

Overall description:

Your team is employed by a bank to implement a system for the management of customers, accounts and loans.

Customer specifications:

The system must be able to store a number of different customers who have opened an account with the bank.

Each customer can have one or more accounts and each account is uniquely identifiable by an account number generated by the system uniquely. The system should be able to provide the following functionality:

- o Register a new customer and store details such as name, address, telephone, as well as some extra information (e.g., type of identification presented for joining the bank, account status (working/blocked) ), etc.

- o Add/delete/amend accounts for an existing customer. Also, change the status of an account (blocked, inactive, active).

- o Register a deposit made into an account, and record all related information: date, sum, type of deposit (i.e., cash, cheque, transfer).

- o Register a withdrawal from an account, and record all related information.

- o Provide loan facilities for the customers. A loan can be linked to a non-blocked and active account and should have information related to the length of the loan, repayment amounts, interests, starting/ending dates, etc. When a deposit is made to an account and there is one or more loans running, the customer may wish to deposit the money towards a specified loan.

- o Implement single or recurrent transfers of money between accounts. Related information to be recorded is setting date, starting date, ending date, account numbers, customers, etc.

- o Present management statistics about the bank customers, such as number of customers, number of accounts, average accounts per customers, (average) account balances, loan histories per account or overall average loan sum, etc.