

## Relational Schema

Client(username, firstname, lastname, email, password).

SystemAdmin(username, firstname, lastname, email, password).

Loan(username, bankID, loanNumber, amount, interestRate, type, installmentPerMonth, remainingBalance, rateType)

username references Client.

bankID references Bank.

Bank(bankID, name, routingNumber)

BankBranches(bankID, branches).

BankServicesOffered(bankID, servicesOffered).

ReportTheft(bankID, username)

Username references Client.

bankID references Bank.

ReportProblemClient(bankID, username).

Username references Client.

bankID references Bank.

ReportProblemSystemAdmin(bankID, username).

Username references SystemAdmin.

bankID references Bank.

TransactionLog(transactionNumber, type, date, To, From, Amount).

Receive(username, transactionNumber)

Username references Client.

transactionNumber references TransactionLog.

CreditCard(cardNumber, CVC, type, cardHolderName, PIN, expirationDate, issueDate,

username, BankAccount\_id, Bank\_bankID)

username references Client.

BankAccount\_id references BankAccount.

Bank\_bankID references Bank.

CreditCardTransactions(cardNumber, transaction).

BankAccount(id , type , balance , username).  
username references Client.

BankTransactions(id, transaction)  
Id references Bank.

ThirdPartyApp(appId, name, bankAccountId, cardNumber).  
cardNumber references CreditCard.

Reminder(message, client\_username , date, subscribed).  
client\_username references Client.

creditCardReminder(message, client\_username ,date, subscribed).  
client\_username references Client.

loanReminder(message, client\_username , date, subscribed).  
client\_username references Client.

otherReminders(message, client\_username , date, subscribed).  
client\_username references Client.

SendAnnouncements(client\_username, systemAdmin\_username)  
systemAdmin\_username references SystemAdmin.  
client\_username references Client.

RequestBankAccountCreation(username, bankID)  
Username references Client.  
bankID references Bank.