

Introduction

An automated teller machine (ATM) is computerized telecommunications device that provides a financial institution's customers a secure method of performing financial transactions, in a public space without the need for a human bank teller. Through ATM, customers interact with a user-friendly interface that enables them to access their bank accounts and perform various transactions.

Problem Statement

Create an ATM interface application using Java. This project should be console-based application (if you have GUI knowledge, you can implement it). If you start running the program,

you should be prompted for user id (representing card) and user pin. If entered it successfully, then the application should unlock all the functionalities which typically exist in an ATM.

The core operations to implement are login, show transactions history(statement) with balance, withdraw, deposit, transfer between accounts of the same customer, pay beneficiary, change user pin and quit. You can add more functionalities if you can.

At minimal, the implementation should have account holder, account, bank transaction, bank, and ATM. Be creative/innovative as you can.

Design task and purpose

1. Check the balance: the initial balance
2. ATM withdrawals, withdrawal and amount is not allowed to be overdrawn.
3. ATM deposits: negative deposits are not allowed.
4. Modify the password: Only the old password is correct, the new password meets the requirements, and the two input is the same The password can be changed successfully only after.

User login interface

When logging in, you should enter the correct username and password. If you enter the wrong username and password, it will prompt login failure. After filling in the correct username and password, you will be redirected to another page with optional features.

User selection

After entering the correct username and password, you will enter the user selection menu. Users can choose to deposit, see accounts, withdraw, transfer and modify password operations.

User balance query module

After the user selects the balance query number, the balance will appear on the console.

Function balance inquiry

Query the remaining balance in the login card number

User withdrawal module design

Function withdrawal the login card number can be withdrawn, And the balance will be subtracted.

UserDeposit

Deposit operations can be performed on the login card number, and negative deposits cannot occur.

ChangePinCode

The password of the login card number can be modified, Only the old password is correct, and the new password meets the requirements. And the password can be changed successfully only when the two entries are the same.

Transfer

Transfer operations can be performed on the login card number.

ATM System use case model

