

MINI PROJECT REPORT

ATM SYSTEM

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BONAFIDE CERTIFICATE

This is to certify That this project report entitled "Indian Tourism Analysis" being submitted to record, IMS Engineering College, by Aman Srivastava, Harsh Ruhela, Janhavi Srivastava, Akash Singh For the Partial fulfilment for the award of B.Tech in Computer Science, is a Bonafide record of work carried out by them, under our guidance and supervision, it has not been submitted for the award of any other degree.

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ABSTRACT

ATM SYSTEM

The ATM System is the project which is used to access their bank accounts in order to make cash withdrawals. Whenever the user need 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cash withdraws, they can enter their PIN number (personal identification number) and it will display the amount to be withdrawn in the form of 100's 500's and 1000's. Once their withdrawn was successful, the amount will be debited in their account.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 System is developed in VB.Net and back-end database as Ms-Access. VB.Net is the one of the powerful version of Framework and object oriented programming. Hence we use this software in our project.

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.

The ATM will communicate each transaction to the database

and obtain verification that it was allowed by the database. In the case of a cash withdrawal, a second message will be sent after the transaction has been physically completed (cash dispensed or envelope accepted). If the database determines that the customer's PIN is invalid, the customer will be required to re-enter the PIN before a transaction can proceed.

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.

1. INTRODUCTION

1.1. Introduction to the ATM system:

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. The product also provides services like request for cheques, deposit cash and other advanced requirement of the user. The data is stored in the database and is retrieved whenever necessary. The implementation needs ATM machine hardware to operate or similar simulated conditions can also be used to successfully use the developed product.

To develop this ATM system the entire operation has been divided into the following step:

- 1.verification process

- 2.language, service and account selection

3. Banking services

4. Transactions

5.Special services

The program is designed in such a way that the user has to card and pin number. Once verified, he is provided a menu and he/she had to enter the option provided in the menu. For example, when the user wants to view the list of payment history than he/she had to enter the option for payment history provided in the main menu. When the option is entered alone with the respective argument, then the payment history is displayed on the screen.

The user also must be given option to browse through the pages like previous page, next page, etc. The user may experience a delay in retrieving or viewing the data, when there are many users logged on to the same bank branch system.

2. METHODOLOGY:

This study adopts survey research. It probes deeply in to the opinion of respondents regarding their satisfaction with automated teller machine services. The study carefully selects samples from the population in order to have an intensive study of the characteristics of the population.

However, the research focuses on users of United Bank for Africa in Sokoto metropolis. The rationale for the selection of the states is that they constitute a relatively a new area where much empirical research has not been conducted. Most of related researches concentrated on other zones and countries. The study has one Independent

Variable(satisfaction) four dependant variable perceived ease of use, availability of money in the booth, transaction cost and service security. Data will be collected on user satisfaction through the use of questionnaire.

Need for the ATM system:

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.

3. PROJECT DESCRIPTION:

3.1. Need For the Software:

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 help to keep the record of the customer it also keeps the details of he customer. It is also easy to access.

3.2 Problem Description:

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.

4.1. Existing System:

- > The existing system is manual system.

4. SYSTEM STUDY AND ANALYSIS

- > The manual system is prone to error.
- > This system involves a lot of manual entries with the application to perform a desired task.
- > Usage of papers and records in the process leads to less efficiently less productivity.
- > Increase lots of mistakes while writing in paper.
- > Time delay between the user and customer is reduced.
- > For this reason the new system is invented.

4.2. Proposed System:

The system customer transactions, satisfies the requirements of the

existing system in full-fledged manner. Through this system, customer can make fast transactions and view the last transactions easily.

4.3. System Analysis:

Understand the problem before the system to create analysis model there is a tendency to rush to a solution, even before the problem is understood.

Develop prototypes that enables user to understand how human/machine interaction will occur. Since the perception of the quality of software is often based on the perception of the "friendliness" of the interface prototyping is highly recommended.

Record the origin of and the reason for every requirement. This is the first step-in establishing traceability back to the customer.

Use multiple views of requirements building data, functional and behavioural models provide the software engineer with three different views. This reduces the likelihood that something will be missed and increases the likelihood that inconsistency will be recognized.

Rank requirements. Tight deadlines may preclude the implementation of every software requirement to be delivered in the first increment must be identified.

Work to eliminate ambiguity because most requirements are described in a natural language, the opportunity for ambiguity abounds.

4.4. Feasibility Study:

■ Technology:

This system is technically feasible, because the system activated by computers and recent technology. We use client / server technology which is powerful and very user friendly.

- Finance:

It is financially feasible. There is no need of spending over money. Mainly this system constructed by existing devices only. Since we use visual studio dot net as a front-end it was most power-full, small and portable across platforms and operating systems both at the source and at the binary level. This project reduces the number of workers wage also.

- Time:

This system really time-to-market beat the competition. Because the system developed with in a time span and worked based on time event. The time taken to access the account is very less and avoids unnecessary waiting that was in the traditional system. Although it uses less time but its performance is very well.

- Resources:

This system will use the well known resources. Where there is no need of any special kind of resource. It uses only the required databases, tables only.

HARDWARE REQUIRMENTS:

1. Operating System: Window 7 32 bit
2. Processor type: Intel core
3. Recommended: Core 2 Duo or higher
4. RAM
5. Minimum: 512 MB
6. Processor speed: 2.30 GHZ or higher
7. Hard disk: 512 GB or more.

SOFTWARE REQUIREMENTS:

1. Front End Tool: Dev C++

5. Problem Statement

ATM is another type of banking where the most frequently type of transaction made is withdrawal. A user may withdraw as much as many

amount as he wants until his account holds a sum greater than his withdrawal amount. ATM is completely automated and there is no necessity of the ATM centre being placed at the bank itself. It can be

placed in the shopping malls, airports, railway stations etc. This ATM system can use any kind of interface. But it should be user friendly and not confusing. Help manuals should be provided in case

any customer has problem working with the software. ATM
SYSTEMS

The system will retain information on the entire customer who has necessity rights to access the service. It will contain the balance amount in the account, rate of interest, any special allowance for that customer and most of all pin number of the customer. The ATM system should be compatible with any kind of database such as MS-ACCESS, DB2, ORACLE, SQL, SERVER etc. the emphasis here is on consistency. Some customer could have availed some special offers on his ATM cards. So this must be taken care of and the appropriate data should be dealt with.

The ATM should provide easy access to the data for the customer. It should also have a highly secure interface so that one can take money one behalf of others. So the security is one of the main aspects in ATM.

6. Problem statement (Use case) analysis

2.1 Identified use cases:

i. Login:

Here the user enters the card and the inputs his password to enter into the main form. If the password is incorrect, the system will display an error message

ii. Transaction:

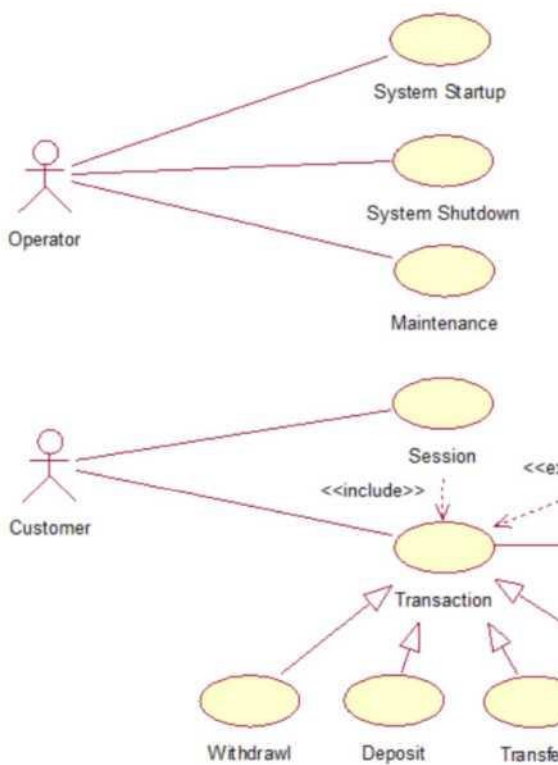
This is the important part of the ATM system, where there are two types of transaction-withdrawal and deposit. While withdrawing the user specifies the amount and may request for the printed output also.

iii. Maintaining Customer Information:

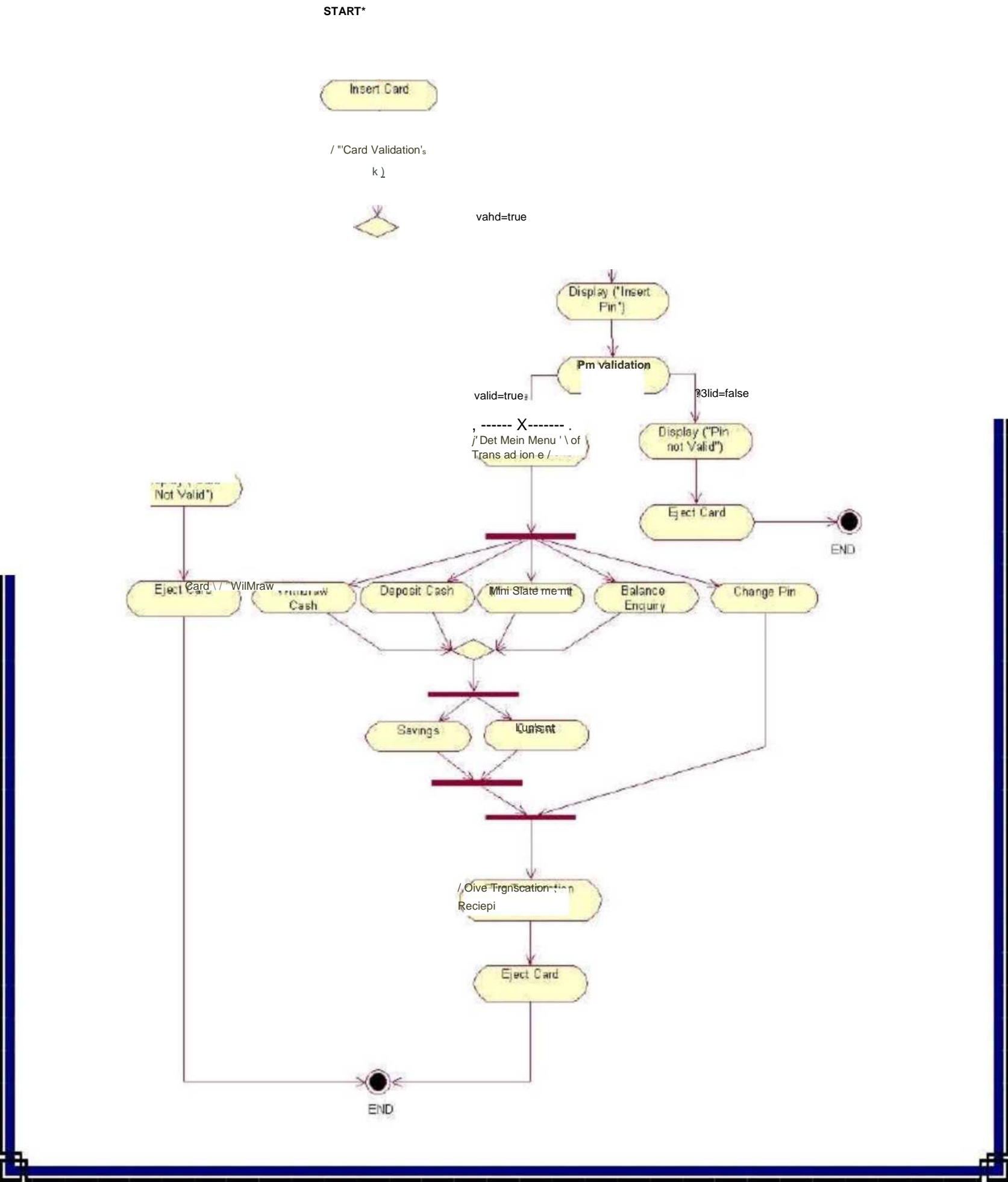
Here the administrator plays an important role, whose work is to add customer, delete customer account, update customer account, etc.

7. Diagram Design (UML):

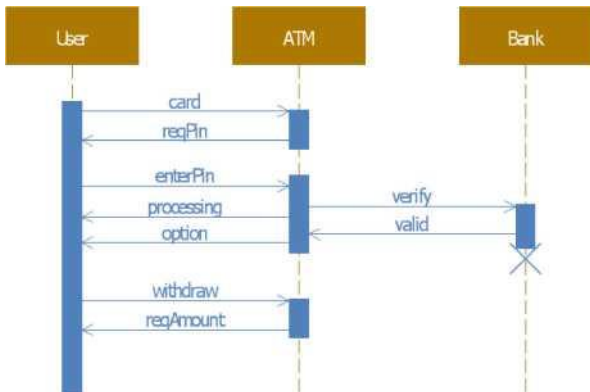
10.1. Use Case Diagram:



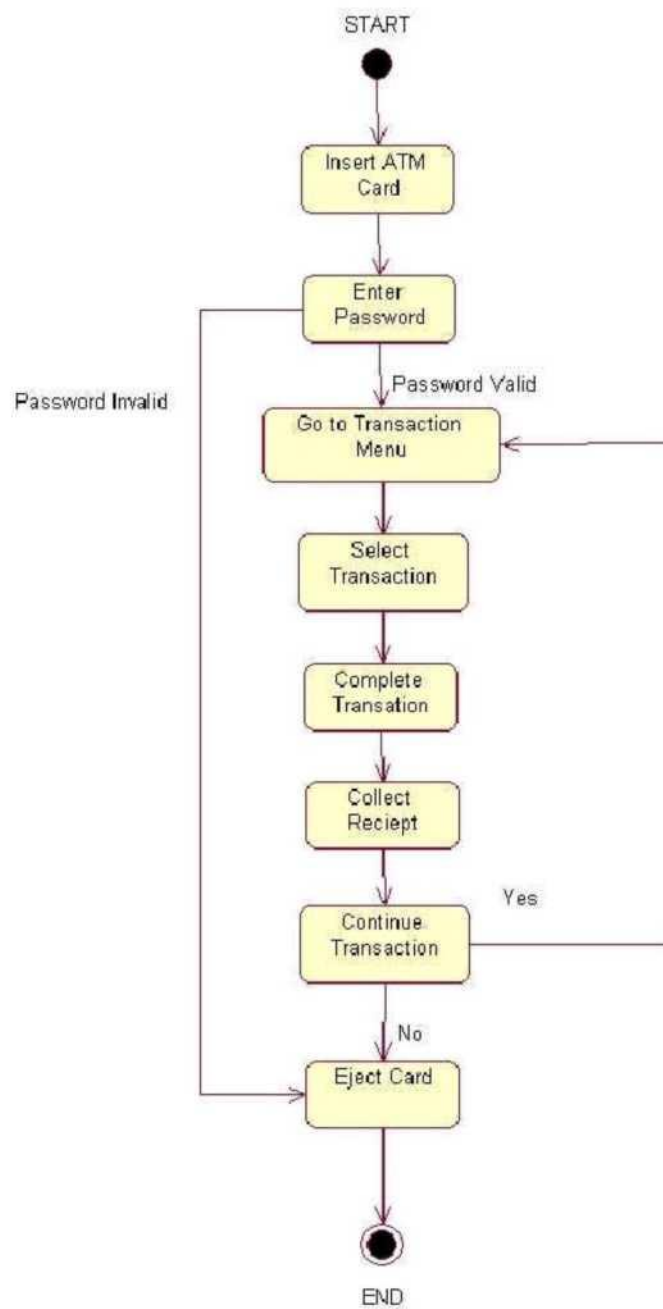
10.2. Activity Diagram:



10.3. Sequence Diagram:



10.4. State Chart Diagram:



ATM SYSTEM

```
//ATM BANKING
```

```
#include<stdio.h>
```

```
#include<time.h>
```

```
#include<windows.h>
```

```
int main()
```

```
system("color 9f");
```

```
int pin=1234,enterpin,option ,count=0,amount=1; float  
balance=5000;
```

```
int continueTransaction=1;
```

```
time_t now;
```

```
time(&now);
```

```
printf("Xn");
```

[illegible]

```
printf("\n\t\t\t\t\t=====welcome to the atm
```

```

banking=====");
while(pin!=enterpin)
{
printf("\n enter your pin number:");
scanf("%d",&enterpin);
if(enterpin!=pin)
{

```

```

Beep(600,500);
printf("\n Invalid pin!!!");

```

```

}
count++;
if(count==5&&pin!=enterpin)
{
printf("\n\tYOUR CARD HAS BEEN
BLOCKED");
exit(O);
}
}
whiie(continueTransaction!=0)
{

```

```

printf("\n\t\t\t=====AVAILAB
ETRACTIONS=====");

```



```
printf("\n\tplease select an option;\n");  
printf("\n\n\t\tl.withdrawl");  
printf("\n\n\t\tt2.deposit");  
printf("\n\n\t\tt3.check balance\n\t");  
  
scanf("%d",&option);  
switch(option)  
{  
case 1:  
while(amount%100!=0)  
{
```

```
printf("\n\tenter the amount:");  
scanf("%d",&amount);  
if(amount%100!=0)  
{
```

```
printf("\n\tamount should be  
multiple of 100");
```

```
}
```

```
}  
if(balance<amount)  
{
```

```
printf("\n\t SORRY YOU HAVE  
INSUFFICIENT BALANCE");
```

```
amount=l;
```

```
break;
```

```
}
```

```
else
```

```
{
```

```
balance-=amount;
```

```
printf("\n\t you have withdrawn Rs  
:%d,your new balance is:%.2f",amount,balance);  
amount=l;
```

```
break;
```

```
}
```

```
case 2:
```

```
printf("\n\t enter the amount:");
```

```
scanf("%d",&amount);
```

```
balance+=amount;
```

```
printf("\n\t you have deposited
```

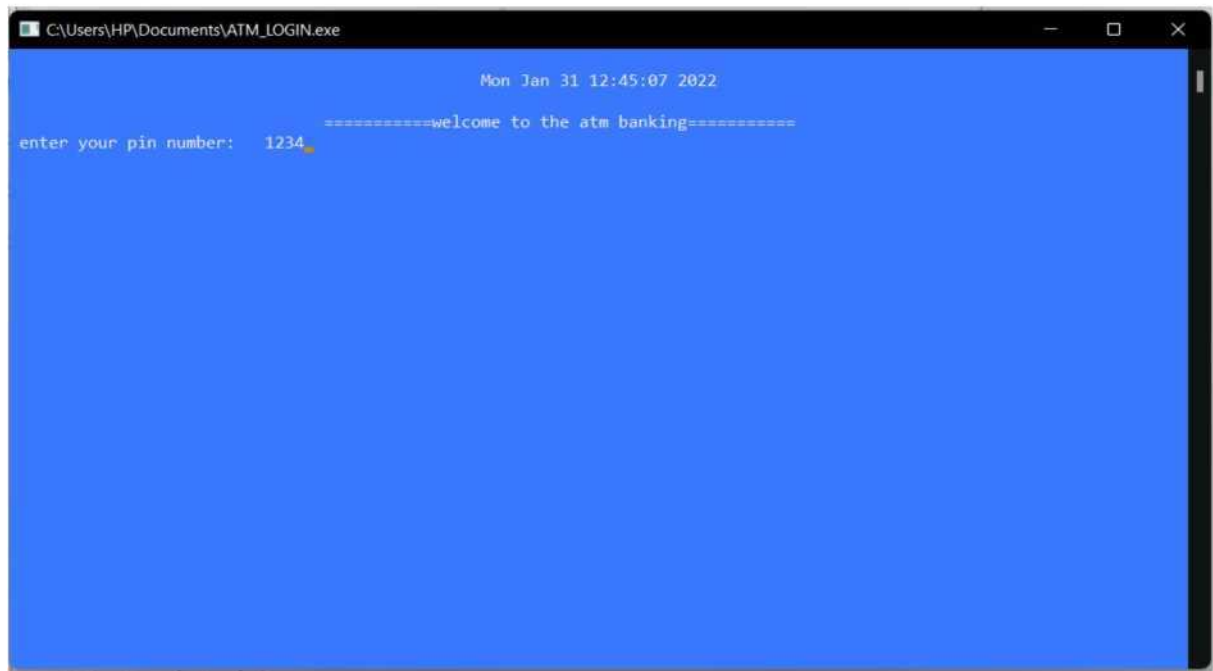
```
Rs. %d,your new balance is:      amount,balance);
```

```
amount=l;
```



```
return 0;
```

OUTPUT:



1. withdrawl
2. deposit
3. check balance

3

your balance is Rs:5000.00

Do you wish to perform another transaction? press I[Yes],0[No]

=====AVAILABE TRANSACTIONS=====

please select an option;

1. withdrawl
2. deposit
3. check balance

2

enter the amount:3000

you have deposited Rs.3000,your new balance is: 8000.00

=====thank you for using atm banking=====

Do you wish to perform another transaction? press I[Yes],0[No]

3.check balance 2

enter the amount:3000

you have deposited Rs.3000,your new balance is: 8000.00 =====thank you for using atm banking===== Do you wish to perform another transaction? press I[Yes],0[No]

1

=====AVAILABE TRANSACTIONS===== please select an option;

1. withdrawl
2. deposit
3. check balance

enter the amount:2000

you have withdrawn Rs :2000,your new balance is:6000.00

Do you wish to perform another transaction? press I[Yes],0[No]

8.Future Scope

We've all become used to ATMs that have minimal screens, hardware, and simple interfaces, such as small number pads with eight buttons only. Then what will futuristic ATMs look like? Well, in reality the ATMs of the future are already here.

Long gone are the prevalence of simple, single-function ATMs. Advances in technologies have allowed ATMs to follow digital trends over the years. These days most ATMs have touch-screen computers running on Microsoft's Windows 10. This means that they can utilize facial recognition technology, remote video, and smartphone app integration. It also means that as digital technology advances, ATM interfaces can follow suit and evolve to become more and more user- friendly and increasingly multi-functional.

9.Conclusion

creating an ATM machine program using C, we need to implement the four fundamental concepts of each ATM system that exists, it includes cash withdraw, cash deposit, account balance checks, and functionality for another transaction or termination.

BIBLIOGRAPHY

Sites Used:

- <https://www.geeksforgeeks.org/>
- <https://stackoverflow.com/>
- <http://hackr.io/blog/python-projects>
- <https://realpython.com/tutorials/project>

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