BUS PAYMENT SYSTEM PROJECT

Member

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```
1 #Library and Value
 2 from random import *
 3 from os import system
4 from time import sleep
6 #Special Module Check Start ==> Dont Touch
7 try:
8
       from prettytable import PrettyTable
9 except ImportError:
       print('Module Not Found Please Wait We Preparing To Install IT . . .')
10
11
       sleep(1)
       system('pip install prettytable')
12
       print('Install SuccessFully ! !\n')
13
14
       sleep(1)
15
       system('cls')
16 finally :
       from prettytable import PrettyTable
17
18
19 data = {25032:{'Name':'Naphop Khumchawna','Age':25,'Balance':100,'Status':'WORKING
  AGE'},24354:{'Name':'Veeraya Lekchaaum','Age':17,'Balance':40,'Status':'STUDYING
  AGE'},74512:{'Name':'Klittima Chawwadee','Age':19,'Balance':50,'Status':'STUDYING
  AGE'}}
20 bus stop = {1:{'BName':'Busta Shinjuku','Price':5},2:
   {'BName':'Tomigaya','Price':10},3:{'BName':'Sakurabashi','Price':15},4:
   {'BName':'Namsan Seoul Tower', 'Price':20},5:{'BName':'Seoul Arts
  Center', 'Price':25},6:{'BName':'Myeong-dong Entrance', 'Price':30},7:{'BName':'Seoul
  Square', 'Price':35},8:{'BName':'Bridge St', 'Price':40},9:{'BName':'Manchester Coach
  Station', 'Price':45},10:{'BName':'Manchester Shudehill', 'Price':50}}
21
22 #Function System
23 def clear():
24
       sleep(0.5)
25
       system('cls')
26 # Create Table Function
27 def create_table(id,field_name):
28
       x = PrettyTable()
29
       x.field_names=field_name
30
       j = 1
31
       ls_per_user= []
32
       for index_name in range (len(field_name)-1):
           if index name == 0:
33
34
               ls_per_user.append(id)
35
           else:
               ls_per_user.append(data[id][field_name[index_name]])
36
               j += 1
37
       Balance = f"{data[id]['Balance']} Bath"
38
39
       ls_per_user.append(Balance)
       # print(ls_per_user)
40
41
       table = lambda x : x
42
       x.add_row([table(k)for k in ls_per_user])
43
       return print(x)
44
45 def table_user(mode):
46
       user_table = PrettyTable()
47
       match mode:
           case 1:
48
               user_table.title='Edit Mode'
49
50
           case 2:
51
               user table.title = 'Delete Mode'
```

```
52
            case 3:
 53
                 user_table.title = 'Finding Mode'
        user table.field names = ['ID','NAME','AGE','STATUS','BALANCE']
 54
 55
        for id in data.keys():
            name = data[id]['Name']
 56
            status = data[id]['Status']
 57
 58
            balance = f"{data[id]['Balance']} bath"
 59
            age = data[id]['Age']
            user table.add row([id,name,age,status,balance])
 60
        print(user_table)
 61
 62
 63 #Function of ADMIN
64 def admin_head():
        print('''
 65
 66
 67
 68
 69
 70
 71
 72
 73 def login_admin():
 74
            while True:
 75
                try:
 76
                     admin_head()
                     print('\nCtrl + c To Exit Admin mode ....\n')
 77
                     # username = 'admin'
 78
 79
                     # password = 'admin'
                     username = str(input('Username : '))
 80
                     password = str(input('Password : '))
 81
                     if username == 'admin' and password == 'admin':
 82
                         print("Welcome Admin")
 83
 84
                         clear()
 85
                         admin_menu()
 86
                     else:
 87
                         input('Wrong Please Try Again....')
 88
                         clear()
                 except KeyboardInterrupt:
 89
                     print('Exit Admin Mode...')
 90
                     clear()
 91
 92
                     break
 93
 94 def admin_menu():
 95
        while True:
 96
            try:
 97
                 admin_head()
98
                 choose = int(input('[0]Log Out\n[1]Edit\n[2]Delete\n[3]Find\nWhat Would
    You Like To Do ? : '))
                 if choose >= 0 and choose <=3:
 99
                     match choose:
100
101
                         case 1:
                             clear()
102
103
                             edit_admin()
104
                             break
105
                         case 2:
106
                             clear()
107
                             delete_admin()
108
                             break
109
                         case 3:
                             clear()
110
```

```
111
                             find_admin()
112
                             break
113
                         case 0:
114
                             clear()
                             break
115
116
                else:
117
                     clear()
118
                     admin_menu()
119
                     break
120
            except ValueError:
121
                print('0 1 2 3 Only Please Try Again')
122
                clear()
123
                admin_menu()
124
                break
125
            except KeyboardInterrupt :
126
                print('Exit Admin Menu Select....')
127
                clear()
128
                break
129
130 def edit admin():
131
        while True:
132
            admin head()
133
            pick_table = PrettyTable()
134
            try:
135
                table_user(1)
                print('''\n===Edit User Data ADMIN Mode===\n''')
136
137
                edit_id = int(input('Edit ID : '))
138
                if check_id(edit_id) == edit_id:
                     edit_choose = int(input('\nEDIT NAME OR AGE ?\n[0]Exit This
139
    Menu\n[1]Name\n[2]Age\nChoose : '))
140
                     if edit choose <= 2:</pre>
141
                         match edit_choose:
142
                             case 0:
143
                                 break
144
                             case 1:
                                  pick_table.field_names = ['ID','NAME']
145
146
                                  pick_table.add_row([edit_id,data[edit_id]['Name']])
147
                                  print(pick_table)
                                  name = str(input('Name : '))
148
                                 surname = str(input('Surname : '))
149
                                  fullname = name + ' ' + surname
150
                                  print('\nPlease Wait...')
151
                                  sleep(1)
152
153
                                  data[edit_id]['Name'] = fullname
154
                                  pick table.del row(0)
155
                                  pick_table.add_row([edit_id,data[edit_id]['Name']])
156
                                  print('\nEdit Successfully ! ! ! !')
157
                                  print(pick_table)
                                  con = str(input('\nDo you want to Edit Continue ? (y/n)
158
    :'))
159
                                  if con.lower() == 'y':
                                      clear()
160
161
                                      edit_admin()
162
                                  elif con.lower() == 'n':
                                      print('Go to Main Admin Menu....')
163
164
                                      clear()
165
                                      admin menu()
166
                                      break
167
                                  else:
168
                                      print('Go to Main Admin Menu....')
```

```
169
                                      clear()
170
                                      admin_menu()
                                      break
171
172
                             case 2:
173
                                 pick_table.field_names = ['ID','NAME','AGE','STATUS']
                                 pick_table.add_row([edit_id,data[edit_id]
174
    ['Name'],data[edit_id]['Age'],data[edit_id]['Status']])
175
                                 print(pick_table)
                                 age = int(input('Edit Age : '))
176
177
                                 if age >= 1 and age <= 20:
178
                                      status = 'STUDYING AGE'
                                 elif age >= 21 and age <= 59:
179
180
                                      status = 'WORKING AGE'
181
                                 elif age >=60:
                                      status = 'OLD AGE'
182
183
                                 else:
                                      input('Your Age Can not be Zero Please Try
184
    Again...')
185
                                      clear()
                                      edit admin()
186
187
                                      break
188
                                 print('\nPlease Wait...')
189
                                 sleep(1)
                                 data[edit_id]['Age'] = age
190
191
                                 data[edit_id]['Status'] = status
192
                                 pick table.del row(0)
                                 pick_table.add_row([edit_id,data[edit_id]
193
    ['Name'],data[edit_id]['Age'],data[edit_id]['Status']])
194
                                 print('Edit Successfully ! ! ! !')
195
                                 print(pick_table)
196
                                 con = str(input('Do you want to Edit Continue ? (y/n) :
    '))
197
                                 if con.lower() == 'y':
198
                                      clear()
199
                                      edit admin()
200
                                 elif con.lower() == 'n':
201
                                      print('Go to Main Admin Menu....')
202
                                      clear()
                                      admin menu()
203
204
                                      break
205
                                 else:
                                      print('Go to Main Admin Menu....')
206
207
                                      clear()
208
                                      admin_menu()
209
                                      break
210
                     else :
211
                         input('0 or 1 or 2 Only Please Try Again...')
212
                         clear()
213
                else:
                     input('Not Found This ID Please Try Again ...')
214
215
                     clear()
            except ValueError as e :
216
217
                # print(e)
                input('Number Only Please Try Again...')
218
219
                clear()
            except KeyboardInterrupt :
220
221
                print('Exit Edit User Menu ...')
222
                clear()
223
                admin_menu()
224
                break
```

```
225
226
227
228 def delete admin():
229
        while True:
230
            admin_head()
231
            delete_table = PrettyTable()
232
            table_user(2)
233
            try:
                print('''\n===Delete User Data ADMIN Mode===\n''')
234
                delete_id = int(input('Delete ID : '))
235
                if delete id in data.keys():
236
                     create_table(delete_id,['ID','Name','Age','Status','Balance'])
237
                     delete com = int(input("Do You Want To Delete ?
238
    \n[0]Yes\n[1]No\nChoose: "))
239
                     if delete_com == 0:
240
                         print('Please Wait...')
241
                         sleep(1)
                         del data[delete id]
242
                         print('\nDelete successfully ! ! !')
243
244
                         table user(2)
                         con = str(input('\nDo You Want to Continue ?(y/n): '))
245
246
                         if con.lower() == 'y':
247
                             clear()
248
                             delete_admin()
249
                             break
                         elif con.lower() == 'n':
250
251
                             print('Redirect to Main Menu....')
252
                             clear()
253
                             admin menu()
254
                             break
255
                         else:
256
                             print('Redirect to Main Menu....')
257
                             clear()
258
                             admin menu()
259
                             break
                     elif delete_com == 1:
260
261
                         clear()
                         delete admin()
262
263
                         break
264
                     else:
265
                         clear()
266
                         delete_admin()
267
                         break
                else:
268
269
                     input('Not Found This ID Please Try Again ....')
270
                     clear()
271
                     delete_admin()
272
                     break
            except (ValueError, TypeError) as e:
273
274
                # print(e)
275
                print('ID Should Be Number Please Try Again')
276
                clear()
            except KeyboardInterrupt:
277
278
                print('Exit Delete User Mode ...')
279
                clear()
280
                admin menu()
281
                break
282
283 def find admin():
```

```
284
        while True:
285
            try:
286
                admin head()
287
                table user(3)
                print('''\n===Finding User Data ADMIN Mode===\n''')
288
                find_id = input('Find By Name Or ID : ')
289
290
                # print(find id)
                if find_id != '':
291
                     if str(find id).isnumeric():
292
293
                         if check_id(int(find_id)) == int(find_id):
294
                             ID = int(find_id)
                             print('\nFounding ! ! !')
295
296
                             create_table(ID,['ID','Name','Age','Status','Balance'])
297
                             con = str(input('\nDo you Want To Find Again ?(y/n)? : '))
                             if con.lower() == 'y':
298
299
                                  clear()
                                  find admin()
300
301
                                 break
302
                             elif con.lower() == 'n':
                                  print('Go to Main Admin Menu....')
303
304
                                  clear()
305
                                  admin_menu()
306
                                 break
307
                             else:
                                  print('Go to Main Admin Menu....')
308
309
                                  clear()
310
                                  admin_menu()
311
                                  break
312
                         else:
                             input('Not Found Please Try Again...')
313
314
                             clear()
315
                             find_admin()
316
                             break
317
                     elif str(find id).isalpha() == False:
318
319
                         for id in data.keys():
                             if data[id]['Name'] == str(find_id):
320
                                  print('\nFounding ! ! !')
321
322
                                  create_table(id,['ID','Name','Age','Status','Balance'])
323
                                  con = str(input('\nDo you Want To Find Again ?(y/n)? :
    '))
324
                                  if con.lower() == 'y':
325
                                      clear()
326
                                      find_admin()
327
                                      return 0
                                  elif con.lower() == 'n':
328
329
                                      print('Go to Main Admin Menu....')
330
                                      clear()
                                      admin_menu()
331
332
                                      return 0
333
                                  else:
334
                                      print('Go to Main Admin Menu....')
                                      clear()
335
336
                                      admin menu()
337
                                      return 0
338
                             else:
339
                                  input('Not Found This Name Please Try Again')
340
                                  clear()
341
                                 find_admin()
342
                                  return 0
```

```
343
                 else:
                    input('Not Found Please Try Again')
344
345
                    clear()
346
                    find admin()
347
                    return 0
348
             else:
                 input('Your Key Finding Should Not To Blank...')
349
350
                 find admin()
351
352
                 break
          except (ValueError, KeyError, TypeError) as e:
353
354
             print(e)
355
          except KeyboardInterrupt :
             print('Exit Finding User Menu...')
356
357
             clear()
             admin_menu()
358
             break
359
360
361
362
363 #Function Of User
364 def name_program():
          print('''
365
            368
                       \__,_|\__, |_| |_|\_|| |_| |_| |_|
369
370
371
372 def show_id(id):
      return create_table(id,['Your ID','Name','Status','Balance'])
373
374 def farewell(name):
375
      print(f'\nThank You Have A Goodday {name}')
376
377 def check id(id):
      if id in data.keys():
378
          return id
379
380
      else:
381
          return 0
382
383 def gen_id():
384
      id = lambda x : str(randint(0,9))
385
      num = (''.join([id(i)for i in range (5)]))
      if num in data.keys():
386
          print('Has IT')
387
          num = (''.join([id(i)for i in range (5)]))
388
389
      # print(num)
      return int(num)
390
391
392 def register():
      while True:
393
394
          name_program()
395
          try:
             print('''===REGISTER USER MENU===\n''')
396
```

```
397
                 id = gen_id()
                 name = str(input("Your Name is : "))
398
399
                 if name.isalpha() :
                     surname = str(input('Your Surname is : '))
400
401
                     if surname.isalpha():
                         if name.isalpha() and surname.isalpha():
402
                             if name !='' or surname != '':
403
404
                                  age = int(input("Your Age is : "))
405
                                  if age >= 0 and age<= 20:
                                      status = 'STUDYING AGE'
406
407
                                  elif age >= 21 and age <=59:
                                      status = 'WORKING AGE'
408
409
                                  else:
                                      status = 'OLD AGE'
410
                                  fullname = name+' '+surname
411
                                  for id_member in data.keys():
412
                                      if fullname == data[id_member]['Name']:
413
414
                                          input('Has this name on our database Please Try
    Again...')
415
                                          clear()
416
                                          register()
417
                                  data[id] = {
418
                                      'Name':fullname,
419
                                      'Age':age,
                                      'Balance':0,
420
                                      'Status':status
421
422
                                      }
423
                                  print('\nRegister Successfully ! ! !')
424
                                  show id(id)
                                  input('Press Any Key To Continue....')
425
426
                                  clear()
427
                                  break
428
                             else:
                                  input('Your Name Or Surname Can not Blank Please Try
429
    Again ....')
430
                                 clear()
431
                         else:
432
                             input('You Name or Surname Should be String not Number
    Please Try Again...')
                             clear()
433
434
                     else:
435
                         input('You Surname Should be String not Number Please Try
    Again...')
436
                         clear()
437
                         register()
438
                         break
439
                 else:
440
                     input('You Name Should be String not Number Please Try Again...')
441
                     clear()
442
                     register()
443
                     break
444
            except ValueError:
445
                 input('Your Age Should Be Number Please Try Again...')
446
                 clear()
447
            except KeyboardInterrupt:
448
                 print('Exit Register Menu ...')
449
                 clear()
450
                 break
451 def pay_1():
452
        while True:
```

```
453
            name_program()
454
            table_bus = PrettyTable()
455
            result payment = PrettyTable()
456
            try:
                print('''===Payment User Menu===''')
457
                user_id=int(input("\nYour ID :"))
458
459
                if check_id(user_id) == user_id:
                    create_table(user_id,['ID','Name','Status','Balance'])
460
                    table bus.field names=['NO.', 'Bus Stop Pitch']
461
                    for select in bus_stop.keys():
462
463
                         table_bus.add_row([select,bus_stop[select]['BName']])
464
                    print(table_bus)
465
                    start=int(input("Choose Start Station : "))
                    stop=int(input("Choose Stop Station : "))
466
                    start_b = bus_stop[start]['BName']
467
                    stop_b = bus_stop[stop]['BName']
468
                    user_age = data[user_id]['Age']
469
                    status = data[user_id]['Status']
470
471
                    if start != 0 and stop !=0:
472
                         if start > stop:
473
                             pay=bus_stop[10]['Price']-(bus_stop[start]['Price']-
    bus_stop[stop]['Price'])
474
                         elif start == stop:
475
                             pay=50
476
                         else:
                             pay=bus_stop[stop]['Price']-bus_stop[start]['Price']
477
478
                    print(f'\n=====You are from {start_b} to {stop_b}=====')
479
                    if user_age >=0 and user_age <= 20:
480
                         rate = 3
481
                    elif user_age >=21 and user_age <= 59:
482
                         rate = 0
483
                    else:
484
                         rate = 2
                    if pay>data[user_id]['Balance']:
485
                         print('\nYour balance is not sufficient')
486
487
                         choose = str(input('Would You Like To Top Up ? (y/n) : '))
488
                         if choose.lower() == 'y':
489
                             print('Redirect To Top-up Page')
490
                             clear()
491
                             top up()
492
                             break
                         elif choose.lower() == 'n':
493
494
                             clear()
495
                             break
496
                         else:
497
                             clear()
                             print('Please Try Again')
498
499
                             break
500
                    else:
501
                         pay discount=pay-rate
                         stable = data[user_id]['Balance']-pay_discount
502
                         data[user_id]['Balance'] = stable
503
504
                         rate = f"{rate} Bath"
                         stable = f"{stable} Bath"
505
                         pay_discount = f"{pay_discount} Bath"
506
507
                         pay = f"{pay} Bath"
                         result_payment.field_names=(['ID','Name','Age','Promotion','Full
508
    Price', 'Discount', 'Discount Price', 'Balance'])
509
                         result_payment.add_row([user_id,data[user_id]
    ["Name"], user_age, status, pay, rate, pay_discount, stable])
```

```
510
                         print('\n', result_payment)
511
                         farewell(data[user_id]['Name'])
                         input('Press Any Key To Continue...')
512
513
                         clear()
                         return 0
514
515
                else:
516
                    print('Not Found Your ID Please Try Again')
517
                    choose = str(input('Do You Want to Go To Main Menu ? (y/n) : '))
                    if choose.lower() == 'y':
518
519
                         print('Redirect to Mainmenu')
520
                         clear()
521
                         break
522
                    elif choose.lower()=='n':
523
                         clear()
524
                         pass
525
                    else:
526
                         clear()
527
                         pass
528
            except (TypeError, ValueError) as e :
                input('It Should Be Number Please Try Again...')
529
530
                clear()
531
            except KeyboardInterrupt:
532
                print('Exit Payment Menu ...')
533
                clear()
534
                break
535
536 def top_up():
537
        while True:
538
            name_program()
539
            final_table = PrettyTable()
540
            try:
                print('''===Top Up User Menu===''')
541
542
                user_id=int(input("\nYour ID : "))
                if check_id(user_id) == user_id:
543
                    create_table(user_id,['ID','Name','Balance'])
544
                    topup=int(input('Top up : '))
545
546
547
                    if topup>=1:
                         name = data[user_id]['Name']
548
549
                         Balance = data[user_id]['Balance']
550
                         Balance += topup
                         data[user_id]['Balance'] = Balance
551
552
                         Balance = f"{Balance} Bath"
553
                         print('\nSuccessfully ! ! ! ! ')
                         final table.field names=['ID','Name','TopUp','Balance']
554
                         final_table.add_row([user_id,name,f'+{topup} Bath',Balance])
555
556
                         print(final_table)
557
                         print('Thank You For Top Up')
                         input('Press Any Key To Continue...')
558
559
                         clear()
560
                         break
561
                    else:
562
                         input('Your Top Up Should be more than 0 Please Try Again...')
563
                         clear()
564
                         top_up()
565
                         break
566
                else:
567
                    print('Not Found This ID')
                    choose = input('Do You Want to Register ? (y/n) : ')
568
569
                    match choose.lower():
```

```
570
                         case 'y':
571
                             print('Redirect To Register Page....')
572
                             clear()
                             register()
573
574
                             break
575
                         case 'n':
576
                             clear()
577
                             break
578
                         case '':
579
                             clear()
580
                             break
581
            except (ValueError, TypeError) as e:
582
                 input('It Should Be Only Number Please Try Again...')
583
                 clear()
584
            except KeyboardInterrupt:
                 print('Exit Top Up Menu ...')
585
586
                 clear()
587
                 break
588
589
590
591 # Main Programe
592 while True :
593
        # edit_admin()
594
        name_program()
595
        try:
            print('What Would You Like :\n[0]Exit\n[1]Register\n[2]Pay\n[3]TopUP')
596
            choose = int(input('Choose : '))
597
            if choose >= 0 and choose <=3:
598
599
                 match choose:
                     case 0:
600
601
                         break
                     case 1:
602
603
                         clear()
                         register()
604
605
                     case 2:
                         clear()
606
607
                         if pay_1() == 0:
608
                             break
                     case 3:
609
610
                         clear()
611
                         top_up()
            elif choose == 1001:
612
613
                 clear()
614
                 login admin()
615
            else:
                 input('0 1 2 3 Only Please Try Again...')
616
617
                 clear()
618
        except (ValueError, TypeError):
619
            input('Only Number Please Try Again...')
620
            clear()
621
```