402
      403
       style = ttk.Style()
404
       style.configure("Treeview.Heading", font=('yu gothic ui', 10, "bold"), foreground="red")
405
406
       scroll_x = Scrollbar(tree_view_frame, orient=HORIZONTAL)
407
       scroll_y = Scrollbar(tree_view_frame, orient=VERTICAL)
408
       department_tree = ttk.Treeview(tree_view_frame,
409
                                      columns=(
                                         "DEPARTMENT ID", "DEPARTMENT CODE", "DEPARTMENT
410
   NAME", "REGISTRATION DATE"),
411
                                      xscrollcommand=scroll_x.set, yscrollcommand=scroll_y.
   set)
412
       scroll_x.pack(side=BOTTOM, fill=X)
413
       scroll_y.pack(side=RIGHT, fill=Y)
414
       scroll_x.config(command=department_tree.xview)
       scroll_y.config(command=department_tree.yview)
415
416
417
      418
       department_tree.heading("DEPARTMENT ID", text="DEPARTMENT ID")
419
       department_tree.heading("DEPARTMENT CODE", text="DEPARTMENT CODE")
       department_tree.heading("DEPARTMENT NAME", text="DEPARTMENT NAME")
420
       department_tree.heading("REGISTRATION DATE", text="REGISTRATION DATE")
421
422
       department_tree["show"] = "headings"
423
       424
425
       department_tree.column("DEPARTMENT ID", width=100)
426
       department_tree.column("DEPARTMENT CODE", width=100)
       department_tree.column("DEPARTMENT NAME", width=170)
427
428
       department_tree.column("REGISTRATION DATE", width=100)
429
       department_tree.pack(fill=BOTH, expand=1)
430
431
      #department_tree.bind("<Delete>", click_delete_key)
432
       #department_tree.bind("<Button-3>", do_popup)
      #department_tree.bind("<Double-Button-1>", tree_double_click)
433
434
      #department_tree.bind("<Return>", tree_double_click)
435
      #search start()
436
      #search_by.current(0)
437
      click_view_all()
438
439
      #root.mainloop()
440
441
442 if __name__ == "__main__":
443
      depart_screen()
```