PROJECT REPORT

BANK MANAGEMENT SYSTEM

SUBMITTED BY:- S. VIDHI IYER

CERTIFICATE

This is to certify that S.Vidhi lyer has successfully completed the project Work entitled <u>"BANK MANAGEMENT SYSTEM"</u> in Python Programming.

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ACKNOWLEDGEMENT

Apart from one's efforts, the success of any project depends largely on the encouragement and guidelines of many others. I take this opportunity to express my gratitude to the people who have been instrumental in the successful completion of this project.

I express deep sense of gratitude to almighty God for giving me strength for the successful completion of the project.

I express my heartfelt gratitude to my parents for constant encouragement while carrying out this project.

-S. Vidhi lyer

SYNOPSIS

Digital banking offers convenience for both the banks and its customers. While customers can save time and hassle through convenient banking transactions that can be conducted on-thego, digital banks save money on physical infrastructure and hiring costs by moving a part of their transactions online

"BANK MANAGEMENT SYSTEM", this project is useful for the bank employees as well as customers to keep a track of account details. The emerging of digital system made information available on finger tips. The following are the objectives of the project:

- This project emphasis on creation of new customer accounts
- One can search account using various option.
- Updating details of Account.
- Closing an account.
- One can view the details of account as and when required in no time.

SOURCE CODE

```
import mysql.connector
import pickle
mydb=mysql.connector.connect(user='Vidhi lyer',
                  passwd='vidhi307331',
                  host='localhost',
                  auth_plugin='mysql_native_password',
                  database='bank'
                  )
mycursor=mydb.cursor(buffered=True)
def Menu():
  print('*'*140)
  myfile=open(R"C:\Mukul's\Python\file1.txt","r")
  str=myfile.read()
  print(str)
  print('MAIN MENU')
  print('1. Insert record/records')
  print('2. Display recods as per Account no. ')
  print(' a. Sorted as per Account no.')
  print(' b. Sorted as per Customer name.')
  print(' c. Sorted as per Customer balance ')
  print('3. Search record details as per Account no.')
  print('4. Update record')
```

```
print('5. Transaction-Debit/Withdraw from the account')
  print(' a. Debit/Withdraw from the account')
  print(' b. Credit into the account')
  print('6. EXIT')
  print('*'*140)
def MenuSort():
   print(' a. Sorted as per Account no.'.center(140))
   print(' b. Sorted as per Customer name.'.center(140))
   print(' c. Sorted as per Customer balance '.center(140))
   print(' d. Back'.center(140))
def MenuTransaction():
   print(' a. Debit/Withdraw from the account'.center(140))
   print(' b. Credit into the account'.center(140))
   print(' c. Back'.center(140))
def Create():
  try:
     mycursor.execute('create table bank(ACCNO varchar(10), NAME
varchar(20), MOBILE varchar(10), EMAIL varchar(25), ADDRESS
varchar(25), CITY varchar(20), COUNTRY varchar(20), BALANCE
float(20) )')
     print('TABLE CREATED')
     Insert()
  except:
     print('TABLE EXIST')
     Insert()
```

```
def Insert():
  while True:
    Acc=input("Enter Account number=")
    Name=input("Enter name=")
    Mob=input("Enter mobile no.=")
    email=input("Enter email=")
    Add=input("Enter address=")
    City=input("Enter city=")
    Country=input("Enter country=")
    Bal=float(input("Enter your balance="))
Rec=[Acc,Name.upper(),Mob,email.upper(),Add.upper(),City.upper(),Co
untry.upper(),Bal]
    Cmd="insert into bank values(%s,%s,%s,%s,%s,%s,%s,%s,%s)"
    mycursor.execute(Cmd,Rec)
    mydb.commit()
    ch=input("Do you want to enter more records?")
    if ch=='N' or ch=='n':
       break
def DispSortAcc():
  try:
    cmd="select * from bank order by ACCNO;"
    mycursor.execute(cmd)
    F="%15s,%15s,%15s,%15s,%15s,%15s,%15s,%15s"
print(F%("ACCNO","NAME","MOBILE","EMAIL","ADDRESS","CITY","C
OUNTRY", "BALANCE"))
    print("="*125)
```

```
for i in mycursor:
       for j in i:
         print("%14s"%j, end=")
       print()
    print("="*125)
  except:
    print("Table doesn't exist")
def DispSortName():
  try:
    cmd="select * from bank order by NAME"
    mycursor.execute(cmd)
    F="%15s,%15s,%15s,%15s,%15s,%15s,%15s,%15s"
print(F%("ACCNO","NAME","MOBILE","EMAIL","ADDRESS","CITY","C
OUNTRY", "BALANCE"))
    print("="*125)
    for i in mycursor:
       for j in i:
         print("%14s"%j, end=")
       print()
    print("="*125)
  except:
    print("Table doesn't exist")
def DispSortBal():
  try:
    cmd="select * from bank order by BALANCE;"
    mycursor.execute(cmd)
```

```
print(F%("ACCNO","NAME","MOBILE","EMAIL","ADDRESS","CITY","C
OUNTRY", "BALANCE"))
    print("="*125)
    for i in mycursor:
       for j in i:
         print("%14s"%j, end=")
       print()
    print("="*125)
  except:
    print("Table doesn't exist")
def DispSearchAcc():
  try:
    cmd="select * from bank;"
    mycursor.execute(cmd)
    ch=input('Enter accno. to be searched')
    for i in mycursor:
       if i[0]==ch:
         print('='*125)
         F="%15s,%15s,%15s,%15s,%15s,%15s,%15s"
print(F%("ACCNO","NAME","MOBILE","EMAIL","ADDRESS","CITY","C
OUNTRY", "BALANCE"))
         print("="*125)
         for j in i:
            print("%14s"%j, end=")
         print()
```

```
break
     else:
       print('Record not found')
  except:
     print("Table doesn't exist")
def Update():
  try:
     cmd="select * from bank;"
     mycursor.execute(cmd)
     A=input('ENTER THE ACCOUNT NO. WHOSE DETAILS ARE TO
BE CHANGED')
     for i in mycursor:
       i=list(i)
       if i[0] == A:
          ch=input("Change Name(Y/N)")
          if ch=='y' or ch=='Y':
            i[1]=input('Enter Name')
            i[1]=i[1].upper()
          ch=input("Change Mobile(Y/N)")
          if ch=='y' or ch=='Y':
            i[2]=input('Enter Mobile')
            i[2]=i[2].upper()
          ch=input("Change Email(Y/N)")
          if ch=='y' or ch=='Y':
            i[3]=input('Enter Email')
            i[3]=i[3].upper()
```

```
if ch=='y' or ch=='Y':
            i[4]=input('Enter Address')
            i[4]=i[4].upper()
         ch=input("Change City(Y/N)")
         if ch=='y' or ch=='Y':
            i[5]=input('Enter City')
            i[5]=i[5].upper()
         ch=input("Change Country(Y/N)")
         if ch=='y' or ch=='Y':
            i[6]=input('Enter Country')
            i[6]=i[6].upper()
         ch=input("Change Balance(Y/N)")
         if ch=='y' or ch=='Y':
            i[7]=float(input('Enter Balance'))
          cmd="UPDATE bank SET
NAME=%s,MOBILE=%s,EMAIL=%s,ADDRESS=%s,CITY=%s,COUNT
RY=%s,BALANCE=%s WHERE ACCNO=%s;"
         val=(i[1],i[2],i[3],i[4],i[5],i[6],i[7],i[0])
         mycursor.execute(cmd,val)
         mydb.commit()
         print("Account Updated")
         break
       else:
         print("Oops.....Record not found")
```

ch=input("Change Address(Y/N)")

```
except:
     print("No such table")
def Debit():
  cmd="select * from bank;"
  mycursor.execute(cmd)
  print("Please note that the money can only be Debited if minimum
amount of Rs.5000 exists")
  acc=input("Enter the account no. from which the money is to be
debited:-")
  for i in mycursor:
     i=list(i)
     if i[0]==acc:
       Amt=float(input("Enter amount to be withdrawn:"))
       if i[7]-Amt>=5000:
         i[7]-=Amt
         cmd="UPDATE bank SET BALANCE=%s WHERE
ACCNO=%s:"
         val=(i[7],i[0])
         mycursor.execute(cmd,val)
         mydb.commit()
         print("Amount Debited")
         break
       else:
         print("There must be a balance of Rs. 5000")
         break
     else:
       print("Record not found")
```

```
def Credit():
  try:
     cmd="select * from BANK"
     mycursor.execute(cmd)
    acc=input("Enter the account no. from which the money is to be
credited:-")
    for i in mycursor:
       i=list(i)
       if i[0]==acc:
         Amt=float(input("Enter amount to be withdrawn"))
         i[7]+=Amt
          cmd="UPDATE bank SET BALANCE=%s WHERE
ACCNO=%s:"
         val=(i[7],i[0])
         mycursor.execute(cmd,val)
         mydb.commit()
         print("Amount Credited")
         break
     else:
       print("Record not found")
  except:
     print("Table doesn't exist")
while True:
  Menu()
 ch=input("Enter your choice:")
 if ch=="1":
```

```
Create()
elif ch=="2":
  while True:
     MenuSort()
     ch1=input("Enter choices a/b/c/d:")
     if ch1 in ["a","A"]:
        DispSortAcc()
     elif ch1 in ['b','B']:
        DispSortName()
     elif ch1 in ['c','C']:
        DispSortBal()
     elif ch in ['d','D']:
        print("Back to main menu")
     break
  else:
     print('Invalid choice')
elif ch=='3':
  DispSearchAcc()
elif ch=='4':
  Update()
elif ch=='5':
  while True:
    MenuTransaction()
   ch1=input("Enter choices a/b/c")
    if ch1 in ['a','A']:
      Debit()
    elif ch1 in ['b','B']:
     Credit()
    elif ch1 in ['c','C']:
```

```
print("back to main menu")
    break
    else:
        print("Invalid choice")
elif ch=='6':
    print("Exiting...")
    break
else:
    print("Wrong choice entered")
```

OUTPUT

#Main menu

WELCOME TO BANK MANAGEMENT SYSTEM

MAIN MENU

1. Insert records
2. Display recods as per Account no.

a. Sorted as per Account no.

b. Sorted as per Customer name.

c. Sorted as per Customer balance

3. Search record details as per Account no.

4. Update record
5. Delete record
6. Transaction-Debit/Withdraw from the account

a. Debit/Withdraw from the account

b. Credit into the account

7. EXIT

#Already existing table in MySQL

ıysql> sel	lect * from bar	ık; 	+	+	+	+	++
ACCNO	NAME	MOBILE	EMAIL	ADDRESS	CITY	COUNTRY	BALANCE
101010 101011 101012 101013 101014	MUKUL SAYAL VIDHI ROHIT RITIKA SHAURYA	8448814151 9717645616 5476980908 8359490239 1234567890	MUKUL@GMAIL.COM VIDHI@GMAIL.COM ROHIT@GMAIL.COM RITIKA@GMAIL.COM SHAURYA@GMAIL.COM	202/2 PALAM D-121 CHANAKKYAPURI V-08 COLABA F-30 VASANT KUNJ D-45	DELHI DELHI MUMBAI KERALA CHENNAI	INDIA INDIA INDIA INDIA INDIA	10000 10500 11000 11500 12000
rows in	set (0.00 sec))					

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#Creating a bank account

```
nter your choice:1
nter Account number=101015
nter name=Shubham
nter mobile no.=8938123451
nter email=shubham@gmail.com
nter address=960-B
nter city=Kochi
nter country=India
nter your balance=12500
o you want to enter more records ?(Y/N)n
```

#New record in MySQL

mysql> se	lect * from bar	ık;	.		.		
ACCNO	NAME	MOBILE	EMAIL	ADDRESS	CITY	COUNTRY	BALANCE
101010 101011 101012 101013 101014 101015	MUKUL SAYAL VIDHI ROHIT RITIKA SHAURYA SHUBHAM	8448814151 9717645616 5476980908 8359490239 1234567890 8938123451	MUKUL@GMAIL.COM VIDHI@GMAIL.COM ROHIT@GMAIL.COM RITIKA@GMAIL.COM SHAURYA@GMAIL.COM SHUBHAM@GMAIL.COM	202/2 PALAM D-121 CHANAKKYAPURI V-08 COLABA F-30 VASANT KUNJ D-45 960-B	DELHI DELHI MUMBAI KERALA CHENNAI KOCHI	INDIA INDIA INDIA INDIA INDIA INDIA	10000 10500 11000 11500 12000 12500
6 rows in	set (0.05 sec))					

Display of records sorted as per Account number

Enter your ch	noice:2						
_				a. Sorted	as per Account no.		
				b. Sorted	as per Customer nam	е.	
				c. Sorted	as per Customer bal	ance	
	0.4.43			d. Back			
Enter choices	ACCNO,	BALANCE	NAME,	MOBILE,	EMAIL,	ADDRESS,	CITY,
	101010		UKUL SAYAL	8448814151	MUKUL@GMAIL.COM	202/2 PALAM	DELHI
INDIA	101011	11500.0	VIDHI	9717645616	VIDHI@GMAIL.COM	D-121 CHANAKKYAPURI	DELHI
INDIA	101012	10500.0	ROHIT	5476980908	ROHIT@GMAIL.COM	V-08 COLABA	MUMBAI
INDIA	101013	11000.0	RITIKA	8359490239	RITIKA@GMAIL.COM	F-30 VASANT KUNJ	DELHI
INDIA	101014	11500.0	SHAURYA	1234567890	SHAURYA@GMAIL.COM	D-45	CHENNAI
INDIA	101015	12000.0	SHUBHAM	8938123451	SHUBHAM@GMAIL.COM	960-B	KOCHI
INDIA		12500.0					

Display records sorted as per Customer name

Enter your ch	hoice:2						
				a. Sorted	as per Account no.		
				b. Sorted	as per Customer nam	e.	
				c. Sorted	as per Customer bal	ance	
		_		d. Back			
Enter choices	s a/b/c/d: ACCNO,	BALANCE	NAME,	MOBILE,	EMAIL,	ADDRESS,	CITY,
	101010		JKUL SAYAL	8448814151	MUKUL@GMAIL.COM	202/2 PALAM	DELHI
INDIA	101013	11500.0	RITIKA	8359490239	RITIKA@GMAIL.COM	F-30 VASANT KUNJ	DELHI
INDIA	101012	11500.0	ROHIT	5476980908	ROHIT@GMAIL.COM	V-08 COLABA	MUMBAI
INDIA	101014	11000.0	SHAURYA	1234567890	SHAURYA@GMAIL.COM	D-45	CHENNAI
INDIA	101015	12000.0	SHUBHAM	8938123451	SHUBHAM@GMAIL.COM	960-B	KOCHI
INDIA	101011	12500.0	VIDHI	9717645616	VIDHI@GMAIL.COM	D-121 CHANAKKYAPURI	DELHI
INDIA		10500.0					

Display records sorted as per Customer balance

Enter your ch	noice:2						
				a. Sorted a	s per Account no.		
				b. Sorted a	s per Customer nam	e.	
				c. Sorted a	s per Customer bal	ance	
	15-1-13-			d. Back			
Enter choices	ACCNO,	С	NAME,	MOBILE,	EMAIL,	ADDRESS,	CITY,
COUNTRY,		BALANCE					
	101011		VIDHI	9717645616	VIDHI@GMAIL.COM	D-121 CHANAKKYAPURI	DELHI
INDIA	101012	10500.0	ROHIT	5476980908	ROHIT@GMAIL.COM	V-08 COLABA	MUMBAI
INDIA	101010	11000.0	UKUL SAYAL	8448814151	MUKUL@GMAIL.COM	202/2 PALAM	DELHI
INDIA		11500.0	OKOL SAIAL		-		DEBHI
INDIA	101013	11500.0	RITIKA	8359490239	RITIKA@GMAIL.COM	F-30 VASANT KUNJ	DELHI
	101014		SHAURYA	1234567890	SHAURYA@GMAIL.COM	D-45	CHENNAI
INDIA	101015	12000.0	SHUBHAM	8938123451	SHUBHAM@GMAIL.COM	960-B	KOCHI
INDIA		12500.0					

#Search record details as per Account number

Enter your contenter accno.	hoice:3 to be searche	d:101010				
COUNTRY,	ACCNO,	NAME,	MOBILE,	EMAIL,	ADDRESS,	CITY,
INDIA	101010 11	MUKUL SAYAL .500.0	8448814151	MUKUL@GMAIL.COM	202/2 PALAM	DELHI

#Update record

Enter your choice:4
ENTER THE ACCOUNT NO. WHOSE DETAILS ARE TO BE CHANGED:101013
Change Name(Y/N)n
Change Email(Y/N)n
Change Email(Y/N)n
Change City(Y/N)Delhi
Change Country(Y/N)n
Change Balance(Y/N)n
Account Updated

#Before updation

ACCNO	NAME	MOBILE	EMAIL	ADDRESS	CITY	COUNTRY	BALANCE
101010	MUKUL SAYAL	8448814151	MUKUL@GMAIL.COM	202/2 PALAM	DELHI	INDIA	10000
101011	VIDHI	9717645616	VIDHI@GMAIL.COM	D-121 CHANAKKYAPURI	DELHI	INDIA	10500
101012	ROHIT	5476980908	ROHIT@GMAIL.COM	V-08 COLABA	MUMBAI	INDIA	11000
101013	RITIKA	8359490239	RITIKA@GMAIL.COM	F-30 VASANT KUNJ	KERALA	INDIA	11500
101014	SHAURYA	1234567890	SHAURYA@GMAIL.COM	D-45	CHENNAI	INDIA	12000
101015	SHUBHAM	8938123451	SHUBHAM@GMAIL.COM	960-B	KOCHI	INDIA	12500

#After updation

ACCNO	NAME	MOBILE	EMAIL	ADDRESS	CITY	COUNTRY	BALANCE
101010	MUKUL SAYAL	8448814151	MUKUL@GMAIL.COM	202/2 PALAM	DELHI DELHI MUMBAI	INDIA	10000
101011	VIDHI	9717645616	VIDHI@GMAIL.COM	D-121 CHANAKKYAPURI		INDIA	10500
101012	ROHIT	5476980908	ROHIT@GMAIL.COM	V-08 COLABA		INDIA	11000
101013	RITIKA	8359490239	RITIKA@GMAIL.COM	F-30 VASANT KUNJ	DELHI	INDIA	11500
101014	SHAURYA	1234567890	SHAURYA@GMAIL.COM	D-45	CHENNAI	INDIA	12000
101015	SHUBHAM	8938123451	SHUBHAM@GMAIL.COM	960-B	KOCHI	INDIA	12500

#Delete record

Enter your choice:5

Enter accno. whose details are to be changed:101015

Account Deleted

#Deletion in MySQL #Before

ACCN0	NAME	MOBILE	EMAIL	ADDRESS	CITY	COUNTRY	BALANCE
101010	MUKUL SAYAL	8448814151	MUKUL@GMAIL.COM	202/2 PALAM	DELHI	INDIA	11500
101011	VIDHI	9717645616	VIDHI@GMAIL.COM	D-121 CHANAKKYAPURI	DELHI	INDIA	10500
101012	ROHIT	5476980908	ROHIT@GMAIL.COM	V-08 COLABA	MUMBAI	INDIA	11000
101013	RITIKA	8359490239	RITIKA@GMAIL.COM	F-30 VASANT KUNJ	DELHI	INDIA	11500
101014	SHAURYA	1234567890	SHAURYA@GMAIL.COM	D-45	CHENNAI	INDIA	12000
101015	SHUBHAM	8938123451	SHUBHAM@GMAIL.COM	960-B	KOCHI	INDIA	12500

#After

ACCNO	NAME	MOBILE	EMAIL	ADDRESS	CITY	COUNTRY	BALANCE
101010	MUKUL SAYAL	8448814151	MUKUL@GMAIL.COM	202/2 PALAM	DELHI	INDIA	11500
101011	VIDHI	9717645616	VIDHI@GMAIL.COM	D-121 CHANAKKYAPURI	DELHI	INDIA	10500
101012	ROHIT	5476980908	ROHIT@GMAIL.COM	V-08 COLABA	MUMBAI	INDIA	11000
101013	RITIKA	8359490239	RITIKA@GMAIL.COM	F-30 VASANT KUNJ	DELHI	INDIA	11500
101014	SHAURYA	1234567890	SHAURYA@GMAIL.COM	D-45	CHENNAI	INDIA	12000

#Transaction - Debit/Withdraw from the account and credit into

account

Enter your choice:6 a. Debit/Withdraw from the account b. Credit into the account c. Back Enter choices a/b/ca Please note that the money can only be Debited if minimum amount of Rs.5000 exists Enter the account no. from which the money is to be debited:-101010 Enter amount to be withdrawn:500 Amount Debited a. Debit/Withdraw from the account b. Credit into the account c. Back Enter choices a/b/cb Enter the account no. from which the money is to be credited:-101010 $\,$ Enter amount to be withdrawn2000 Amount Credited a. Debit/Withdraw from the account b. Credit into the account c. Back Enter choices a/b/cc back to main menu

#Transaction shown in MySQL

#Debit

ACCNO	NAME	MOBILE	EMAIL	ADDRESS	CITY	COUNTRY	BALANCE
101010	+ MUKUL SAYAL	8448814151	 MUKUL@GMAIL.COM	 202/2 PALAM	+ DELHI	INDIA	+ 9500
101011	VIDHI	9717645616	VIDHI@GMAIL.COM	D-121 CHANAKKYAPURI	DELHI	INDIA	10500
101012	ROHIT	5476980908	ROHIT@GMAIL.COM	V-08 COLABA	MUMBAI	INDIA	11000
101013	RITIKA	8359490239	RITIKA@GMAIL.COM	F-30 VASANT KUNJ	DELHI	INDIA	11500
101014	SHAURYA	1234567890	SHAURYA@GMAIL.COM	D-45	CHENNAI	INDIA	12000

#Transaction shown in MySQL

#Credit

ACCNO	NAME	MOBILE	EMAIL	ADDRESS	CITY	COUNTRY	BALANCE
101010	MUKUL SAYAL	8448814151	MUKUL@GMAIL.COM	202/2 PALAM	DELHI	INDIA	11500
101011	VIDHI	9717645616	VIDHI@GMAIL.COM	D-121 CHANAKKYAPURI	DELHI	INDIA	10500
101012	ROHIT	5476980908	ROHIT@GMAIL.COM	V-08 COLABA	MUMBAI	INDIA	11000
101013	RITIKA	8359490239	RITIKA@GMAIL.COM	F-30 VASANT KUNJ	DELHI	INDIA	11500
101014	SHAURYA	1234567890	SHAURYA@GMAIL.COM	D-45	CHENNAI	INDIA	12000

#Exiting

WELCOME TO BANK MANAGEMENT SYSTEM
MAIN MENU
1. Insert records
2. Display recods as per Account no.
a. Sorted as per Account no.
b. Sorted as per Customer name.
c. Sorted as per Customer balance
3. Search record details as per Account no.
4. Update record
5. Delete record
6. Transaction-Debit/Withdraw from the account
a. Debit/Withdraw from the account
b. Credit into the account
7. EXIT

Enter your choice:7
Exiting

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