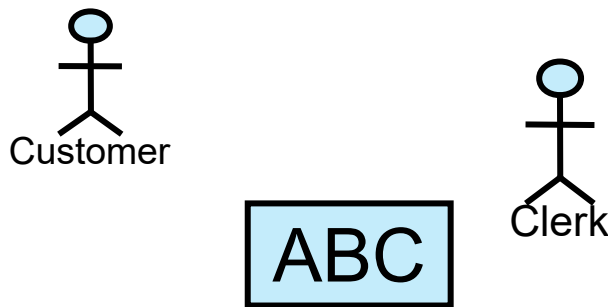# ABC Banking System

Problem Statement:

ABC bank plans to automate its current account related activities. A customer can open a current account. There are two types of current accounts:-Cash Credit account and Regular Current account. Cash credit account holders can avail overdraft facility. They can withdraw 10% of their balance amount as overdraft. They cannot withdraw or avail an overdraft if existing overdraft is not paid back. Only privileged customers can open a Cash Credit account. For every 100 transactions made on a regular current account a fee of Rs.100/- is deducted from the account balance. A customer should first provide his details to register in the bank before opening an account. If required he can update his details later. Clerk can view details of registered customers. The customer may have one or more accounts in the bank. He can deposit or withdraw money from his account. He can also close his account. The clerk generates a statement of the transactions performed on an account to verify the account transactions.

Assumption: Customer interacts with the system through the clerk

Stake Holders:

Primary Actors:
1. An Actor is a role that a user plays when invoking a use case.
2. A single user can represent multiple actors
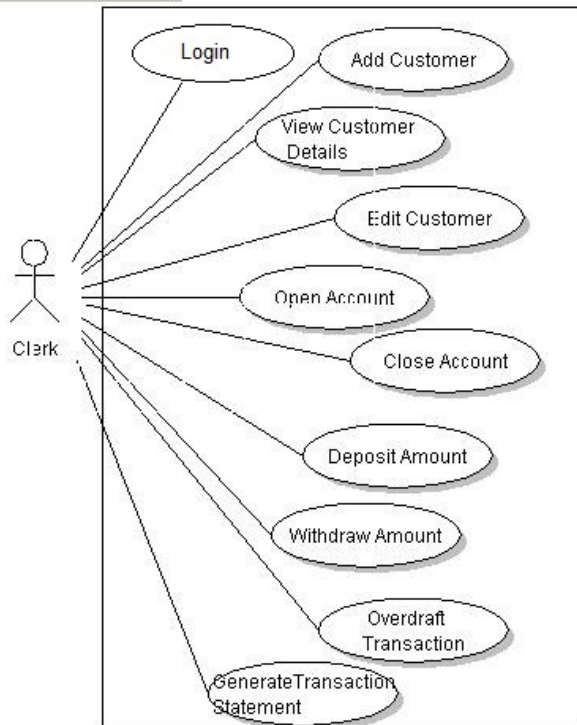3. Actors need not be always human; they can represent even external systems.

Goals of Clerk (Primary Actor):
1. Login to the application
2. Adding a new customer
3. List all customers
4. Search Customer Details
5. Update Customer Details
6. Delete Customer Details (A customer can be deleted only if there is no account associated with that particular customer)
7. Open Account
8. Close Account

9. Deposit Amount
10. Withdraw Amount (Before performing the with draw check enough balance available for Cash Credit account. Generate a business exception if not enough balance. Also check the necessary condition for overdraft scenario and generate the exception accordingly.)
11. Overdraft Transaction
12. Generate Transaction Statement

User Case Diagram:

ABC Banking System:
Use Case Diagram

Login

Add Customer

View Customer Details

Edit Customer

Open Account

Clerk

Close Account
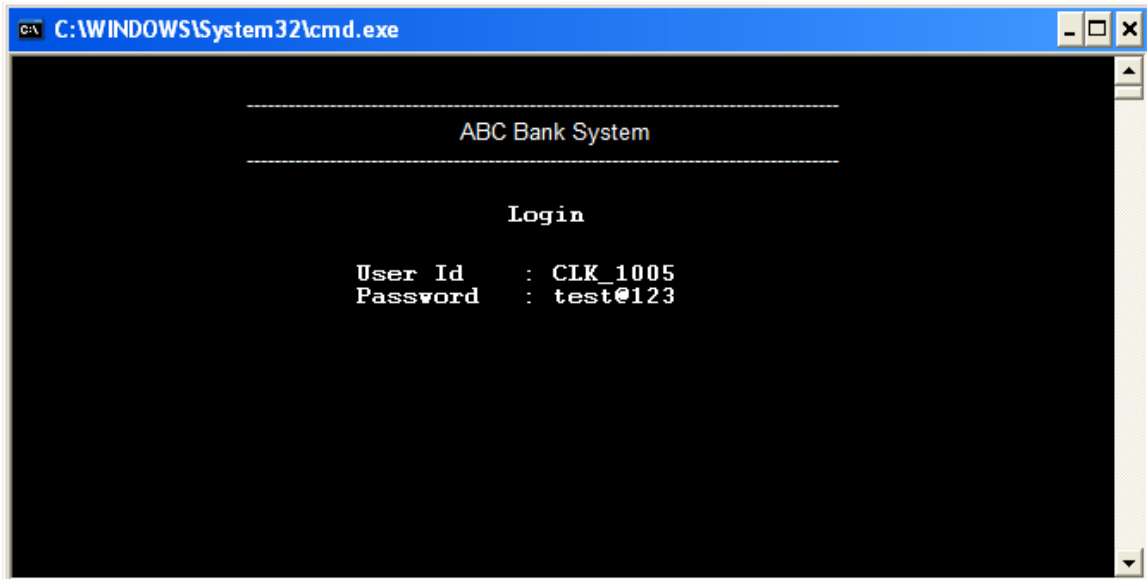
Deposit Amount

Withdraw Amount

Overdraft Transaction

GenerateTransaction Statement
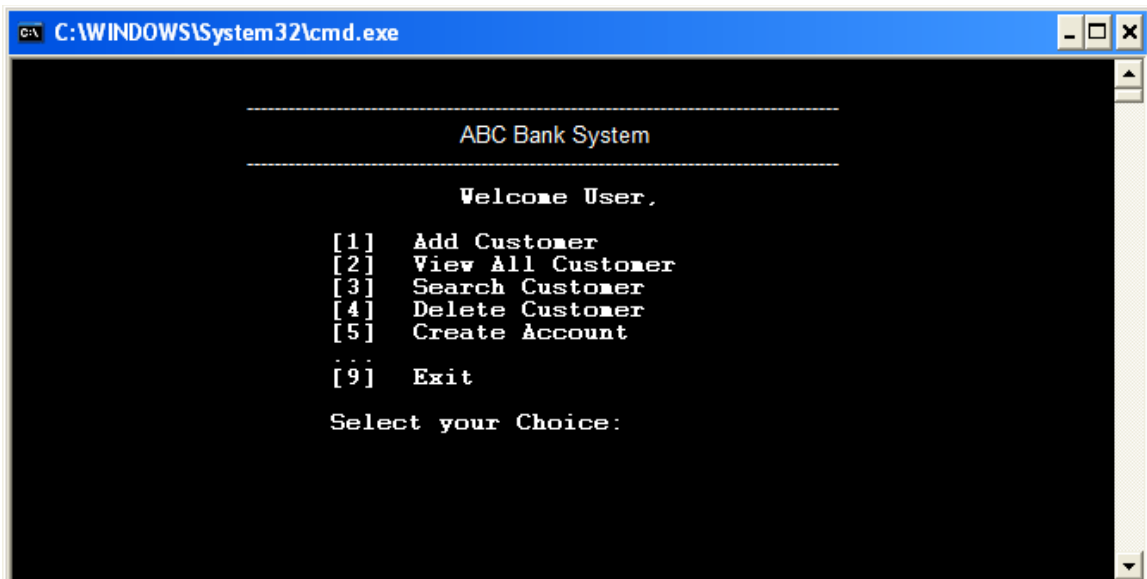
Artifacts to be generated:

1. Database design
2. Command based application for ABC Bank System

Sample Screens

```
------------------------------------------------------
                   ABC Bank System
------------------------------------------------------

                        Login

          User Id    : CLK_1005
          Password   : test@123
```

Login Screen

```
------------------------------------------------------
                   ABC Bank System
------------------------------------------------------
                   Welcome User,

          [1]   Add Customer
          [2]   View All Customer
          [3]   Search Customer
          [4]   Delete Customer
          [5]   Create Account
          ...
          [9]   Exit

          Select your Choice:
```

Accountant Home Screen

```
-------------------------------------------------------------
                    ABC Bank System
-------------------------------------------------------------
              Customer Registration

        Name            : Akshay
        Customer Id     : C10001
        Gender          : M
        Email           : akshay@gmail.com
        Phone           : 9874563210
        Address         : 12/4567 Stokan Street SG
```

Customer Registration Screen

```
-------------------------------------------------------------
                    ABC Bank System
-------------------------------------------------------------
              Customer Registration


Customer Registered Successfully...

Press [ENTER] to continue.
```

Customer Registration Response Screen