CASE STUDY-2 ATM (PART 2)

........PLEASE READ ALL THE CONTENT AND POINTS GIVEN........

The whole program is divided into two parts. First one is used by users for doing transactions in ATM. The second one is for Bank Manager for adding new accounts, deleting an account, changing some conditions in ATM etc.

Each user has one unique account number, and they can use facilities provided by ATM by giving their account number and PIN to ATM. An account number is a five-digit number, and the PIN is also a five-digit number.

Each user can have a Current Account or Savings Account.

Each user has the following transaction options :

1. Balance Inquiry
2. PIN change
3. Transfer
4. Withdrawal
5. Deposit
6. Block Card
7. Mini Statement

• A user can access ATM facilities by either giving his PIN or OTP along with Account Number. OTP is printed in the console for each transaction in a separate new line.

• A user has a specific no of chances for giving the wrong PIN or OTP to the ATM. If they exceed that limit than for a certain amount of time their card will be Blocked and that user can do NO transaction.

• In Mini Statement 8 most recent transactions of the user will be shown.

The Manager has a separate interface for doing changes.

He/She can do the following :

1. Add account
2. Delete Account
3. Change Bank name
4. Change limit of max notes
5. Change limit of max cash withdraw
6. Change limit of max cash deposit
7. Change Total cash in ATM

8. Block or Unblock card

9. Change Transaction Charge

10. Change Bank code

11. Change No of Tries (no of times a user can give wrong PIN or OTP)

12. Change Time Limit (Time for which card of the user will be blocked after unsuccessful attempts of login to the ATM)

• When money is loaded in ATM manager can change the amount from BankManager.java program by changing total cash in ATM.

• Bank Manager can Block or UnBlock ATM card of the user so that user cannot access ATM anymore.

• I have given unique code to each bank so that when the user of other bank comes to this atm, he will be charged for each transaction.

• Since Bank Manager has no access to the PIN of AccountHolders while adding a new account to the database, he is not giving any input of PIN of the user. That's why for the new user I am generating a random five-digit number, and after encrypting it, I am adding it to the database.

• All the newly added account to the database by Bank Manager are not Blocked by default.

• Also an account number can have only one type of account i.e either Savings or Current

NOTE :

•Since the PINs of users are encrypted you cannot see actual PIN in the database. That's why I am giving some account numbers and their PINS in this file. But you can also login through OTP without the need of PIN, and later you can change PIN and access it.

Account Number	PIN
10025	11223
10235	10235
14523	32541
10237	56565

(Also the PIN of new user added to the database by Bank Manager cannot be known that's why please login through OTP and do transactions and you can also change the PIN.)

Please NOTE :

I used SQLite database for storing data of users and some details of ATM and Bank.

PLEASE change the path of the "atmdata.db" database file in the "DataConnection.java" file.

Run the file "ATM.java" for doing transactions which are done at real ATM.

Run the file "BankManager.java" for ATM-related changes done by Manager.

Manager password: 55645 (required for accessing Manager's dashboard)

I also included SQLite-JDBC-driver file in the repository which I used to install the SQLite database in my system along with the database file.

(If by any chance, the program does not run due to some paths, download or any reason., PLEASE TELL ME because it runs on my laptop perfectly and because I am new to use database and GUI I may not provide all the necessary info to you)