**Low-Level Design (LLD)**

***User authentication module:***

The user authentication module can be designed with a class named "UserAuthentication." This class should contain two methods, "authenticateUser()" and "validateUserCredentials()". The "authenticateUser()" method should prompt the user to enter the user id and pin, while the "validateUserCredentials()" method should validate the user credentials against the user account database.

***Account module:***

The account module can be designed with a class named "AccountDetails." This class should contain methods like "getAccountBalance()", "getAccountNumber()", and other account details. These methods should fetch the account details from the account database.

***Transaction module:***

The transaction module can be designed with a class named "Transaction." This class should contain methods like "deposit()", "withdraw()", "transfer()", and "viewTransactionHistory()". The "deposit()" method should deposit the specified amount into the user's account, while the "withdraw()" method should withdraw the specified amount from the user's account. The "transfer()" method should transfer the specified amount from the user's account to another user's account. The "viewTransactionHistory()" method should fetch the transaction history from the transaction database.

***ATM module:***

The ATM module can be designed with a class named "ATM." This class should contain the main method, which should integrate all the other modules and provide the user interface to access the functionalities of the ATM. The "main()" method should call the "authenticateUser()" method of the "UserAuthentication" class to authenticate the user. If the authentication is successful, it should proceed to the next module. Otherwise, it should prompt the user to enter the correct user id and pin. Once the user is authenticated, it should display the account details using the "getAccountDetails()" method of the "AccountDetails" class. The user should be able to perform all the banking transactions using the methods of the "Transaction" class. Finally, the user should be able to quit the ATM interface by selecting the "quit" option.