St. Xavier's Sr. Secondary School

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PROJECT REPORT

ON

"ATM MANAGEMENT"

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Certificate of Originality

This is to certify that the project report entitled "**Automatic Teller Machine (ATM) Management**" submitted to **St. Xavier's Sr. School** in partial fulfilment of the requirement for **All India Senior School Certificate Examination 2020-21** of **Central Board of School Examination**, is original work carried out by Mr. **Puranjay Bhargava** under my guidance.

The matter embodied in this project is genuine work done by the students and has not been submitted of any course of study.

Mr Rajendra Joshi

Head of Department, Informatics Practices

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Puranjay Bhargava

PROJECT
ON
ATM MANAGEMENT

INTRODUCTION

The **ATM MANAGEMENT** is device which is as same as normal ATM machine. It allows the user to create account, deposit money, withdraw money, Transfer the money and check Balance.

Note:

- Allow the user to input their question.

- Show an in progress message.

- Create 10/20 responses, and show a random response.

- Allow the user to ask another question/advice or quit the software.

OBJECTIVES OF THE PROJECT

The objective of this project is to let the students apply the programming knowledge into a real- world situation/problem and exposed the students how programming skills helps in developing a good software.

- Write programs utilizing modern software tools.
- Apply object oriented programming principles effectively when developing small to medium sized projects.
- Write effective procedural code to solve small to medium sized problems.
- Students will demonstrate a breadth of knowledge in computer science, as exemplified in the areas of systems, theory and software development.
- Students will demonstrate ability to conduct a research or applied Computer Science project, requiring writing and presentation skills which exemplify scholarly style in computer science.

SOURCE CODE

MySQL connection

```
import mysql.connector as sql
conn=sql.connect(host='localhost',user='root',password='hemant',database='  ATM_MACHINE')
if conn.is_connected():
    print("sucessfully connected")
c1=conn.cursor()
mn="CREATE TABLE RECORDS( ACCONT_NO  INT(4) primary key,PASSWORD INT(3),NAME VARCHAR(20),CR_AMT INT default(0),WITHDRAWL INT default(0),BALANCE INT default(0))"
c1.execute(mn)
print("Sucessfulluy created")
```

Main Part

```
1   import mysql.connector as sql
2   conn=sql.connect(host='localhost',user='root',password='hemant',database='  ATM_MACHINE')
3   c1=conn.cursor()
4   print("==================================================================")
5
6   print("                         WELCOME  TO  OUR  ATM ")
7
8   print("==================================================================")
9
10  print("1.To create account")
11  print("2.To login")
12  print("3.Exit")
13  print("==================================================================")
14
15  op=int(input("Enter your choice :"))
16  print("==================================================================")
17
18  if op==1:
19      c="y"
20      while c=="y":
21          m=int(input("Enter a 4 digit number as accont number:"))
22          cb="select * from records where ACCONT_NO={}".format(m)
23          c1.execute(cb)
24          d=c1.fetchall()
25          data=c1.rowcount
26          if data==1:
27              print("==================================================================")
28
29              print("This account number already exists:")
30              c=input("Do you want to continue y/n -")
31              print("==================================================================")
32
33              if c=="y":
34                  continue
35              else:
36                  print("                      Thank you.")
37                  print("          PLEASE CLOSE THIS FILE BEFORE EXITING")
38                  print("Visit again")
39                  print("==================================================================")
```

```python
        else:
            name=input("Enter your name:")
            passw=int(input("Enter your password:"))
            ab="insert into records(ACCONT_NO,PASSWORD,NAME) values({},{},'{}')".format(m,passw,name)
            print("=======================================================================")

            c1.execute(ab)
            conn.commit()
            print("Account sucessfully created")
            print("The minimum balance is 1000 ")
            print("=======================================================================")

            s=int(input("Enter the money to be deposited :"))
            print("=======================================================================")

            sr="update records set  CR_AMT={} where ACCONT_NO={}".format(s,m)
            c1.execute(sr)
            conn.commit()
            ef="update records set balance=cr_amt-withdrawl where ACCONT_NO={}".format(m)
            c1.execute(ef)
            conn.commit()
            print("sucessfully deposited")

            print("                    Thank you")
            print("            PLEASE CLOSE THIS FILE BEFORE EXITING")
            print("Visit again")
            break

if op==2:
    y="y"
    while y=="y":

        acct=int(input("Enter your account number:"))
        cb="select * from records where ACCONT_NO={}".format(acct)
        c1.execute(cb)
        c1.fetchall()
        data=c1.rowcount
        if data==1:
            pas=int(input("Enter your password  :"))
            print("=======================================================================")

            e="select password from records where ACCONT_NO={}".format(acct)
            c1.execute(e)
            a=c1.fetchone()
            d=list(a)
            if pas==d[0]:
                print("correct")
                print("1.Depositng money")
                print("2.withdrawing money")
                print("3.Transfering money")
                print("4.Checking balance")
                print("5.Changing Account number ")
                print("=======================================================================")

                r=int(input("Enter your choice:"))
                print("=======================================================================")
```

```python
            if r==1:
                amt=int(input("Enter the money to be deposited:"))
                print("====================================================================")

                sr="update records set CR_AMT=CR_AMT + {} where ACCONT_NO={}".format(amt,acct)
                c1.execute(sr)
                conn.commit()
                ef="update records set balance=cr_amt-withdrawl where ACCONT_NO={}".format(acct)
                c1.execute(ef)
                conn.commit()
                print("sucessfully deposited")

                t=input("Do you want to continue y/n -")
                print("====================================================================")

                if t=="y":
                    continue
                else:
                    print("                    Thank you")
                    print("           PLEASE CLOSE THIS FILE BEFORE EXITING")
            if r==2:
                amt=int(input("Enter the money to withdraw:"))
                print("====================================================================")

                ah="select  BALANCE from records where accont_no={}".format(acct)
                c1.execute(ah)
                m=c1.fetchone()
                if amt >m[0]:
                    print("Your are having less than",amt)
                    print("Please try again")
                    print("====================================================================")
```

```python
                else:
                    sr="update records set balance=balance - {}  where ACCONT_NO={}".format(amt,acct)
                    ed="update records set  WITHDRAWL ={}  where ACCONT_NO={}".format(amt,acct)
                    c1.execute(ed)
                    c1.execute(sr)
                    conn.commit()
                    print("Sucessfully updatad")
                y=input("do you want to continue y/n -")
                if y=="y":
                    continue
                else:
                    print("                    Thank you")
                    print("           PLEASE CLOSE THIS FILE BEFORE EXITING")

            if r==3:
                act=int(input("Enter the accont number to be transferrsd :"))

                print("====================================================================")

                cb="select * from records where ACCONT_NO={}".format(act)
                c1.execute(cb)
                c1.fetchall()
                data=c1.rowcount
                if data==1:
                    print(act ,"number exists")
                    m=int(input("Enter the money to be transferred :"))

                    print("====================================================================")
```

```python
                    ah="select  BALANCE from records where accont_no={}".format(acct)
                    c1.execute(ah)
                    c=c1.fetchone()
                    if m > c[0]:
                        print("Your are having less than",m)
                        print("Please try again")

                        print("====================================================================")

                    else:
                        av="update records set balance=balance-{} where ACCONT_NO={}".format(m,acct)
                        cv="update records set balance=balance+{} where ACCONT_NO={}".format(m,act)
                        w="update records set withdrawl=withdrawl+{} where accont_no={}".format(m,acct)
                        t="update records set  CR_AMT=CR_AMT+{} where accont_no={}".format(m,act)
                        c1.execute(av)
                        c1.execute(cv)
                        c1.execute(w)
                        c1.execute(t)
                        conn.commit()
                        print("Sucessfully transfered")
                y=input("do you want to continue y/n -")
                if y=="y":
                    continue
                else:
                    print("                    Thank you")
                    print("           PLEASE CLOSE THIS FILE BEFORE EXITING")
```

```python
            if r==4:
                ma="select balance from records where accont_no={}".format(acct)
                c1.execute(ma)
                k=c1.fetchone()
                print("Balance in your account=",k)
                print("=========================================================================")

                y=input("do you want to continue y/n -")
                if y=="y":
                    continue
                else:
                    print("                    Thank you")
                    print("            PLEASE CLOSE THIS FILE BEFORE EXITING")
            if r==5:
                i=int(input("Enter your new account number:"))
                cb="select * from records where ACCONT_NO={}".format(i)
                c1.execute(cb)
                c1.fetchall()
                data=c1.rowcount
                if data==1:
                    print("This number already exists")
                    print("Try again")

                    y=input("do you want to continue y/n -")
                    if y=="y":
                        continue
                    else:
                        print("                    Thank you")
                        print("            PLEASE CLOSE THIS FILE BEFORE EXITING")
                else:
                    name=input("Enter your name")
                    ar="Update records set accont_no={} where name='{}' and password={}".format(i,name,pas)
                    c1.execute(ar)
                    conn.commit()
                    print("Your new account number is ",i)
```

```python
            else:
                print("Wrong password")
                print("=========================================================================")

                y=input("do you want to continue y/n -")


        else:
            print("your Account does not exists")


if op==3:
    print("Exiting")
    print("Please close this file before exiting.")
    c1.close()
```

THEORY

The Home page greets you with the title: "WELCOME TO OUR ATM" Followed by 3 different queries for the customer to choose from namely:

     1) <u>To Create Account</u>
     2) <u>To Login</u>
     3) <u>Exit</u>

- Then a query asking to input a choice from 1, 2, or 3 to proceed.

- If the person chooses option 1 i.e. to create Account, then a query pops up asking "Enter a 4 digit account number". If the account number entered by the user already exists as an account number for any other user in our MySQL database then a message pops up saying: "This account number already exists" followed by "Do you want to continue y/n". If the user types "n" in reply, then a message pops up saying, "Thank You" followed by "PLEASE CLOSE THIS FILE BEFORE EXITING" and then by "Visit Again". But if the user types "y", then the window for entering the account no reappears.

- If the account no. is valid, then the program will ask to "Enter Your Name" and after entering the name, "Enter Your Password". Then these records are stored in the SQL database using the following command.

- After storing this data a message is displayed saying "Account Successfully Created" followed by "The minimum balance is 1000".

- Then an input query is opened saying "Enter the money to be deposited:" The amount that the user types in will be printed back on the screen. This record is now further updated in the SQL database using the following command.

- A message then is displayed saying "Successfully Deposited", followed by "Thank you" and "Please CLOSE THIS FILE BEFORE EXITING" and then "Visit Again". The first command is now complete and then breaks.

- If the user chose 2 in the home page i.e. "To Login", then an input message appears saying "Enter Account Number". The account number if exists in the records will be fetched from the database and also for the account password as a input. If password is correct then it will show 5 different options to choose from namely :

  1*)* Depositing Money
  2) Withdrawing Money
  3) Transferring Money
  4) Checking Balance
  5) Changing Account Number

  Followed by an Input message asking "Enter your Choice:"

- If the user types in "1", i.e. Depositing of money, an input message will be shown saying: "Enter Money To BE Deposited:" *.* After entering the amount the main balance will be updated in the SQL database using the given commands. After that a message will be printed saying "Successfully deposited" and then asking an input "Do you want to continue y/n-". If the user types in "y" then the depositing of money window will once again be shown. Otherwise if typed "n", and then a message will be printed saying "Thank You" and "PLEASE CLOSE THIS WINDOW BEFORE EXITING".

- If the user typed in "2", i.e. "Withdrawing money", an input message will appear saying "Enter the money to withdraw:" . If the amount typed in is more than the account balance then a message will be shown saying "You are having less than (followed by the amount typed in)" and then another message saying "Please try again". Otherwise the main balance will be updated in the SQL database using the following command. then a message will be shown saying, "Successfully Updated". Then an input message will be shown saying "Do you want to continue y/n-". If user types in "y" then the withdraw page will once again open and if "n", a message will be printed saying, "Thank you" and then "PLEASE CLOSE THIS FILE BEFORE EXITING".

- If the user typed in "3", i.e. "Transferring money", an input message will appear saying "Enter account number to be transferred:" If the account to which the money is to be transferred exists in the database. then a

message will be printed saying"(the account number) number exists". Again an input message will be shown saying, "Enter the money to be transferred:". Then if the user who is transferring does not have the sufficient money to be transferred a message will be shown saying, "You are having less than (the amount to be transferred)" and then "Please try again". Otherwise the user and the recipient's main balances will be updated in the database using the given commands ... A message will then be printed saying "Successfully Transferred" and then an input message saying "Do you want to continue y/n-". If the user types in "y" then he will again be shown the transfer money window and if "n", "Thank you" and "PLEASE CLOSE THIS FILE BEFORE EXITING" will be printed on screen.

- If the user typed in option "4", i.e. "Checking Balance", using the given commands ... , the data will be fetched from the database and then displayed on the screen as "Balance in your account: (balance in the account as in the database). Then a message will be printed saying "Do you want to continue y/n-". If the user types in "y" then he will again be shown the balance window and if "n", "Thank you" and "PLEASE CLOSE THIS FILE BEFORE EXITING" will be printed on screen.

- If the user typed in option "5", i.e. "Changing account number", an input message will be shown saying "Enter new account number:" If the user types in an account number that already had been registered in the database earlier then a message will be printed saying "This account number already exists" and then "Try Again". Then an input message saying "Do you want to continue y/n-" will be shown. If the user types in "y" then he will again be shown the change account number window and if "n", "Thank you" and "PLEASE CLOSE THIS FILE BEFORE EXITING" will be printed on screen. Otherwise if the new number is unique then the details will be updated in the database using the following commands ... Then a message will be printed on screen saying "Your new account number is (the new account number just updated in the database)".

- Otherwise the password if typed in the "Login" page was incorrect, "Wrong Password" will be printed followed by an input window asking whether "Do you want to continue y/n-" .If the user types in "y" then he

will again be shown the home page and if "n", "Thank you" and "PLEASE CLOSE THIS FILE BEFORE EXITING" will be printed on screen.

- Otherwise if the account number was typed in wrong in the login page or if it does not exist then "Your account number does not Exist" will be printed. The Login page has now ended.

- If in the homepage if the user typed in "3", i.e. "Exit", a message saying "Exiting" and "PLEASE CLOSE THIS FILE BEFORE EXITING" and then the program will close.

BIBLIOGRAPHY

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