ARITRA BISWAS

BANKING APPLICATION

Designed a dynamic Bank Database Management System using Python for backend logic and SQL for database management.

aritrabiswas2017@gmail.com

Tech Stack

Python
Structured Query Language
Python.Mysql Connector

Project Overview

Developed a user friendly bank management system using Python and SQL, encompassing essential functionalities such as account opening, depositing, withdrawing, balance inquiry, customer details display, and account closure.

DATABASE & TABLE CREATION

- SHOW DATABASES;
- CREATE DATABASE SBI_Bank;
- SHOW DATABASES
- USE SBI_Bank;
- CREATE TABLE Accounts (Name varchar(30),
  AccNo varchar(15),
  DOB varchar(10),
  Address varchar(50),
  ContactNumber varchar(15),
  EmailId varchar(15),
  OpeningBalance Integer);
- CREATE TABLE Amount (Name varchar(30),
  AccNo varchar(30),
  Balance Integer);

- DESC Accounts;
- DESC Amount;

OPERATIONS PERFORMED

```
111  def main():
112      print( '''
113              1. OPENING ACCOUNT
114              2. DEPOSIT MONEY
115              3. WITHDRAW MONEY
116              4. BALANCE ENQUIRY
117              5. DISPLAY CUSTOMER DETAILS
118              6. CLOSING ACCOUNT
119              9. Exit''')
120      print()
121      choice=input("Enter the Number You want to Perform: ")
122      if choice=="1":
123          OpenAcc()
124      elif choice=="2":
125          DepositMoney()
126      elif choice=="3":
127          WithdrawMoney()
128      elif choice=="4":
129          Balance()
130      elif choice=="5":
131          CustomerDetails()
132      elif choice=="6":
133          close()
134      elif choice=="9":
135          tata()
136
137      else:
138          print('Invalid Choice, Sorry!')
139          main()
140  #Password Protection
141  x=int(input("Enter the Password:: "))
142  if x==123456:
143
144      main()
145  else:
146      print("Please Leave!!")
```

CONNECTION ESTABLISHMENT

- import mysql.connector
- mydb=mysql.connector.connect(host="localhost",user="root",password='123456',

  database='sbi_bank')
- if mydb.is_connected():

  print("Connection Established")

OPEN NEW ACCOUNT

```
def OpenAcc():
    n=input("Enter the Name: ")
    an=input("Enter the Account Number: ")
    db=input("Enter the Date of Birth: ")
    add=input("Enter the Address: ")
    cn=input("Enter the Conatact Number: ")
    ei=input("Enter the Email: ")
    ob=int(input("Enter the Opening Balance: "))
    data1=(n, an, db, add, cn, ei, ob)
    data2=(n,an,ob)
    sql1=("insert into Accounts values (%s, %s, %s, %s, %s, %s, %s)")
    sql2=("insert into Amount values(%s, %s, %s)")
    a=mydb.cursor()
    a.execute(sql1, data1)
    a.execute(sql2, data2)
    mydb.commit()
    print("Task Accomplished without Any Error.")
    main()
```

DEPOSIT MONEY

```
def DepositMoney():
    amount=int(input("Enter the amount to be deposited? "))
    an=input("Enter the Account Number: ")
    b='select Balance from Amount where AccNo=%s'
    data=(an, )
    a=mydb.cursor()
    a.execute(b, data)
    result=a.fetchone()
    bal=result[0]+amount
    sql=('update amount set Balance=%s where AccNo= %s')
    c=(bal, an)
    a.execute(sql, c)
    mydb.commit()
    print("Task Accomplished without Any Error.")
    main()
```

WITHDRAW MONEY

```
def WithdrawMoney():
    amount=int(input("Enter the amount to be withdraw? "))
    an=input("Enter the Account Number: ")
    b='select Balance from Amount where AccNo=%s'
    data=(an,)
    a=mydb.cursor()
    a.execute(b, data)
    result=a.fetchone()
    bal=result[0]-amount
    sql=('update amount set balance=%s where AccNo= %s')
    c=(bal, an)
    a.execute(sql, c)
    mydb.commit()
    print("Task Accomplished without Any Error.")
    main()
```

BALANCE ENQUIRY

```
def Balance():
    an=input('Enter the Account Number: ')
    d='select * from Amount where AccNo=%s'
    data=(an,)
    a=mydb.cursor()
    a.execute(d, data)
    result=a.fetchone()
    print()
    print("Balance for Account Number",an, "is",result[-1])
    main()
```

SHOW CUSTOMER DETAILS

```
def CustomerDetails():
    an=input('Enter the Account Number: ')
    d='select * from Accounts where AccNo=%s'
    data=(an,)
    a=mydb.cursor()
    a.execute(d, data)
    result=a.fetchall()
    for i in result:
        print("The Full Details(Name, AccNo, DOB, Address, PhoneNo, Email, Opening Balance) of a Customer with Account Number", an,"is", i)
    main()
```

CLOSE ACCOUNT & EXIT

```
92
93  def close():
94      an=input("Enter the Account Numner: ")
95      sql1='delete from Accounts where AccNo= %s'
96      sql2= 'delete from Amount where AccNo= %s'
97      data=(an,)
98      a=mydb.cursor()
99      a.execute(sql1, data)
100     a.execute(sql2, data)
101     mydb.commit()
102     print("Task Accomplished without Any Error.")
103     main()
104
105 def tata():
106         print()
107         print("*****************************Thanks for trusting SBI.*********************************")
108         return
109
110
```

RESULT

```
Connection Established
Enter the Password:: 123456

            1. OPENING ACCOUNT
            2. DEPOSIT MONEY
            3. WITHDRAW MONEY
            4. BALANCE ENQUIRY
            5. DISPLAY CUSTOMER DETAILS
            6. CLOSING ACCOUNT
            9. Exit

Enter the Number You want to Perform: 1
Enter the Name: Virat Kohli
Enter the Account Number: vk18
Enter the Date of Birth: 5/11/1988
Enter the Address: Delhi
Enter the Conatact Number: 8170930000
Enter the Email: vk@gmail.com
Enter the Opening Balance: 50101
Task Accomplished without Any Error.

            1. OPENING ACCOUNT
            2. DEPOSIT MONEY
            3. WITHDRAW MONEY
            4. BALANCE ENQUIRY
            5. DISPLAY CUSTOMER DETAILS
            6. CLOSING ACCOUNT
            9. Exit

Enter the Number You want to Perform:
```

RESULT

```
Enter the Number You want to Perform: 2
Enter the amount to be deposited? 10
Enter the Account Number: vk18
Task Accomplished without Any Error.

            1. OPENING ACCOUNT
            2. DEPOSIT MONEY
            3. WITHDRAW MONEY
            4. BALANCE ENQUIRY
            5. DISPLAY CUSTOMER DETAILS
            6. CLOSING ACCOUNT
            9. Exit

Enter the Number You want to Perform: 4
Enter the Account Number: vk18

Balance for Account Number vk18 is 50111

            1. OPENING ACCOUNT
            2. DEPOSIT MONEY
            3. WITHDRAW MONEY
            4. BALANCE ENQUIRY
            5. DISPLAY CUSTOMER DETAILS
            6. CLOSING ACCOUNT
            9. Exit

Enter the Number You want to Perform: 9

**********Thanks for trusting SBI.**********
```

RESULT

```
Enter the Number You want to Perform: 3
Enter the amount to be withdraw? 10
Enter the Account Number: vk18
Task Accomplished without Any Error.

            1. OPENING ACCOUNT
            2. DEPOSIT MONEY
            3. WITHDRAW MONEY
            4. BALANCE ENQUIRY
            5. DISPLAY CUSTOMER DETAILS
            6. CLOSING ACCOUNT
            9. Exit

Enter the Number You want to Perform: 4
Enter the Account Number: vk18

Balance for Account Number vk18 is 50101

            1. OPENING ACCOUNT
            2. DEPOSIT MONEY
            3. WITHDRAW MONEY
            4. BALANCE ENQUIRY
            5. DISPLAY CUSTOMER DETAILS
            6. CLOSING ACCOUNT
            9. Exit

Enter the Number You want to Perform: 9

******************************Thanks for trusting SBI.**********************************
```