#### PROJECT REPORT

Submitted by

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In partial satisfaction of the requirements for the degree of

# BACHELOR OF TECHNOLOGY in COMPUTER SCIENCE ENGINEERING



#### SCHOOL OF COMPUTING

COLLEGE OF ENGINEERING AND TECHNOLOGY SRM INSTITUTE OF SCIENCE AND TECHNOLOGY KATTANKULATHUR - 603203

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# SRM INSTITUTION OF SCIENCE AND TECHNOLOGY KATTANKULATHUR-603203

#### **BONAFIDE CERTIFICATE**

Certified that this Project Report titled **SIMPLE ATM MACHINE** is the bonafide work done by Naveen U RA2211003010203 who completed the project under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other work.

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#### **Problem Statement:**

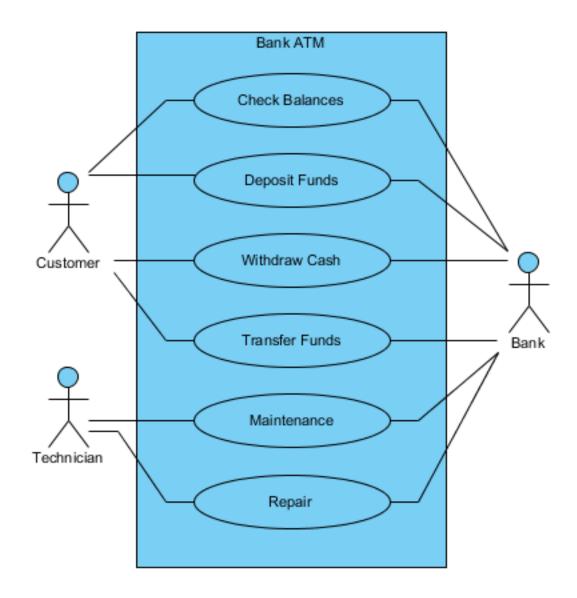
This project allows the users to login through password and deposit amount, withdraw amount, balance enquiry and reset the password.

#### **Objectives:**

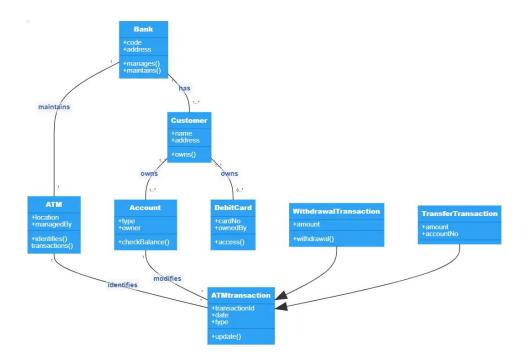
- The objective of this mini-project is to create a simple ATM that allows users to Login through password and Withdraw, Deposit, Balance Enquiry and Reset Password.
- To render accurate services to customer.
- The reduction of fraudulent activities
- To achieve speedy processing of customer data
- To reduce error processing, the guarantee of increase security

#### **Modules of Project:**

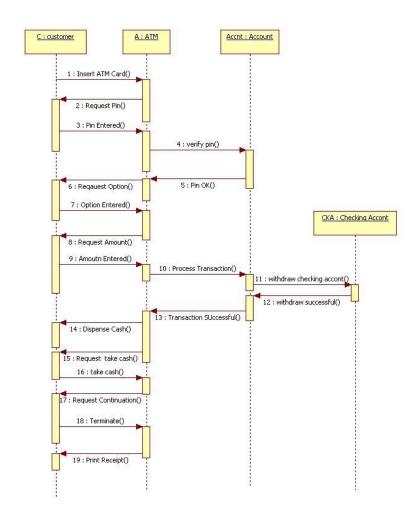
- Account- This Displays the login menu which displays Login, Register, Exit.
- Login- This allows the user to login through username and password.
- Create- This allows user to create new account.
- Menu- This displays the main menu of ATM which displays Withdraw, Deposit, Balance enquiry, Reset password, Exit.
- Deposit- This allows user to deposit amount in the account.
- Withdraw- This allows user to withdraw amount from account Balance.
- Balance- This allows user to view at the balance of the account.
- Password- This allows user to reset the password.
- Exit- This quits the program.



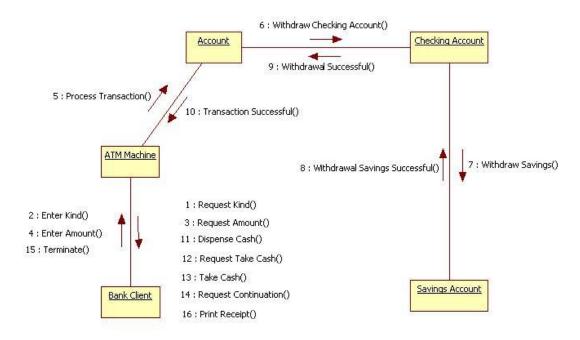
# **Class Diagram:**



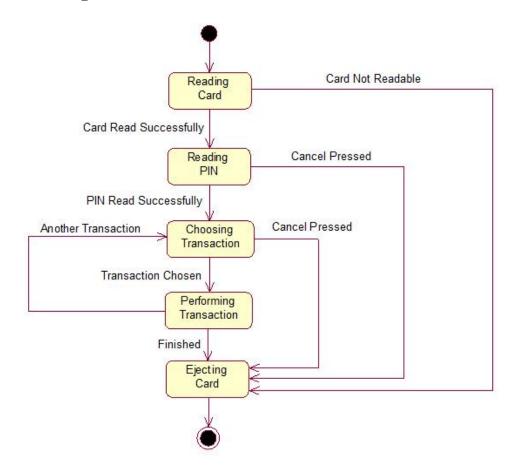
# **Sequence Diagram:**



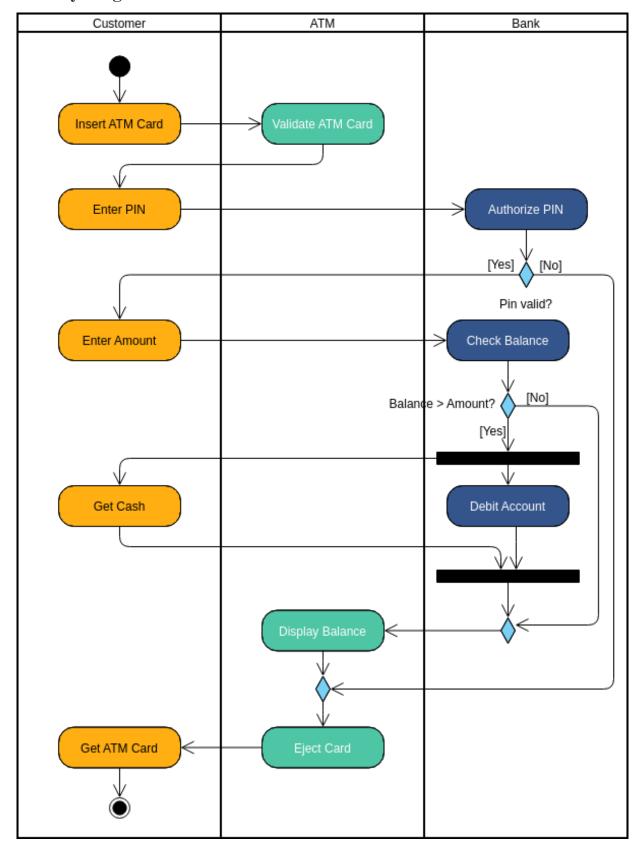
#### **Collaboration Diagram:**



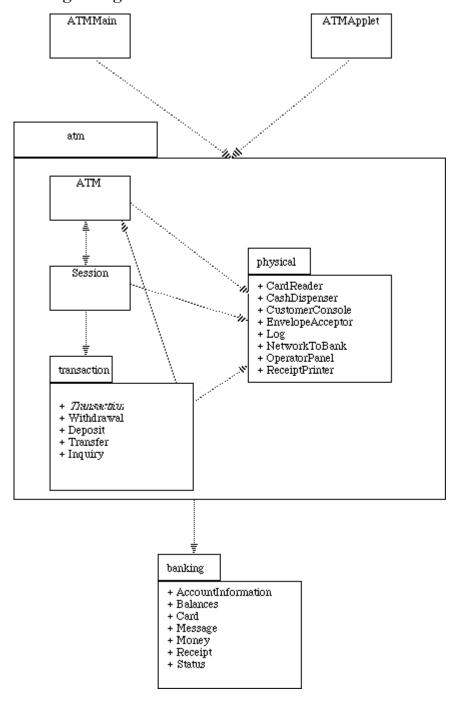
#### **State Chart Diagram:**



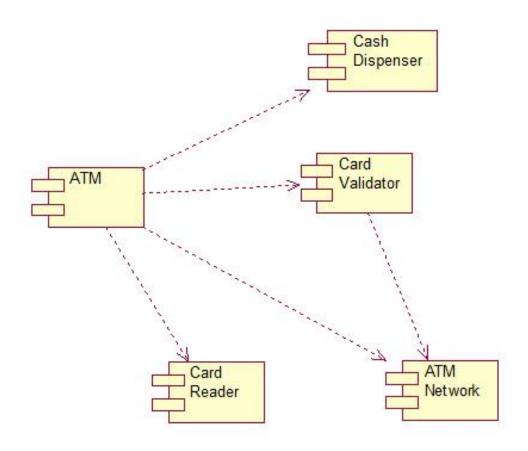
# **Activity Diagram:**



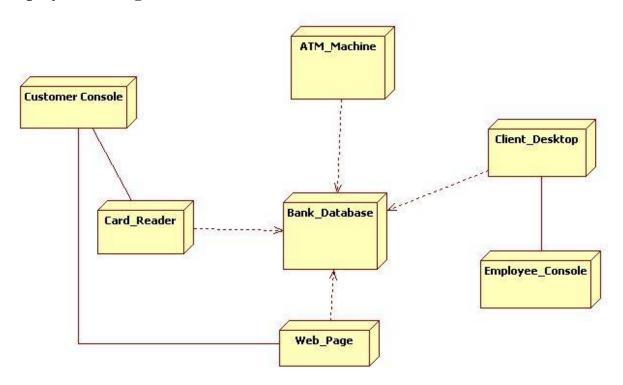
# Package Diagram:



# **Component Diagram:**



# **Deployment Diagram:**



#### **Source Code:**

```
#include <iostream>
#include<conio.h>
using namespace std;
main()
    string tpass,pass="123",reset,pass1,pass2,user;
    float amnt=0,bal=0;
    int s;
    char w;
account:
    cout<<"Welcome to CONTINENTAL BANK!"<<endl;</pre>
    cout<<"1: Login\n2: Create Account\n3: Exit\n"<<endl;</pre>
    cin>>s;
    switch(s)
         case 1:
             cout<<"Enter Username: ";</pre>
             cin>>user;
             cout<<"Enter Password= ";</pre>
             cin>>tpass;
         if(tpass==pass)
             cout<<"Welcome User!"<<endl;</pre>
             goto menu;
         else{
             goto wr;
        case 2:
         create:
            cout<<"Enter Username: ";</pre>
            cin>>user;
            cout<<"Enter Password: ";</pre>
            cin>>pass1;
            cout<<"Renter Password: ";</pre>
            cin>>pass2;
                  if(pass2==pass1)
                      pass=pass2;
                      cout<<"\nPassword changed!"<<endl;</pre>
                      goto start;
                  else
                      cout<<"Password not match "<<endl;</pre>
                      t1:
                           cout<<"Wanna Try Again(Y/N)?= ";</pre>
```

```
cin>>w;
                          switch(w)
                              case'y':case'Y':
                                 goto create;
                                  break;
                              case'n':case'N':
                                  goto account;
                                  break;
                          default:
                                  cout<<"Invalid Input!"<<endl;</pre>
                                  goto t1;
           break;
       case 3:
           goto exit1;
          break;
       default:
           cout<<"Invalid Input!";</pre>
start:
       menu:
           cout<<"\nPress\n1: Deposit amount\n2: Withdraw amount\n3: Balance</pre>
inquiry\n4. Reset Password\n5 Exit= "<<endl;</pre>
           cin>>s;
               switch(s)
                   case 1:
                      deposit:
                      cout<<"Type amount= ";</pre>
                      cin>>amnt;
                      bal+=amnt;
                      cout<<"\n\t-----
"<<endl;
                      cout<<"\t\t\tRecipt"<<endl;</pre>
                      cout<<"\t-----"<<endl;</pre>
                      cout<<"\tYour balance is= | Rs."<<bal<<endl;</pre>
                      cout<<"\t-----"<<endl;
                   t2:
                       cout<<"Wanna Try Again(Y/N)?= ";</pre>
                              cin>>w;
                                  switch(w)
                                      case'y':case'Y':
                                         goto menu;
                                         break;
```

```
case'n':case'N':
                                         goto exit;
                                         break;
                                 default:
                                         cout<<"Invalind Input!"<<endl;</pre>
                                         goto t2;
                      break;
                  case 2:
                  withdraw:
                      cout<<"Enter Amount= ";</pre>
                      cin>>amnt;
                          if(amnt>bal)
                              cout<<"Sorry! Invalid amount"<<endl;</pre>
                          t3: cout<<"\nWanna try again?(Y/N)= ";
                              cin>>w;
                                 switch(w)
                                     case'y':case'Y':
                                         goto withdraw;
                                         break;
                                     case'n':case'N':
                                         goto exit;
                                         break;
                                     default:
                                         cout<<"Invalind Input!";</pre>
                                         goto t3;
                      bal-=amnt;
                      cout<<"\n\t-----
"<<endl;
                      cout<<"\t\t\tRecipt"<<endl;</pre>
                      cout<<"\t-----
"<<endl;
                      cout<<"\twithdrawed Amount= | Rs."<<amnt<<endl;</pre>
                      cout<<"\tRemaining Balance= | Rs."<<bal<<endl;</pre>
                      cout<<"\t-----"<<endl;
                  t4:
                      cout<<"\nNeed another Transaction(Y/N)?= ";</pre>
                                                                         13
```

```
cin>>w;
                                switch(w)
                                    case'y':case'Y':
                                       goto menu;
                                        break;
                                    case'n':case'N':
                                        goto exit;
                                       break;
                                default:
                                        cout<<"Invalind Input!"<<endl;</pre>
                                        goto t4;
                     break;
                  case 3:
                     Balance:
                     cout<<"\n\t-----
"<<endl;
                     cout<<"\t\t\tRecipt"<<endl;</pre>
                     cout<<"\t-----"<<endl;
                     cout<<"\tCurrent Balance= | Rs."<<bal<<endl;</pre>
                     cout<<"\t-----"<<endl;
                  t5:
                     cout<<"\nWanna Use Again(Y/N)?= ";</pre>
                     cin>>w;
                             switch(w)
                                case'y':case'Y':
                                    goto menu;
                                    break;
                                case'n':case'N':
                                    goto exit;
                                    break;
                                default:
                                    cout<<"Invalind Input!"<<endl;</pre>
                                    goto t5;
                     break;
                  case 4:
                  password:
                  p1:
                     cout<<"Type old Password= ";</pre>
                     cin>>reset;
                         if(reset==pass)
                         р:
```

```
cout<<"Type New Password= ";</pre>
                                    cin>>pass1;
                                    cout<<"Confirm Password= ";</pre>
                                    cin>>pass2;
                                         if(pass2==pass1)
                                             pass=pass2;
                                             cout<<"\nPassword changed!"<<endl;</pre>
                                             goto start;
                                         else
                                             cout<<"Password not match "<<endl;</pre>
                                         p3:
                                             cout<<"\nWanna Try Again(Y/N)?= ";</pre>
                                             cin>>w;
                                                  switch(w)
                                                      case'y':case'Y':
                                                           goto p;
                                                           break;
                                                      case'n':case'N':
                                                           goto exit;
                                                           break;
                                                      default:
                                                           cout<<"Invalind</pre>
Input!"<<endl;</pre>
                                                           goto p3;
                                else
                               p2:
                                    cout<<"Invalid Password!";</pre>
                                    cout<<"\nWanna try again(Y/N)?= ";</pre>
                                    cin>>w;
                                         switch(w)
                                             case'y':case'Y':
                                                  goto p1;
                                                  break;
                                             case'n':case'N':
                                                  goto exit;
                                                  break;
                                             default:
                                                  cout<<"Invalind Input!"<<endl;</pre>
                                                  goto p2;
                                                                                        15
```

```
case 5:
                          goto exit;
                          break;
                      default:
                          cout<<"Invalid Input!"<<endl;</pre>
                      t6:
                          cout<<"\nWanna try again?(Y/N)= ";</pre>
                          cin>>w;
                               switch(w)
                                   case'y':case'Y':
                                        goto menu;
                                        break;
                                   case'n':case'N':
                                        goto exit;
                                        break;
                                   default:
                                        cout<<"Invalind Input!"<<endl;</pre>
                                        goto t6;
        wr:
             cout<<"Error!\nWrong Password!"<<endl;</pre>
        t7:
             cout<<"Wanna Try Again(Y/N)?= ";</pre>
             cin>>w;
                 switch(w)
                      case'y':case'Y':
                          goto start;
                          break;
                      case'n':case'N':
                          goto exit;
                          break;
                      default:
                          cout<<"Invalind Input!"<<endl;</pre>
                          goto t7;
exit:
    cout<<"Are you sure to Exit(Y/N)?=";</pre>
    cin>>w;
        switch(w)
             case'Y': case'y':
                 goto exit1;
                 goto account;
             default:
                                                                                      16
```

#### **Output:**

```
PS C:\Users\navee cd "d:\Naveen\college\znd Sem\coop\Project\Naveen\" ; if ($?) { g++ ATM.cpp -o ATM } ; if ($?) { .\ATM } Welcome to CONTINENTAL BANK!

1: Login
2: Create Account
3: Exit

1
Enter Username: naveen
Enter Password= 123
Welcome User!

Press
1: Deposit amount
2: Withdraw anount
3: Balance inquiry
4. Reset Password
5 Exit=
1
Type amount= 100000

Recipt

Your balance is= | Rs.100000

Wanna Try Again(Y/N)?= Y

Press
1: Deposit amount
2: Withdraw anount
3: Balance inquiry
4. Reset Password
5 Exit=
1
2
2
Enter Amount= 10000
```

```
Press
1: Deposit amount
2: Withdraw amount
3: Balance inquiry
4. Reset Password
5 Exit=
2
Enter Amount= 10909

Recipt

Withdrawed Amount= Rs.10000

Remaining Balance= Rs.90000

Need another Transaction(Y/N)?= Y

Press
1: Deposit amount
2: Withdraw amount
3: Balance inquiry
4. Reset Password
5 Exit=
3

Recipt

Current Balance= Rs.90000

Wanna Use Again(Y/N)?= Y
```

```
Wanna Use Again(Y/N)?= Y

Press

1: Deposit amount

2: Withdraw amount

3: Balance inquiry

4. Reset Password

5 Exit=

4

Type old Password= 123
Type New Password= 456

Confirm Password= 456

Password changed!

Press

1: Deposit amount

2: Withdraw amount

3: Balance inquiry

4. Reset Password

5 Exit=

5

Are you sure to Exit(Y/N)?=Y
```

#### **Conclusion:**

In conclusion, the Simple ATM project implemented using C++ has successfully provided basic banking functionalities such as balance inquiry, cash withdrawal, and cash deposit to users. The project has demonstrated the use of object-oriented programming concepts such as classes, objects, and inheritance in designing and implementing the system.

Through the use of conditional statements, loops, and functions, the project has also shown how to handle user inputs and perform necessary actions accordingly. The project has been developed with simplicity and user-friendliness in mind, making it easy for users to navigate through the different functionalities.

Overall, this project serves as a great introduction to the world of programming, particularly for beginners interested in learning C++. It provides a foundation for understanding the concepts of object-oriented programming and helps to build essential programming skills.

#### **Reference:**

- Github
- W3 Schools
- Geeksforgeeks