BUS PAYMENT SYSTEM PROJECT

Member

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```python
1   #Library and Value
2   from random import *
3   from os import system
4   from time import sleep
5
6   #Special Module Check Start ==> Dont Touch
7   try:
8       from prettytable import PrettyTable
9   except ImportError:
10      print('Module Not Found Please Wait We Preparing To Install IT . . .')
11      sleep(1)
12      system('pip install prettytable')
13      print('Install SuccessFully ! ! !\n')
14      sleep(1)
15      system('cls')
16  finally :
17      from prettytable import PrettyTable
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):
33          if index_name == 0:
34              ls_per_user.append(id)
35          else:
36              ls_per_user.append(data[id][field_name[index_name]])
37              j += 1
38      Balance = f"{data[id]['Balance']} Bath"
39      ls_per_user.append(Balance)
40      # print(ls_per_user)
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:
48          case 1:
49              user_table.title='Edit Mode'
50          case 2 :
51              user_table.title = 'Delete Mode'
```

```python
        case 3 :
            user_table.title = 'Finding Mode'
    user_table.field_names = ['ID','NAME','AGE','STATUS','BALANCE']
    for id in data.keys():
        name = data[id]['Name']
        status = data[id]['Status']
        balance = f"{data[id]['Balance']} bath"
        age = data[id]['Age']
        user_table.add_row([id,name,age,status,balance])
    print(user_table)

#Function of ADMIN
def admin_head():
    print('''

   ____  ___  ___ ____ _  _
  /\    |  _ \|  \/  ||_   _| \ | |
 /  \   | | | | |\/ | | | |  \| |
 / /\ \ | | | | | |\/| | | | | . ` |
 / ____ \| |_| | | |  | |_| |_| |\  |
/_/    \_\___/|_|  |_|____|_| \_|\n''')

def login_admin():
        while True:
            try:
                admin_head()
                print('\nCtrl + c To Exit Admin mode .....\n')
                # username = 'admin'
                # password = 'admin'
                username = str(input('Username : '))
                password = str(input('Password : '))
                if username == 'admin' and password == 'admin':
                    print("Welcome Admin")
                    clear()
                    admin_menu()
                else:
                    input('Wrong Please Try Again....')
                    clear()
            except KeyboardInterrupt:
                print('Exit Admin Mode...')
                clear()
                break

def admin_menu():
    while True:
        try :
            admin_head()
            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:
                match choose:
                    case 1:
                        clear()
                        edit_admin()
                        break
                    case 2:
                        clear()
                        delete_admin()
                        break
                    case 3:
                        clear()
```

```python
                            find_admin()
                            break
                    case 0:
                        clear()
                        break
            else:
                clear()
                admin_menu()
                break
        except ValueError:
            print('0 1 2 3 Only Please Try Again')
            clear()
            admin_menu()
            break
        except KeyboardInterrupt :
            print('Exit Admin Menu Select....')
            clear()
            break

def edit_admin():
    while True:
        admin_head()
        pick_table = PrettyTable()
        try:
            table_user(1)
            print('''\n===Edit User Data ADMIN Mode===\n''')
            edit_id = int(input('Edit ID : '))
            if check_id(edit_id) == edit_id:
                edit_choose = int(input('\nEDIT NAME OR AGE ?\n[0]Exit This
Menu\n[1]Name\n[2]Age\nChoose : '))
                if edit_choose <= 2:
                    match edit_choose:
                        case 0 :
                            break
                        case 1 :
                            pick_table.field_names = ['ID','NAME']
                            pick_table.add_row([edit_id,data[edit_id]['Name']])
                            print(pick_table)
                            name = str(input('Name : '))
                            surname = str(input('Surname : '))
                            fullname = name + ' ' + surname
                            print('\nPlease Wait...')
                            sleep(1)
                            data[edit_id]['Name'] = fullname
                            pick_table.del_row(0)
                            pick_table.add_row([edit_id,data[edit_id]['Name']])
                            print('\nEdit Successfully ! ! ! !')
                            print(pick_table)
                            con = str(input('\nDo you want to Edit Continue ? (y/n)
 :'))
                            if con.lower() == 'y':
                                clear()
                                edit_admin()
                            elif con.lower() == 'n':
                                print('Go to Main Admin Menu....')
                                clear()
                                admin_menu()
                                break
                            else:
                                print('Go to Main Admin Menu....')
```

```python
                                    clear()
                                    admin_menu()
                                    break
                            case 2 :
                                pick_table.field_names = ['ID','NAME','AGE','STATUS']
                                pick_table.add_row([edit_id,data[edit_id]
['Name'],data[edit_id]['Age'],data[edit_id]['Status']])
                                print(pick_table)
                                age = int(input('Edit Age : '))
                                if age >= 1 and age <= 20:
                                    status = 'STUDYING AGE'
                                elif age >= 21 and age <= 59:
                                    status = 'WORKING AGE'
                                elif age >=60:
                                    status = 'OLD AGE'
                                else:
                                    input('Your Age Can not be Zero Please Try
Again...')
                                    clear()
                                    edit_admin()
                                    break
                                print('\nPlease Wait...')
                                sleep(1)
                                data[edit_id]['Age'] = age
                                data[edit_id]['Status'] = status
                                pick_table.del_row(0)
                                pick_table.add_row([edit_id,data[edit_id]
['Name'],data[edit_id]['Age'],data[edit_id]['Status']])
                                print('Edit Successfully ! ! ! !')
                                print(pick_table)
                                con = str(input('Do you want to Edit Continue ? (y/n) :
'))
                                if con.lower() == 'y':
                                    clear()
                                    edit_admin()
                                elif con.lower() == 'n':
                                    print('Go to Main Admin Menu....')
                                    clear()
                                    admin_menu()
                                    break
                                else:
                                    print('Go to Main Admin Menu....')
                                    clear()
                                    admin_menu()
                                    break
                        else :
                            input('0 or 1 or 2 Only Please Try Again...')
                            clear()
                    else:
                        input('Not Found This ID Please Try Again ...')
                        clear()
            except ValueError as e :
                # print(e)
                input('Number Only Please Try Again...')
                clear()
            except KeyboardInterrupt :
                print('Exit Edit User Menu ...')
                clear()
                admin_menu()
                break
```

```python
def delete_admin():
    while True:
        admin_head()
        delete_table = PrettyTable()
        table_user(2)
        try:
            print('''\n===Delete Usᴇʀ Data ADMIN Mode===\n''')
            delete_id = int(input('Delete ID : '))
            if delete_id in data.keys():
                create_table(delete_id,['ID','Name','Age','Status','Balance'])
                delete_com = int(input("Do You Want To Delete ? \n[0]Yes\n[1]No\nChoose: "))
                if delete_com == 0:
                    print('Please Wait...')
                    sleep(1)
                    del data[delete_id]
                    print('\nDelete successfully ! ! !')
                    table_user(2)
                    con = str(input('\nDo You Want to Continue ?(y/n): '))
                    if con.lower() == 'y':
                        clear()
                        delete_admin()
                        break
                    elif con.lower() == 'n':
                        print('Redirect to Main Menu....')
                        clear()
                        admin_menu()
                        break
                    else:
                        print('Redirect to Main Menu....')
                        clear()
                        admin_menu()
                        break
                elif delete_com == 1:
                    clear()
                    delete_admin()
                    break
                else:
                    clear()
                    delete_admin()
                    break
            else:
                input('Not Found This ID Please Try Again ....')
                clear()
                delete_admin()
                break
        except (ValueError,TypeError) as e:
            # print(e)
            print('ID Should Be Number Please Try Again')
            clear()
        except KeyboardInterrupt:
            print('Exit Delete User Mode ...')
            clear()
            admin_menu()
            break

def find_admin():
```

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

```python
                else:
                    input('Not Found Please Try Again')
                    clear()
                    find_admin()
                    return 0
            else:
                input('Your Key Finding Should Not To Blank...')
                clear()
                find_admin()
                break
        except (ValueError,KeyError,TypeError) as e:
            print(e)
        except KeyboardInterrupt :
            print('Exit Finding User Menu...')
            clear()
            admin_menu()
            break


#Function Of User
def name_program():
        print('''  ____                 ____                          _      ____
  _
| _ ) _   _ __    | _ \ _  _ _   _ _ _ _   __ _ _ | |_ / __| _   _ __| |_
 ___ _ ___ ___
|  _ \| | | / _| | |_) / _` | | | | | '_ ` _ \ / _ \ '_ \| _| \__ \| | | / _| __/
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|____/ \__,_|__/ |_|   \__,_|\_, |_| |_| |_|\__|_| |_|\__| |___/ \__,
  |__/\__\__|_| |_| |_|
                               |__/                                   |__/
        ''')

def show_id(id):
    return create_table(id,['Your ID','Name','Status','Balance'])
def farewell(name):
    print(f'\nThank You Have A Goodday {name}')

def check_id(id):
    if id in data.keys():
        return id
    else:
        return 0

def gen_id():
    id = lambda x : str(randint(0,9))
    num = (''.join([id(i)for i in range (5)]))
    if num in data.keys():
        print('Has IT')
        num = (''.join([id(i)for i in range (5)]))
    # print(num)
    return int(num)

def register():
    while True:
        name_program()
        try:
            print('''===Register User Menu===\n''')
```

```python
            id = gen_id()
            name = str(input("Your Name is : "))
            if name.isalpha() :
                surname = str(input('Your Surname is : '))
                if surname.isalpha():
                    if name.isalpha() and surname.isalpha():
                        if name !='' or surname != '':
                            age = int(input("Your Age is : "))
                            if age >= 0 and age<= 20:
                                status = 'STUDYING AGE'
                            elif age >= 21 and age <=59:
                                status = 'WORKING AGE'
                            else:
                                status = 'OLD AGE'
                            fullname = name+' '+surname
                            for id_member in data.keys():
                                if fullname == data[id_member]['Name']:
                                    input('Has this name on our database Please Try
Again...')
                                    clear()
                                    register()
                            data[id] = {
                                'Name':fullname,
                                'Age':age,
                                'Balance':0,
                                'Status':status
                                }
                            print('\nRegister Successfully ! ! !')
                            show_id(id)
                            input('Press Any Key To Continue....')
                            clear()
                            break
                        else:
                            input('Your Name Or Surname Can not Blank Please Try
Again ....')
                            clear()
                    else:
                        input('You Name or Surname Should be String not Number
Please Try Again...')
                        clear()
                else:
                    input('You Surname Should be String not Number Please Try
Again...')
                    clear()
                    register()
                    break
            else:
                input('You Name Should be String not Number Please Try Again...')
                clear()
                register()
                break
        except ValueError:
            input('Your Age Should Be Number Please Try Again...')
            clear()
        except KeyboardInterrupt:
            print('Exit Register Menu ...')
            clear()
            break
def pay_1():
    while True:
```

```python
        name_program()
        table_bus = PrettyTable()
        result_payment = PrettyTable()
        try:
            print('''===Payment User Menu===''')
            user_id=int(input("\nYour ID :"))
            if check_id(user_id) == user_id:
                create_table(user_id,['ID','Name','Status','Balance'])
                table_bus.field_names=['NO.','Bus Stop Pitch']
                for select in bus_stop.keys():
                    table_bus.add_row([select,bus_stop[select]['BName']])
                print(table_bus)
                start=int(input("Choose Start Station : "))
                stop=int(input("Choose Stop Station : "))
                start_b = bus_stop[start]['BName']
                stop_b = bus_stop[stop]['BName']
                user_age = data[user_id]['Age']
                status = data[user_id]['Status']
                if start != 0 and stop !=0:
                    if start > stop:
                        pay=bus_stop[10]['Price']-(bus_stop[start]['Price']-
bus_stop[stop]['Price'])
                    elif start == stop:
                        pay=50
                    else:
                        pay=bus_stop[stop]['Price']-bus_stop[start]['Price']
                print(f'\n=====You are from {start_b} to {stop_b}=====')
                if user_age >=0 and user_age <= 20:
                    rate = 3
                elif user_age >=21 and user_age <= 59:
                    rate = 0
                else:
                    rate = 2
                if pay>data[user_id]['Balance']:
                    print('\nYour balance is not sufficient')
                    choose = str(input('Would You Like To Top Up ? (y/n) : '))
                    if choose.lower() == 'y':
                        print('Redirect To Top-up Page')
                        clear()
                        top_up()
                        break
                    elif choose.lower() == 'n':
                        clear()
                        break
                    else:
                        clear()
                        print('Please Try Again')
                        break
                else:
                    pay_discount=pay-rate
                    stable = data[user_id]['Balance']-pay_discount
                    data[user_id]['Balance'] = stable
                    rate = f"{rate} Bath"
                    stable = f"{stable} Bath"
                    pay_discount = f"{pay_discount} Bath"
                    pay = f"{pay} Bath"
                    result_payment.field_names=(['ID','Name','Age','Promotion','Full
Price','Discount','Discount Price','Balance'])
                    result_payment.add_row([user_id,data[user_id]
["Name"],user_age,status,pay,rate,pay_discount,stable])
```

```python
                        print('\n',result_payment)
                        farewell(data[user_id]['Name'])
                        input('Press Any Key To Continue... ')
                        clear()
                        return 0
                else:
                    print('Not Found Your ID Please Try Again')
                    choose = str(input('Do You Want to Go To Main Menu ? (y/n) : '))
                    if choose.lower() == 'y':
                        print('Redirect to Mainmenu')
                        clear()
                        break
                    elif choose.lower()=='n':
                        clear()
                        pass
                    else:
                        clear()
                        pass
            except (TypeError,ValueError) as e :
                input('It Should Be Number Please Try Again...')
                clear()
            except KeyboardInterrupt:
                print('Exit Payment Menu ...')
                clear()
                break

def top_up():
    while True:
        name_program()
        final_table = PrettyTable()
        try:
            print('''===Top Up User Menu===''')
            user_id=int(input("\nYour ID : "))
            if check_id(user_id) == user_id:
                create_table(user_id,['ID','Name','Balance'])
                topup=int(input('Top up : '))

                if topup>=1:
                    name = data[user_id]['Name']
                    Balance = data[user_id]['Balance']
                    Balance += topup
                    data[user_id]['Balance'] = Balance
                    Balance = f"{Balance} Bath"
                    print('\nSuccessfully ! ! ! ! ')
                    final_table.field_names=['ID','Name','TopUp','Balance']
                    final_table.add_row([user_id,name,f'+{topup} Bath',Balance])
                    print(final_table)
                    print('Thank You For Top Up')
                    input('Press Any Key To Continue... ')
                    clear()
                    break
                else:
                    input('Your Top Up Should be more than 0 Please Try Again...')
                    clear()
                    top_up()
                    break
            else:
                print('Not Found This ID')
                choose = input('Do You Want to Register ? (y/n) : ')
                match choose.lower():
```

```python
                    case 'y':
                        print('Redirect To Register Page....')
                        clear()
                        register()
                        break
                    case 'n':
                        clear()
                        break
                    case '':
                        clear()
                        break
        except (ValueError,TypeError) as e:
            input('It Should Be Only Number Please Try Again...')
            clear()
        except KeyboardInterrupt:
            print('Exit Top Up Menu ...')
            clear()
            break


# Main Programe
while True :
    # edit_admin()
    name_program()
    try:
        print('What Would You Like :\n[0]Exit\n[1]Register\n[2]Pay\n[3]TopUP')
        choose = int(input('Choose : '))
        if choose >= 0 and choose <=3:
            match choose:
                case 0 :
                    break
                case 1 :
                    clear()
                    register()
                case 2 :
                    clear()
                    if pay_1() == 0:
                        break
                case 3 :
                    clear()
                    top_up()
        elif choose == 1001:
            clear()
            login_admin()
        else:
            input('0 1 2 3 Only Please Try Again...')
            clear()
    except (ValueError,TypeError):
        input('Only Number Please Try Again...')
        clear()
```