

SOURCE CODE

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import mysql.connector as my
import matplotlib.pyplot as plt

plt.rcParams.update({'font.size': 11})
import colorama
from colorama import Fore, Back, Style
import string
import random

def idgenerator(size=4, chars=string.ascii_uppercase + string.digits):
    return ''.join(random.choice(chars) for _ in range(size))

con = my.connect(host="localhost", user="root", password="12345", database="ELECTRIC")
cur = con.cursor()
ch = 0
while True:
    h = input("enter Y if new customer N if old customer something else to exit ")
    if (h.lower() == "y"):
        name = input("enter your name ")
        address = input("enter your address ")
        phone = input("enter mobile no. ")
        cno = idgenerator()
        print(Fore.RED)
        print("Amount to be paid as security deposit is ₹1000", Style.RESET_ALL)
        choice = 0
        print("ENTER 1 to pay with google pay")
        print("ENTER 2 to pay with credit/debit card")
        choice = int(input("ENTER your choice "))
        if (choice == 1):
            print("payment successful")
            print(Fore.RED)
            print("consumer id is ", cno)
            print("Account created ", end="")
            print(Style.RESET_ALL)
        elif (choice == 2):
            j = int(input("enter card no. "))
            k = input("enter valid thru mm/yy ")
            cvv = int(input("enter cvv "))
            print("otp sent to registered no. ")
            otp = int(input("enter otp "))
            print("payment successful")
            print(Fore.RED)
            print("consumer id is ", cno)
            print("Account created ", end="")
            print(Style.RESET_ALL)
        query = "insert into id values('{}', '{}')".format(cno, name.upper())
        cur.execute(query)
        con.commit()
        query = "insert into details values('{}', '{}', '{}')".format(cno, address, phone)
        cur.execute(query)
        con.commit()
        query = "insert into bill values('{}', {}, {}, {}, {})".format(cno, 0, 0, 0, 0)
        cur.execute(query)
        con.commit()
    elif (h.lower() == "n"):
        q = "select * from ID"
        cur.execute(q)
        result = list(cur.fetchall())
        for i in result:
            q1 = "select unit_1m from BILL where CONSUMER_ID='{}'".format(i[0])
            cur.execute(q1)
            re = list(cur.fetchall())
            s = 0
            for m in re:
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for j in m:
    if (j >= 1) and (j <= 100):
        s = j * 5
    elif (j > 100) and (j <= 200):
        s = 100 * 5 + ((j - 100) * 10)
    elif (j > 200):
        s = 100 * 5 + 100 * 10 + ((j - 200) * 15)
    query = "update bill set price_present={} where CONSUMER_ID='{}'.format(s, i[0])
    cur.execute(query)
    con.commit()

while True:
    n = input("enter name ")
    cid = input("enter consumer id ")
    for i in result:
        if (i[1] == n.upper()):
            if (i[0] == cid):
                print("entry successful")
                while True:
                    print("1 to see current bill")
                    print("2 to surrender metre")
                    print("3 to apply for revised consumption for new heavy wattage appliances or application "
                          "history")
                    print("4 to see last three months consumption")
                    print("5 to update phone no.")
                    print("enter 6 to logout and exit ")
                    ch = int(input("enter your choice "))
                    if (ch == 1):
                        print("1-100 units = rs5")
                        print("next 100 units = rs10")
                        print("above 200 units = rs15")
                        q66 = "select unit_1m,price_present from bill where consumer_id='{}'.format(cid)
                        cur.execute(q66)
                        res = list(cur.fetchall())
                        l = res[0][0]
                        a = res[0][1]
                        if (a == 0):
                            print(Fore.RED)
                            print("NEW CONSUMER BILL WILL BE DISPLAYED AFTER THIS MONTHS READING", end="")
                            print(Style.RESET_ALL)
                        else:
                            print("units consumed is ", l)
                            print("Bill without gst is ", a)
                            a = a + ((18 / 100) * a)
                            print(Fore.RED)
                            print("Bill with gst is ", a, end="")
                            print(Style.RESET_ALL)
                            print("press 1 to pay with google pay and avail 20% discount")
                            print("press 2 to use debit/credit card and avail 10% discount")
                            k = int(input("enter your choice "))
                            if (k == 1):
                                a = a - ((20 / 100) * a)
                                print(Fore.RED)
                                print("new bill is ", a, end="")
                                print(Style.RESET_ALL)
                                gh = input("enter y to confirm ")
                                if (gh == "y"):
                                    print("payment successful")
                                else:
                                    print("payment cancelled")
                            elif (k == 2):
                                a = a - ((10 / 100) * a)
                                print(Fore.RED)
                                print("new bill is ", a, end="")
                                print(Style.RESET_ALL)
                                gh = input("enter y to confirm ")
                                if (gh == "y"):
                                    j = int(input("enter card no. "))
                                    k = input("enter valid thru mm/yy ")
                                    cvv = int(input("enter cvv "))
                                    print("otp sent to registered no. ")
                                    otp = int(input("enter otp "))
                                    print("payment successful")
                                else:
                                    print("payment cancelled")
                    elif (ch == 2):
                        n1 = input("enter name ")
                        c = input("enter consumer id for confirmation ")
                        phoneno = input("enter phone no. ")
                        s2 = 1000

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query = "DELETE from id where consumer_id='{ }'".format(c)
cur.execute(query)
con.commit()
query = "DELETE from bill where consumer_id='{ }'".format(c)
cur.execute(query)
con.commit()
query = "DELETE from details where consumer_id='{ }'".format(c)
cur.execute(query)
con.commit()
query = "DELETE from application where consumer_id='{ }'".format(c)
cur.execute(query)
con.commit()
print(Fore.RED)
print("SECURITY DEPOSIT OF AMOUNT ", s2, "WILL BE RETURNED TO YOUR BANK ACCOUNT "
      "WITHIN 2 DAYS ", end="")

print(Style.RESET_ALL)
print("ANY APPLICATION RELATED AMOUNT WILL NOT BE REFUNDED ")
print("x-----THANK "
      "YOU-----x")
exit()
elif (ch == 3):
    print("1 for ac")
    print("2 for geyser ")
    print("3 for microwave oven")
    print("4 for washing machine")
    print("5 for application history ")
    kh = int(input("enter your choice "))
    if (kh == 1):
        n1 = input("enter name ")
        c = input("enter consumer id for confirmation ")
        app = "NEW AC"
        no = int(input("enter ac capacity "))
        no1 = int(input("enter no. of ac "))
        phoneno = input("enter phone no.")
        s2 = 5000 * no * no1
        s1 = "APPROVED measures after payment will be taken accordingly"
        print(Fore.RED)
        print(s1)
        print("Price to be paid on approval is RS", s2, end="")
        print(Style.RESET_ALL)
        print("1 to pay with google pay ")
        print("2 to pay with credit or debit card ")
        k = int(input('enter your choice '))
        if (k == 1):
            h = input("press y to confirm ")
            if (h.lower() == "y"):
                print(Fore.RED)
                print("PAYMENT CONFIRMED", Style.RESET_ALL)
                q4 = "insert into APPLICATION values('{ }','{ }',{ })".format(c, app, s2)
                cur.execute(q4)
                con.commit()
                print("Further details will be relayed via S.M.S")
            else:
                print("APPLICATION not confirmed")
        elif (k == 2):
            h = input("press y to confirm ")
            if (h.lower() == "y"):
                j = int(input("enter card no. "))
                k = input("enter valid thru mm/yy ")
                cvv = int(input("enter cvv "))
                print("otp sent to registered no. ")
                otp = int(input("enter otp "))
                print(Fore.RED)
                print("PAYMENT CONFIRMED", Style.RESET_ALL)
                q4 = "insert into APPLICATION values('{ }','{ }',{ })".format(c, app, s2)
                cur.execute(q4)
                con.commit()
                print("Further details will be relayed via S.M.S")
            else:
                print("APPLICATION not confirmed")
    elif (kh == 2):
        n1 = input("enter name ")
        c = input("enter consumer id for confirmation ")
        app = "NEW GEYSER"
        no = int(input("enter geyser capacity "))
        no1 = int(input("enter no. of geyser "))
        phoneno = input("enter phone no.")
        s2 = 3000 * no * no1
        s1 = "APPROVED measures after payment will be taken accordingly"

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print(Fore.RED)
print(s1)
print("Price to be paid on approval is RS", s2, end="")
print(Style.RESET_ALL)
print("1 to pay with google pay ")
print("2 to pay with credit or debit card ")
k = int(input('enter your choice '))
if (k == 1):
    h = input("press y to confirm ")
    if (h.lower() == "y"):
        print(Fore.RED)
        print("PAYMENT CONFIRMED", Style.RESET_ALL)
        q4 = "insert into APPLICATION values('{}','{}',{})".format(c, app, s2)
        cur.execute(q4)
        con.commit()
        print("Further details will be relayed via S.M.S")
    else:
        print("APPLICATION not confirmed")
elif (k == 2):
    h = input("press y to confirm ")
    if (h.lower() == "y"):
        j = int(input("enter card no. "))
        k = input("enter valid thru mm/yy ")
        cvv = int(input("enter cvv "))
        print("otp sent to registered no. ")
        otp = int(input("enter otp "))
        print(Fore.RED)
        print("PAYMENT CONFIRMED", Style.RESET_ALL)
        q4 = "insert into APPLICATION values('{}','{}',{})".format(c, app, s2)
        cur.execute(q4)
        con.commit()
        print("Further details will be relayed via S.M.S")
    else:
        print("APPLICATION not confirmed")
elif (kh == 3):
    n1 = input("enter name ")
    c = input("enter consumer id for confirmation ")
    app = "NEW MICROWAVE OVEN"
    no = int(input("enter microwave oven capacity "))
    no1 = int(input("enter no. of microwave oven "))
    phoneno = input("enter phone no.")
    s2 = 600 * no * no1
    s1 = "APPROVED measures after payment will be taken accordingly"
    print(Fore.RED)
    print(s1)
    print("Price to be paid on approval is RS", s2, end="")
    print(Style.RESET_ALL)
    print("1 to pay with google pay ")
    print("2 to pay with credit or debit card ")
    k = int(input('enter your choice '))
    if (k == 1):
        h = input("press y to confirm ")
        if (h.lower() == "y"):
            print(Fore.RED)
            print("PAYMENT CONFIRMED", Style.RESET_ALL)
            q4 = "insert into APPLICATION values('{}','{}',{})".format(c, app, s2)
            cur.execute(q4)
            con.commit()
            print("Further details will be relayed via S.M.S")
        else:
            print("APPLICATION not confirmed")
    elif (k == 2):
        h = input("press y to confirm ")
        if (h.lower() == "y"):
            j = int(input("enter card no. "))
            k = input("enter valid thru mm/yy ")
            cvv = int(input("enter cvv "))
            print("otp sent to registered no. ")
            otp = int(input("enter otp "))
            print(Fore.RED)
            print("PAYMENT CONFIRMED", Style.RESET_ALL)
            q4 = "insert into APPLICATION values('{}','{}',{})".format(c, app, s2)
            cur.execute(q4)
            con.commit()
            print("Further details will be relayed via S.M.S")
        else:
            print("APPLICATION not confirmed")
    elif (kh == 4):
        n1 = input("enter name ")

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c = input("enter consumer id for confirmation ")
app = "NEW WASHING MACHINE"
no = int(input("enter washing machine capacity "))
no1 = int(input("enter no. of washing machine "))
phoneno = input("enter phone no.")
s2 = 2000 * no * no1
s1 = "APPROVED measures after payment will be taken accordingly"
print(Fore.RED)
print(s1)
print("Price to be paid on approval is RS", s2, end="")
print(Style.RESET_ALL)
print("1 to pay with google pay ")
print("2 to pay with credit or debit card ")
k = int(input('enter your choice '))
if (k == 1):
    h = input("press y to confirm ")
    if (h.lower() == "y"):
        print(Fore.RED)
        print("PAYMENT CONFIRMED", Style.RESET_ALL)
        q4 = "insert into APPLICATION values('{},{},{})'.format(c, app, s2)
        cur.execute(q4)
        con.commit()
        print("Further details will be relayed via S.M.S")
    else:
        print("APPLICATION not confirmed")
elif (k == 2):
    h = input("press y to confirm ")
    if (h.lower() == "y"):
        j = int(input("enter card no. "))
        k = input("enter valid thru mm/yy ")
        cvv = int(input("enter cvv "))
        print("otp sent to registered no. ")
        otp = int(input("enter otp "))
        print(Fore.RED)
        print("PAYMENT CONFIRMED", Style.RESET_ALL)
        q4 = "insert into APPLICATION values('{},{},{})'.format(c, app, s2)
        cur.execute(q4)
        con.commit()
        print("Further details will be relayed via S.M.S")
    else:
        print("APPLICATION not confirmed")
elif (kh == 5):
    q100 = "select * from application where CONSUMER_ID='{ }'.format(cid)
    cur.execute(q100)
    result1 = cur.fetchall()
    if (cur.rowcount == 0):
        print("No previous application found")
    else:
        print(Fore.RED)
        print('%10s' % 'CONSUMER_ID', '%20s' % 'APPLICATION', '%15s' % 'PRICE_PAID',
              Style.RESET_ALL)
        print(Fore.RED)
        for row in result1:
            print("%10s" % row[0], "%20s" % row[1], "%15s" % row[2])
        print(Style.RESET_ALL)
elif (ch == 4):
    l = ["present month", "last month", "2nd last month"]
    q6 = "select unit_3m,unit_2m,unit_1m from BILL where consumer_id='{ }'.format(cid)
    cur.execute(q6)
    res = list(cur.fetchall())
    b = []
    for i in res:
        for j in i:
            b.append(j)
    b = b[:-1]
    colors = ["red", "green", "blue"]
    plt.barh(1, b, color=colors)
    plt.barh(1, b, color=colors)
    for index, value in enumerate(b):
        plt.text(value, index, str(value))
    plt.xlabel("units----->", fontsize=20, color="BLUE")
    plt.ylabel("months----->", fontsize=20, color="RED")
    plt.show()
elif (ch == 5):
    q7 = "select * from DETAILS where CONSUMER_ID='{ }'.format(cid)
    cur.execute(q7)
    result = cur.fetchall()
    if (cur.rowcount == 0):
        print("not found")
    else:

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print(Fore.RED)
print("%10s" % "CONSUMER_ID", "%20s" % "ADDRESS",
      "%15s" % "MOB_NO" + Style.RESET_ALL)
print(Fore.RED)
for row in result:
    print("%10s" % row[0], "%20s" % row[1], "%15s" % row[2])
print(Style.RESET_ALL)
k = int(input("enter 1 to update mobile no. "))
if (k == 1):
    m = input("enter new mobile no or leave blank to not change ")
    if (m == ""):
        m = row[2]
    q8 = "update DETAILS set MOB_NO='{ }'.format(m)
    cur.execute(q8)
    con.commit()
    print(Fore.RED)
    print("MOBILE NO UPDATED", end="")
    print(Style.RESET_ALL)
    q7 = "select * from DETAILS where CONSUMER_ID='{ }'.format(cid)
    cur.execute(q7)
    result = cur.fetchall()
    print("NEW RECORD IS ")
    print(Fore.RED)
    print("%10s" % "CONSUMER_ID", "%20s" % "ADDRESS", "%15s" % "MOB_NO",
          Style.RESET_ALL)
    print(Fore.RED)
    for row in result:
        print("%10s" % row[0], "%20s" % row[1], "%15s" % row[2], end="")
    print(Style.RESET_ALL)
elif (ch == 6):
    print(
        "x-----THANK "
        "YOU-----x")
    exit()
else:
    print("INVALID INPUT TRY AGAIN")
else:
    print("invalid credentials")
    continue
else:
    print(
        "x-----THANK "
        "YOU-----x")
    exit()

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