

PROJECT REPORT

On

ATM PROJECT

Submitted to Centurion University of Technology & Management
in partial fulfillment of the requirement for award of the degree of

B. TECH.

in

Computer Science and Engineering

Submitted By

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Under the Guidance of

Mr. Anshuman Patanaik



DEPT. OF COMPUTER SCIENCE & ENGINEERING

**SCHOOL OF ENGINEERING & TECHNOLOGY,
CUTM, Paralakhemundi-761200**

CERTIFICATE

This is to be certified that the minor project entitled “ATM PROJECT” has been submitted for the Bachelor of Technology in **Computer Science and Engineering** of School of Engineering & Technology, CUTM, Paralakhemundi during the academic year 2022-2023 is a persuasive piece of project work carried out by “Manish Kumar” towards the partial fulfillment for award of the degree (B.Tech.) under the guidance of “ Mr.Anshuman Patanaik” and no part there of has been submitted by them for any degree to the best of my knowledge.

Signature of HOD

Name of the HOD

Signature of Project Guide

Name of the Guide

EVALUATION SHEET

1. Title of the Project: ATM PROJECT
2. Year of submission: 2022
3. Name of the degree: BTech
4. Date of Examination / Viva:
5. Student Name with Regn No.:

Name	Registration no
Manish Kumar	210101120013

6. Name of the Guide: Mr.Anshuman Patanaik
7. Result:

[APPROVED/REJECTED]

Signature of HOD

Signature of Project Guide

Name of the HOD

Name of the Guide

Signature of External Examiner

CANDIDATE'S DECLARATION

We “Manish Kumar (210101120013)”, B. Tech.in (CSE) (Semester-III) of School of Engineering & Technology, CUTM, Paralakhemundi, hereby declare that the Project Report entitled “ATM PROJECT” is an original work and data provided in the study is authentic one. This report has not been submitted to any other Institute for the award of any other degree by me.

Signature of Student

Name

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Manish Kumar

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ACKNOWLEDGEMENT

I would like to express my gratitude to my project guide Mr. Anshuman Patanaik for his able guidance and support to complete my project. I would also extend my sincere thanks to Centurion University of

Technology and Management to provide the resources and extensions in my project.

STUDENT NAMES & REGD NUM

Name	Registration no
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Abstract

Automated Teller Machine (ATM) 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 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.



ATM PROJECT

INTRODUCTION

Automated Teller Machine (ATM) 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 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.

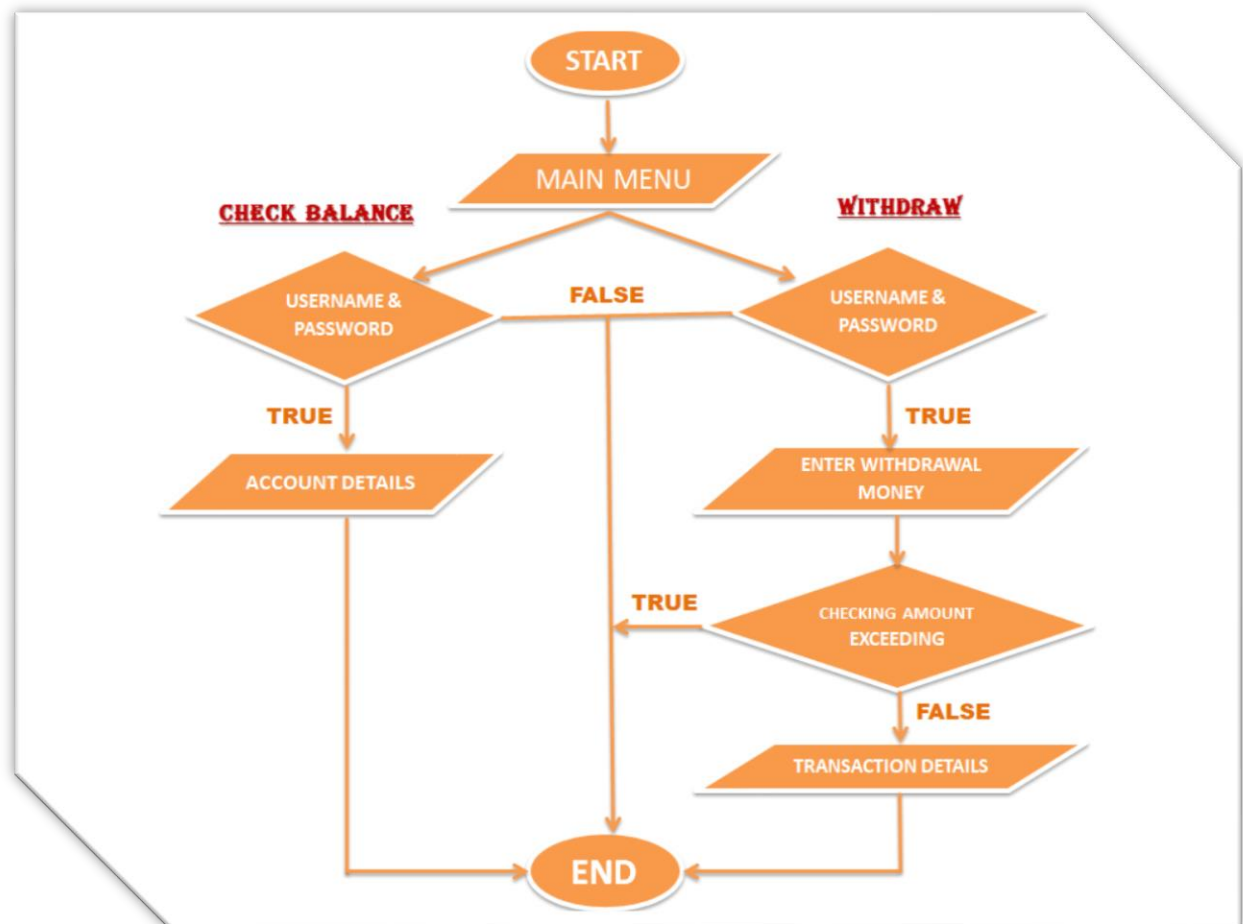
PROBLEM STATEMENT

To develop an ATM machine which satisfies the requirements of the existing system in full-fledged manner and to make fast transactions.

OBJECTIVES:

1. To speed up the transactions done by customers.
2. No manual transactions needed generally.
3. To save the time which is very important now-a-days.
4. To know the account details within no time.

CONTROL FLOW DIAGRAM WITH EXPLANATION



EXPLANATION

In main menu there is option between cash withdrawal or check balance. After selecting any one option you have to enter your valid username and password to enter your account, if anyone of username-password is invalid it will pop up an invalid message and it will return to the main menu.

- 1) If Check Balance is selected then it will display amount number and balance of your account and Exit to Main menu.
- 2) If Cash Withdrawal is selected then
 - a) Type the amount that you want to receive.

- b) If amount is exceeding the balance, then it will pop a message with **AMOUNT EXCEEDING YOUR BALANCE** and Exit to Main Menu.
- c) If amount is within your balance, then it will withdraw your specified money and the withdraw money will be deducted from your balance.
- d) Then it will display amount withdraw, Balance amount before and after transaction.
- e) Exit to Main menu.

ALGORITHM / PSEUDO CODE

Step 1: Start.

Step 2: Firstly, initialize the account details (Admin Control [create ()].

Initialization is done only once.

Step 3: Use switch statement to do the operations like Balance checking [bal ()], Cash withdrawal [withd ()].

Step 4: Choose any one option between Balance check or withdraw.

Step 5: Take the ATM password and username as input.

Step 6: If the input password and username is equal to the initialized password and username, then do the further operations.

Step 7: After completing your operation Press 'Enter' to go back to Main Menu.

Step 8: Use do while loop to terminate or restart the process.

Step 9: End.

FUNCTIONS AND CONSTRUCTS

create (): - This function is only accessible to Admin. It is used to create Account of an individuals which include the data members mentioned in structure 'acc' like username, password, balance etc. All the values are saved in a file in binary format.

bal (): - This function is used to check the balance of the user. It opens the file in read mode and take username-password as input. If the username-password is valid then it displays the details of that particular user.

withd (): - This function is used to withdraw money. It opens the file in append+ mode and take username-password as input. If the username-password is valid then it will ask for Enter amount to withdraw. It will check whether the amount is exceeding the balance. If not, it completes the operation and display the details. After completion of operation, it will update the Account balance of the user.

SYSTEM REQUIREMENT

Hardware Requirements:

- Processor: Intel Dual Core CPU or any AMD CPU Equivalent with base clock of 2.60 GHz
- RAM: Minimum 512MB or More
- System Type: 32 Bit or 64-bit as compatible with Compiler

Software Requirements:

- IDE: Code Blocks or Visual Studio or equivalent.
- C programming language.

CODE:

```
#include<stdio.h>
#include<stdlib.h>
#include<string.h>
#include<conio.h>

typedef struct acc
{
```

```

char user [10];
int pass;
int accno;
char name [20];
int balance;
} acc;

void bal (void);
void create (void);
void withd (void);
int main ()
{
    int p=9856, q;
    int ch;
    system("cls");
    do {
        printf ("\n\n
        printf ("\n
        printf ("\n
                                WELCOME TO ATM \n\n");
                                1. VIEW BALANCE");
                                2. WITHDRAW \n\n");

        printf ("\n
        printf ("\n\n
        printf ("\n\n
                                *Admin Control      *Close ");
                                [* Press Security Pin] ");
                                Enter your choice: ");
        scanf ("%d", &ch);

        switch(ch)
        {
            case 1: system("cls");
                    bal ();
                    printf ("
                                Press Enter to Exit....");
                    getch ();
                    system("cls");
                    break;
            case 2: system("cls");
                    withd ();
                    printf ("
                                Press Enter to Exit....");
                    getch ();
                    system("cls");

```

```

        break;
    case 1997: system("cls");
        create ();
        printf ("\nPress Enter to Exit....");
        getch ();
        system("cls");
        break;

    case 1998: system("cls");
        printf ("Enter Bank Security Pin: ");
        scanf("%d",&q);
        if(q==p)
        {
            system("cls");
            return (0);
        }
        else
        {
            printf ("\nINVALID SECURITY PIN \n");
            printf ("\nPress Enter to Exit....");
            getch ();
            system("cls");
            break;
        }
    default: printf ("\n\n                INVALID CHOICE");
        getch ();
        system("cls");
        break;
    }
} while (ch! =0);
}

void create ()
{
    int p=9856, q;
    printf ("Enter Bank Security Pin: ");
    scanf("%d",&q);
    if(q==p)

```



```

{
    acc s;
    FILE *fp;
    fp=fopen("p.txt","ab");
    printf ("Enter account number:");
    scanf("%d",&s.accno);
    printf ("Enter name: ");
    fflush(stdin);
    gets(s.name);
    printf ("Enter username: " );
    fflush(stdin);
    gets(s.user);
    printf ("Enter password : ");
    scanf("%d",&s.pass);
    printf("Enter balance : ");
    scanf("%d",&s.balance);
    fwrite(&s,sizeof(acc),1,fp);
    fclose(fp);
    printf("\nAccount Created..!!\n");
}
else
printf("INVALID SECURITY PIN \n");
}

void bal()
{
    acc a1;
    FILE *fp;
    int pa ,found=0;
    char u[10];
    fp = fopen("p.txt","r");
    printf("\n                                CHECK BALANCE " );
    printf("\n\n\n                                Enter username : " );
    fflush(stdin);
    gets(u);
    printf("\n                                Enter password : ");
    scanf("%d",&pa);
    while(fread(&a1, sizeof(acc),1,fp))

```

```

{
    if(strcmp(a1.user,u)==0)
    {
        if(a1.pass==pa)
        {
            found=1;
            printf("\n\n                NAME : %s\n\n
ACCOUNT NUMBER : %d\n\n                BALANCE :
%d\n\n",a1.name,a1.accno,a1.balance);
        }
    }
}
if(!found)
{
    printf("\n\n                Record not found. Enter correct Username and
Password\n\n");
}
fclose(fp);
}

```

```

void withd()
{
    acc a1;
    FILE *fp, *fp1;
    int pa , w, wd, b ,found=0;
    char u[10];
    fp = fopen("p.txt","r");
    fp1 = fopen("temp4.txt","w");
    printf("\n                WITHDRAW " );
    printf("\n\n\n                Enter username : " );
    fflush(stdin);
    gets(u);
    printf("\n                Enter password : ");
    scanf("%d",&pa);
    while(fread(&a1, sizeof(acc),1,fp))
    {
        if(strcmp(a1.user,u)==0)
        {

```

```

    if(a1.pass==pa)
    {
        found=1;
        printf("\n
        scanf("%d",&w);
        b=a1.balance;
        if(w>a1.balance)
        {
            printf("\n\n
            Balance\n\n");
            a1.balance=a1.balance-0;
        }
        else
        {
            a1.balance=a1.balance-w;
        }
    }
    }
    fwrite(&a1,sizeof(acc),1,fp1);
}
fclose(fp);
fclose(fp1);
if(found)
{
    fp1 = fopen("temp4.txt","r");
    fp = fopen("p.txt","w");

    while(fread(&a1,sizeof(acc),1,fp1))
    {
        fwrite(&a1, sizeof(acc),1,fp);
    }
    fclose(fp);
    fclose(fp1);

    fp = fopen("p.txt","r");
    while(fread(&a1, sizeof(acc),1,fp))
    {

```

Enter amount to withdraw : ");

Amount exceeding your

```

        if(strcmp(a1.user,u)==0)
        {
            if(a1.pass==pa)
            {
                if(w<a1.balance)
                {
                    printf("\n\n                NAME : %s\n\n
ACCOUNT NUMBER : %d\n\n                CASH WITHDRAW :
%d\n\n                BALANCE BEFORE WITHDRAWAL : %d\n\n
AVAILABLE BALANCE : %d\n\n",a1.name,a1.accno,w,b,a1.balance);
                }
            }
        }
        else
        printf("\n");
    }
}
else
    printf("\n\n                Record not found. Enter correct Username and
Password\n\n");
}

```

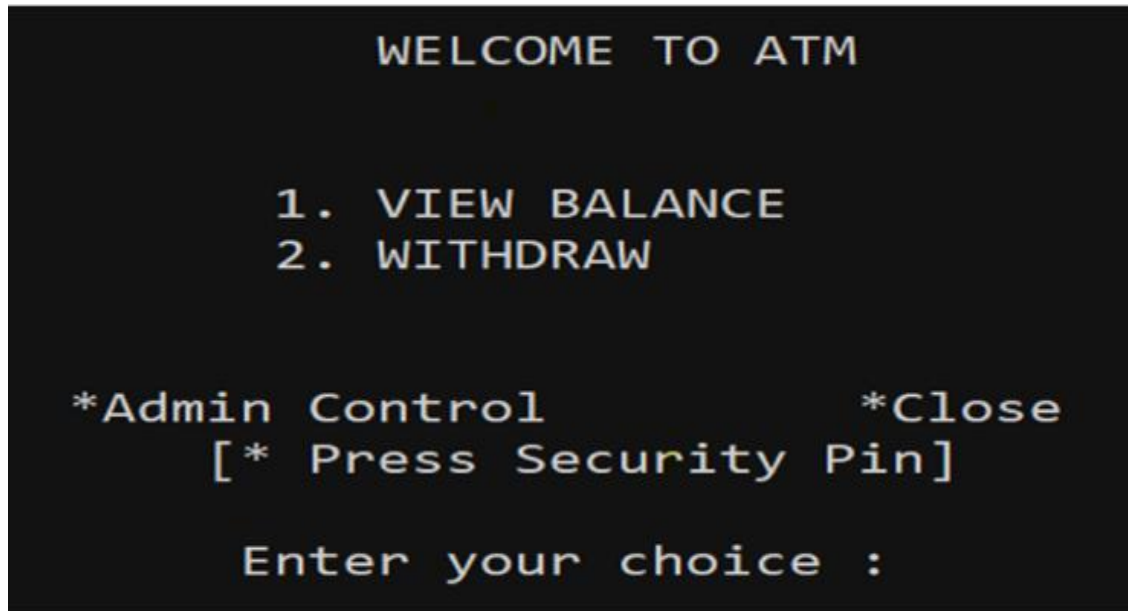
INPUT & OUTPUT

INPUT

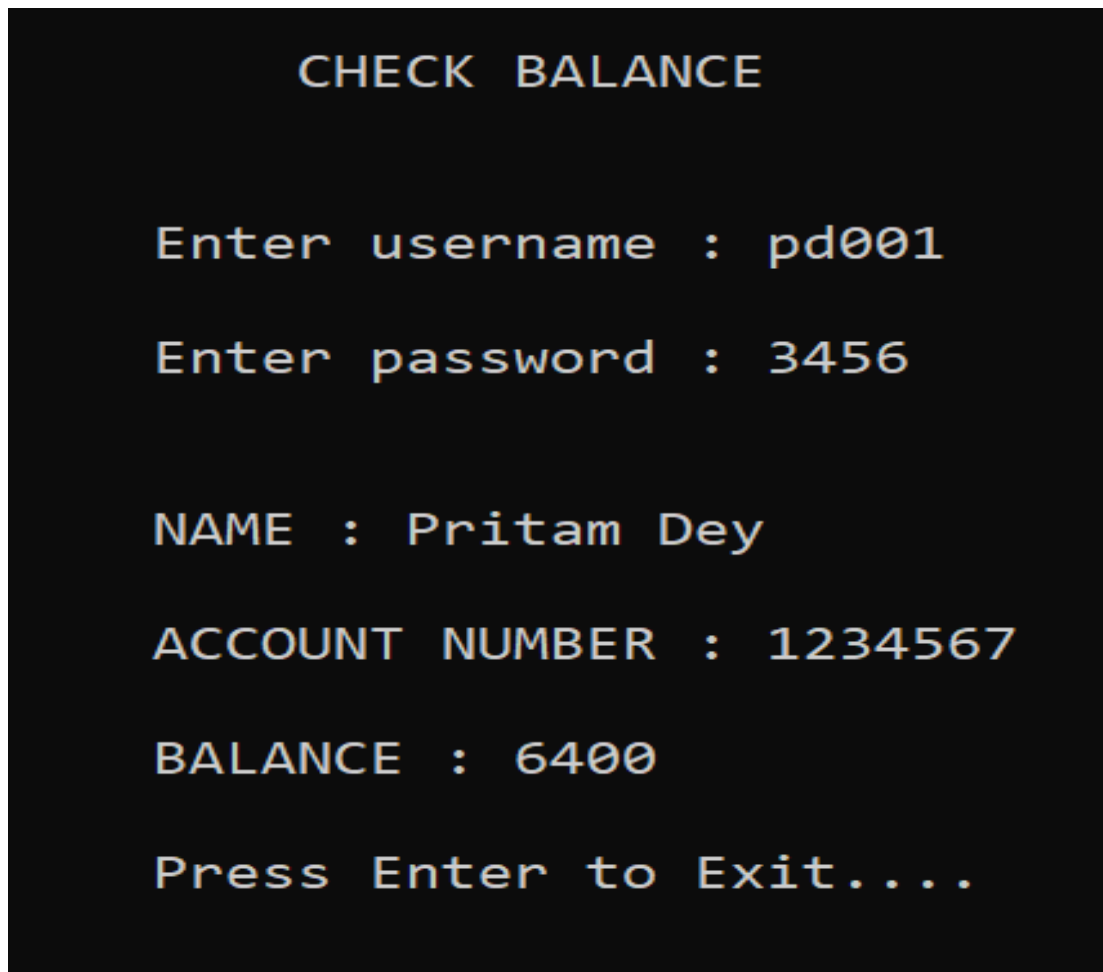
- Choose any one option between check balance or withdraw, then put username and password of account.
- If you choose withdraw then put amount you want to withdraw.

OUTPUT

- In check balance the output will be your name, account number and your account balance.
- In withdraw the output will be your name, account number, amount withdraw, Balance amount before and after transaction.



(a) Main menuAfter executing the program, the first page that will be appear is the Main Menu as shown in (a).



(b) Check Balance

After choosing Check Balance option from Main Menu, Enter the valid username and password and then it will display Name, Account number and Balance of that particular user as shown in (b).

WITHDRAW

Enter username : pd001

Enter password : 3456

Enter amount to withdraw : 1000

NAME : Pritam Dey

ACCOUNT NUMBER : 1234567

CASH WITHDRAW : 1000

BALANCE BEFORE WITHDRAWAL : 6400

AVAILABLE BALANCE : 5400

Press Enter to Exit....

(c)Withdraw

After choosing Withdraw option from Main Menu, Enter the valid username and password and then it will ask for Amount to withdraw. After completing the operation, it will display Name, Account number, Cash Withdraw, Balance before withdrawal and Available Balance of that particular user as shown in

CONCLUSION

In this era of growing competition among the banks, ATM's have played a vital role in helping the bank to sustain in the market. The ATM's have gained worldwide popularity within a few years. ATM machines are easy to operate and hence, attract more and more customers. There are quite of innovations, which are being taken place in the ATM machine. The locations of ATM's are the key location of any particular area. ATM's is a form of easy banking. The aim of banks of setting of ATM's is to cater to the needs of the customers. The flexibility of the ATM's has increased so much that now-a-days, have been reached the doorsteps of the customers. The customers using the ATM machine are satisfied with the service and have very less complaints about the machines.

THANK YOU