PROJECT ON

BANKING



CERTIFICATE

TE DIV: -A <u>YEAR:2021-22</u>

This is to certify that Investigatory Project is successfully completed by Vinayak bansode of Class:TE,Division: - A Roll no 304A071 for the academic year 2020-2021 in the My own Laptop.

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Brief Overview of project

This is a project based on bank management. The program helps us to enter, display or alter the details of different accounts in the bank.

Moreover and most importantly the program helps us to deposit money in the account or close the account from the bank.

The program also helps us to know all the details of customers of the bank.

It includes various function programs to do the above mentioned tasks.

Data file handling has been effectively used in the program.

Database is a collection of interrelated data to serve multiple applications, i.e. database programs create files of information. So we see that files are worked with most inside the program itself.

DBMS

The software required for management of data is called DBMS. It has three models

- Relation model: It stores information in form of rows(cardinality) and columns(degree).
- Hierarchical model: In this type of model, we have multiple records inside a single record.
- network model: In this, the data is represented by collections of record and relationship is represented by associations.

CHARACTERISTICS OF DBMS:

- . It reduces the redundancy
- . Data sharing
- . Data standardization
- .Reduction of data in inconsistency

TYPES OF FILES BASED ON ACCESS:

- . Sequential file
- . Serial file
- . Random file
- . Text file
- . Binary file

Need for computerization

The profile of Indian Banking has undergone a metamorphosis in the post nationalization era. The change is characterized by radical transformation in its role, scope and extent of business operations and the industry has grown dramatically in size as well as complexity of operations. The banks in India have also emerged as effective catalytic agent of socio-economic change. This massive expansion and diversification of the banking system also brought its attendant strains. Housekeeping and control functions got neglected owing to exponential increase in business. The customer service tended to deteriorate and attracted criticism. Bottlenecks developed in the flow of information compromising control and monitoring on the one hand and MIS based policy formulation on the other. This massive growth in network of branches and volume of business was achieved mostly by enlarging manpower resources. Then, this industry entered into a phase with assent on consolidation and qualitative improvement on its operations by using suitable contemporary technological tools.

Software and Hardware requirement

#Software Specification: -

Operating system: Windows 10/8/7

Platform : Python IDLE 3.8

Database : MySQL

Languages : Python

#Hardware specification: -

Processor: Dual core or above

Hard Disk: 40 GB

Ram : 1024MB

Advantages of project

IN ORDER TO MEET COMPETITION, AVOID OBSOLESCENCE, AND SEIZE OPPORTUNITIES .A BANK MUST BE ABLE TO:

- . Respond rapidly to new or changing information needs.
- . Maintaining the past data to ensure the satisfaction of the customer.
- . Reduce error
- . Provide better protection
- . Make work easier
- . Reduce manual labor

#SOURCE CODE IN PYTHON

```
import os
import platform
import mysql.connector
import pandas as pd
mydb=mysql.connector.connect(host="localhost",\
        user="root",\
        password="root",\
        database="Bank")
mycursor=mydb.cursor()
def AccInsert():
  L=[]
  Accno=int(input("Enter the Account number : "))
  L.append(Accno)
  name=input("Enter the Customer Name: ")
  L.append(name)
  age=int(input("Enter Age of Customer : "))
  L.append(age)
  occup=input("Enter the Customer Occupation : ")
  L.append(occup)
```

```
Address=input("Enter the Address of the Customer: ")
  L.append(Address)
  Mob=int(input("Enter the Mobile number : "))
  L.append(Mob)
  Aadharno=int(input("Enter the Aadhar number: "))
  L.append(Aadharno)
  Amt=float(input("Enter the Money Deposited:"))
  L.append(Amt)
  AccType=input("Enter the Account Type (Saving/RD/PPF/Current):")
  L.append(AccType)
  cust=(L)
  sql="'Insert into ACCOUNT(Accno ,Name,Age,occu,Address,Mob,Aadharno,amt,AccType)
     values(%s,%s,%s,%s,%s,%s,%s,%s,%s)"
  mycursor.execute(sql,cust)
  mydb.commit()
def AccView():
  print("Select the search criteria : ")
  print("1. Acc no")
  print("2. Name")
  print("3. Mobile")
  print("4. Adhar")
  print("5. View All")
  ch=int(input("Enter the choice : "))
  if ch==1:
     s=int(input("Enter ACC no : "))
     rl=(s,)
     sql="select * from account where Accno=%s"
     mycursor.execute(sql,rl)
```

```
elif ch==2:
     s=input("Enter Name : ")
     rl=(s,)
     sql="select * from account where Name=%s"
     mycursor.execute(sql,rl)
  elif ch==3:
    s=int(input("Enter Mobile No : "))
    rl=(s,)
    sql="select * from account where Mob=%s"
    mycursor.execute(sql,rl)
  elif ch==4:
    s=input("Enter Adhar : ")
    rl=(s,)
    sql="select * from account where Aadharno=%s"
     mycursor.execute(sql,rl)
  elif ch==5:
    sql="select * from account"
    mycursor.execute(sql)
  res=mycursor.fetchall()
  print("The Customer details are as follows : ")
k=pd.DataFrame(res,columns=['AcNo','Name','Age','Occn','Add','Mob','Aadh','Amt','AccTy'])
  print(k)
def AccDeposit():
  L=[]
  Accno=int(input("Enter the Account number : "))
  L.append(Accno)
  Amtdeposit=eval(input("Enter the Amount to be deposited: "))
  L.append(Amtdeposit)
```

```
month=input("Enter month of Salary : ")
  L.append(month)
cust=(L)
  sql="Insert into amt(Accno,Amtdeposit,Month) values(%s,%s,%s)"
  mycursor.execute(sql,cust)
  mydb.commit()
def accView():
  print("Please enter the details to view the Money details:")
  Accno=int(input("Enter the Account number of the Customer whose amount is to be
viewed:"))
  sql="'Select Account.Accno, Account.Name,
Account.Age, Account.occu, Account.Address, Account.Mob, Account.Aadharno, Account.Amt, A
ccount.Ac
     cType, sum(amt.Amtdeposit), amt.month from Account INNER JOIN amt ON
     Account.Accno=amt.Accno and amt.Accno = %s'''
  rl=(Accno,)
  mycursor.execute(sql,rl)
  res=mycursor.fetchall()
  for x in res:
    print(x)
def closeAcc():
  Accno=int(input("Enter the Account number of the Customer to be closed: "))
  rl=(Accno,)
  sql="Delete from amt where Accno=%s"
  mycursor.execute(sql,rl)
  sql="Delete from Account where Accno=%s"
mydb.commit()
def MenuSet():
  print("Enter 1 : To Add Customer")
```

```
print("Enter 2 : To View Customer ")
  print("Enter 3 : To Deposit Money ")
  print("Enter 4 : To Close Account")
print("Enter 5 : To View All Customer Details")
  try:
    userInput = int(input("Please Select An Above Option: "))
  except ValueError:
    exit("\nHy! That's Not A Number")
  else:
    print("\n")
    if(userInput == 1):
      AccInsert()
    elif (userInput==2):
      AccView()
    elif (userInput==3):
      AccDeposit()
    elif (userInput==4):
      closeAcc()
    elif (userInput==5):
      accView()
    else:
       print("Enter correct choice. . . ")
MenuSet()
def runAgain():
  runAgn = input("\nwant To Run Again Y/n: ")
  while(runAgn.lower() == 'y'):
    if(platform.system() == "Windows"):
      print(os.system('cls'))
    else:
```

```
print(os.system('clear'))

MenuSet()

runAgn = input("\nwant To Run Again Y/n: ")

runAgain()
```

#OUTPUT SCREEN:-

```
Python 3.8.0 Shell
```

```
File Edit Shell Debug Options Window Help
Python 3.8.0 (tags/v3.8.0:fa919fd, Oct 14 2019, 19:21:23) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
====== RESTART: C:\Users\HP\Desktop\banking system(by himan) (1).py =======
Enter 1 : To Add Customer
Enter 2 : To View Customer
Enter 3 : To Deposit Money
Enter 4 : To Close Account
Enter 5 : To View All Customer Details
Please Select An Above Option: 1
Enter the Account number: 123456
Enter the Customer Name: xyz
Enter Age of Customer : 25
Enter the Customer Occupation : xadvsdv
Enter the Address of the Customer : ambarnath E
Enter the Mobile number : 123456
Enter the Aadhar number: 123456789
Enter the Money Deposited : 12000
Enter the Account Type (Saving/RD/PPF/Current) : Saving
want To Run Again Y/n: n
```

#MYSQL TABLE:-

```
Enter password:
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 23
Server version: 5.5.62 MySQL Community Server (GPL)
Copyright (c) 2000, 2018, Oracle and/or its affiliates. All rights reserved.
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql> use Bank2;
Database changed
mysql> desc Account;
Field
         Type
                          | Null | Key | Default | Extra
                           NO
           | int(15)
                                  PRI |
                                        NULL
 Accno
            varchar(25)
                           NO
                                         NULL
 Name
                                        NULL
            int(5)
                           NO
 Age
                           NO
                                        NULL
 Occup
            varchar(15)
                           NO
 Address
            varchar(50)
                                        NULL
            int(11)
                           NO
                                        NULL
 Mob
 Aadharno
            int(16)
                           YES
                                        NULL
 amt
            double(20,5)
                           YES
                                        NULL
           varchar(15)
                          NO
 AccType
                                        NULL
9 rows in set (0.17 sec)
mysql> desc amt;
             | Type | Null | Key | Default | Extra |
 Field
 Accno | int(15)
Amtdeposite | double(20,5)
                            YES YES
                                           NULL
                              YES
                                           NULL
              varchar(15)
                             NO
 month
                                           NULL
3 rows in set (0.09 sec)
mysql>
```

Limitation:-

#1 Performance and Speed.

2 It cannot perform all the required function as bank required. It's simply a record of account of customer