

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV,
Bhopal)



Skill Based Mini Project Report on **MAKING ATM MACHINE SIMULATION USING CPP**

Submitted
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Submitted to:
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JULY-DEC 2021

MADHAV INSTITUTE OF TECHNOLOGY &SCIENCE, GWALIOR

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CERTIFICATE

This is certified that Surbhi Gupta (0901CA211062) has submitted the project report titled ATM Machine simulation under the mentorship of Dr. Anshu Chaturvedi (Professor) as the skills based mini project in 1st year of Master of Computer Application in Computer Science and Engineering from Madhav Institute of Technology and Science, Gwalior.



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DECLARATION

I hereby declare that the work being presented in this project report, for the fulfilment of partial requirement for the skill based mini project in 1st of Master of Computer Application in Computer Science and Engineering at Madhav Institute of Technology & Science, Gwalior is an authenticated and original record of my work under the mentorship of **Dr. Anshu Chaturvedi, (professor)**, MITS Gwalior

I declare that I have not submitted the matter embodied in this report anywhere else.



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ACKNOWLEDGEMENT

The full semester project has proved to be pivotal to my career. I am thankful to my institute, **Madhav Institute of Technology and Science** to allow me to continue my disciplinary project. I extend my gratitude to the Director of the institute, **Dr. R. K. Pandit** and Dean Academics, **Dr. Manjaree Pandit** for this.

I would sincerely like to thank my department, **Department of Computer Science and Engineering, for allowing** me to explore this project. I humbly thank **Dr. Manish Dixit**, Professor and Head, Department of Computer Science and Engineering, for his continued support during the course of this engagement, which eased the process and formalities involved.

I am sincerely thankful to my faculty coordinator. I am grateful to the guidance of **Dr. Anshu Chaturvedi**, (professor), computer science and engineering, for his continued support and guidance throughout the project. I am also very thankful to the faculty and staff of the department.



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ABSTRACT

The ATM System is the project which is used to access their bank accounts in order to make cash withdrawals. Whenever the user needs to make cash withdraws, they can enter their PIN number (personal identification number) and it will display the amount to be withdrawn in the form of 100's 500's and 1000's. Once their withdrawn was successful, the amount will be debited in their account.

The ATM will service one customer at a time. A customer will be required to enter ATM Card number, personal identification number (PIN) – both of which will be sent to the database for validation as part of each transaction. The customer will then be able to perform one or more transactions. Also, customer must be able to make a balance inquiry of any account linked to the card.

If a transaction fails for any reason other than an invalid PIN, the ATM will display an explanation of the problem, and will then ask the customer whether he/she wants to do another transaction.

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INTRODUCTION

Automated Teller Machine enables the clients of a bank to have access to their account without going to the bank. This is achieved only by development the application using online concepts. When the product is implemented, the user who uses this product will be able to see all the information and services provided by the ATM, when he enters the necessary option and arguments

Millions of times per day around the globe people are instantly withdrawing money at automatic teller machines (ATMs). Given the fast-pace of the world today, it is not surprising that the demand for access to quick cash is so immense. The power of ATMs would not be possible without secure connections. The final act of ATM dispensing cash is the result of an amazingly fast burst of the customer never sees, but a trust is being done in a confidential manner. The product also provides services like request for cheques, deposit cash and other advanced requirement of the user

The implementation needs ATM machine hardware to operate or similar simulated conditions can also be used to successfully use the developed product.

so here, I make this project to develop an ATM using “C++ Programming Language”.

Problem Definition

The system mainly used by the bank clients. When a client comes to ATM Centre to update and delete their account. It reduces the time consumption and lot of paperwork. For any single operation it involves numerous references and updating also takes subsequent changes in other places.

Now a days every one very busy in their work. So, they feel that the job must be easier so the system is used to reduce their work which is done in the ATM system. Instead of keeping lots of paper into a record or file and it may be missed somewhere so, this system helps to keep the record of the customer it also keeps the details of the customer. It is also easy to access.

CODE

```
#include<iostream.h>

#include<conio.h>

#include<stdlib.h>

void main()

{

clrscr();

float balance1;

int i, pin,npin,option;

double balance = 10000, withdraw, deposit;

textcolor(YELLOW);

clrscr();

cout<<"\t\t ***** "<<endl;

cout<<"\t\t *****  "<<endl;

cout<<"\t\t *****  "<<endl;

cout<<"\t\t *****  "<<endl;

cout<<"\t\t ** ** **  "<<endl;

cout<<"\t\t ** ** **  "<<endl;

cout<<"\t\t ** ** **  "<<endl;

cout<<"\t\t ** ** **  "<<endl;

cout<<"\t\t ** ** **  "<<endl;

cout<<"\t\t * ** *  "<<endl;

cout<<"\t\t *      "<<endl;

cout<<"=====
```

[illegible]

```

cout<<"\t\t*      4 - Change Pin      *"<<endl;

cout<<"\t\t*      5 - Exit      *"<<endl;

cout<<"\t\t*****"<<endl;

cout<<"\t\t*****"<<endl; cout<<"\n";

cout<<"\t\t      Enter Option: ";

cin>>option;

switch(option)

{

case 1:

cout<<"\n\t\t\t [[[% BALANCE INQUIRY %]]]\n\n";

cout<<"\t\t\t*****"<<endl;

cout<<"\t\t\t Your Balance Is: rs "<<balance1<<endl;

cout<<"\t\t\t*****"<<endl;

getch();

clrscr();

goto repeat;

break;

case 2:

repe:

cout<<"\n\t\t\t [[[% WITHDRAW %]]]";

cout<<"\n\t\t\t Enter amount in Rupees: ";

cin>>withdraw;

if(withdraw<=balance1)

{

balance1 = balance1 - withdraw;

cout<<"\t\t\t You withdrew RS: "<< withdraw<< endl;

```

```
cout<<"\t\t\t Your remaining balance is RS: "<< balance1<< endl;

}

else

{

cout<<"\t\t!! You have only Rs.10,000 balance in your account. !!\n";

goto repe;

}

getch();

clrscr();

goto repeat;

break;

case 3:

cout<<"\n\t\t\t [[[% DEPOSIT %]]]\n";

cout<<"\n\t\t\t Enter amount in RS: ";

cin>>deposit;

balance1 = balance1 + deposit;

cout<<"\n\t\t\t You deposited RS: "<< deposit<< endl;

cout<<"\n\t\t\t Your new balance is RS: "<< balance1<< endl;

getch();

clrscr();

goto repeat;

break;

pinchange: case 4:

cout<<"\n\t\t\t Enter Your Old Pin: ";

cin>>pin;
```

```
if(pin==5555)

{

cout<<"\t\t Enter New Pin: ";

cin>>npin;

cout<<"\n\t\t Pin Changed Successfully.";
}
else
{
cout<<"\n\t\t Wrong Pin !! Enter Pin Again.\n" ;

goto pinchange;
}
getch();

clrscr();

goto repeat;

break;

case 5:

exit(0);

break;

default:

cout<<"\n\t\t That is an invalid option Plz enter correct option. \n";

getch();

clrscr();

break;
}
}
}
else

cout<<"\t\tPls try again!!! Wrong pin entered.\n\n";

}
getch();
}
```

INPUT / OUTPUT

```
*****
*****  ***  *****
*****  ***  *****
      **  ***  **
      **  ***  **
      **  ***  **
      **  ***  **
      **  ***  **
      *  ***  *
          *
=====
Welcome To [ T CUBE ATM ] Service
Architect By:
#### THE TECHNICAL THAKUR ####
=====

***** PIN FOR USER IS 5555 *****

== WELCOME USER ==
Enter Your Pin:

***** PIN FOR USER IS 5555 *****

== WELCOME USER ==
Enter Your Pin: 1234
Pls try again!!! Wrong pin entered.
```

***** PIN FOR USER IS 5555 *****

== WELCOME USER ==
Enter Your Pin: 5555_

Activate Win

*** Automated Teller Machine ***

* Main Menu *

* 1 - View My Balance *

* 2 - Withdraw Cash *

* 3 - Deposit Funds *

* 4 - Change Pin *

* 5 - Exit *

Enter Option: 1

[[[% BALANCE INQUIRY %]]]

Your Balance Is: rs 10000

Activ

*** Automated Teller Machine ***

* Main Menu *

* 1 - View My Balance *

* 2 - Withdraw Cash *

* 3 - Deposit Funds *

* 4 - Change Pin *

* 5 - Exit *

Enter Option: 2

[[[% WITHDRAW %]]]

Enter amount in Rupees: 13000

!! You have only Rs.10,000 balance in your account. !!

*** Automated Teller Machine ***

* Main Menu *

* 1 - View My Balance *

* 2 - Withdraw Cash *

* 3 - Deposit Funds *

* 4 - Change Pin *

* 5 - Exit *

Enter Option: 3

[[[% DEPOSIT %]]]

Enter amount in RS: 15000

You deposited RS: 15000

Your new balance is RS: 17000

*** Automated Teller Machine ***

* Main Menu *

- * 1 - View My Balance *
- * 2 - Withdraw Cash *
- * 3 - Deposit Funds *
- * 4 - Change Pin *
- * 5 - Exit *

Enter Option: 4

Enter Your Old Pin: 123

Wrong Pin !! Enter Pin Again.

Enter Your Old Pin: 5555

Enter New Pin: 4444

Active
Go to S

Pin Changed Successfully.

CONCLUSION

All good things must come to an end, so does our ATM program. We are done with the basic transaction processes for our ATM. Now we have in hand, two unique features of our ATM which help in reducing the complex nature of banking process such as PIN CHANGE and FUND TRANSFER. I am not sure about the fund transfer, but now we can change the pin using ATM without visiting the bank. This amendment is one of the most advantageous features of ATM today.

REFERENCES

During my learning phase for making this project I have used these references:

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2. <https://www.w3schools.com/cpp/default.asp>
3. www.geeksforgeeks.com
4. Programming in ANSI C by E. Balagurusamy.