

# Project Relational Schema

WebApplication()

User(userID, name, email, phone, address)

NewUser(userID)

NewUser.userID references User

Client(clientID)

Client.clientID references User

Banker(bankerID, position)

Banker.bankerID references User

Account(accountNumber, status, balance, type)

Transaction(transactionID)

Payment(paymentID, transactionID)

Payment.transactionID references Payment

Transfer(transferID, transactionID, amount)

Transfer.transactionID references Transaction

OwnTransfer(transferID)

OwnTransfer.transferID references Transfer

InternalTransfer(transferID, distAccNumber)

InternalTransfer.transferID references Transfer

DomesticTransfer(accountNumber, bankName, transferID)

DomesticTransfer.transferID references Transfer

InternationalTransfer(accountNumber, bankName, transferID)

InternationalTransfer.transferID references Transfer

Loan(loanID, amount, interestRate, startDate, endDate)

LoanBill(bill\_ID, amount, dueDate, status, remaining, loanID)

LoanBill.loanID references Loan

Personal\_Loan(loanID)

PersonalLoan.loanID references Loan

CarLoan(loanID)

CarLoan.loanID references Loan

CreditCard(cardNumber, status, type)

CreditCardBill(bill\_ID, amount, dueDate, status, cardNumber)

CreditCardBill.cardNumber references CreditCard

CreditCardTransaction(transactionID, amount, merchant, date, cardNumber)

CreditCardTransaction.cardNumber references CreditCard

CreditCardCreditScore(creditScoreID, score, status, cardNumber)

CreditCardCreditScore.cardNumber references CreditCard

Bill(bill\_ID, debtor, amount, status, dueDate)

ExternalAccount(bankID, bankName)

ThirdPartyApp(applID, appName)

Notification(notificationID)

NewUserRegister(username, password, userID)

NewUserRegister.userID references NewUser

ClientLogIn(username, password, clientID)

ClientLogIn.clientID references Client

ClientTechErrReport(clientID, errorMSG)

ClientTechErrReport.clientID references Client

ClientOpenAcc(clientID, accountNumber, status, balance, type)

ClientCloseAcc(clientID, accountNumber)

ClientHaveAcc(clientID, accountNumber, status, balance, type)

ClientReceiveNoti(notificationID, clientID, bankAnnounMSG)

ClientReceiveNoti.notificationID references Notification

ClientReceiveNoti.clientID references Client

BankerLogIn(username, password, bankerID)

BankerLogIn.bankerID references Banker

ClientApplyBankerApproveLoan(clientID, bankerID, loanID)

ClientApplyBankerApproveLoan.clientID reference Client

ClientApplyBankerApproveLoan.bankerID reference Banker

ClientApplyBankerApproveLoan.loanID reference Loan

ClientApplyBankerApproveCard(clientID, bankerID, cardNumber)

ClientApplyBankerApproveCard.clientID reference Client

ClientApplyBankerApproveCard.bankerID reference Banker

ClientApplyBankerApproveCard.cardNumberID reference CreditCard

IssueSolvedNotification(clientID, notificationID, IssueSolvedMSG)

IssueSolvedNotification.clientID references Client

IssueSolvedNotification.notificationID references Notification

ClientReceiveLoanBillNotification(clientID, bill\_ID, notificationID, BillMSG)  
ClientReceiveLoanBillNotification.clientID references Client  
ClientReceiveLoanBillNotification.bill\_ID references LoanBill  
ClientReceiveLoanBillNotification.notificationID references Notification

ClientReceiveCardBillNotification(clientID, bill\_ID, notificationID, BillMSG)  
ClientReceiveCardBillNotification.clientID references Client  
ClientReceiveCardBillNotification.bill\_ID references CreditCardBill  
ClientReceiveCardBillNotification.notificationID references Notification

ClientSetBillNotification(clientID, bill\_ID, notificationID)  
ClientSetBillNotification.clientID references Client  
ClientSetBillNotification.bill\_ID references Bill  
ClientSetBillNotification.notificationID references Notification

ClientReceiveBillNotification(clientID, bill\_ID, notificationID, BillMSG)  
ClientReceiveBillNotification.clientID references Client  
ClientReceiveBillNotification.bill\_ID references Bill  
ClientReceiveBillNotification.notificationID references Notification

CardReplacement(accountNumber, cardNumber, bankerID)  
CardReplacement.accountNumber references Account  
CardReplacement.cardNumber references CreditCard  
CardReplacement.bankerID references Banker

AccMakeTransc(transactionID, accountNumber)  
AccMakeTransc.accountNumber references Account

OwnTransferto(transactionID, transferID)  
OwnTransferto.transactionID references Transaction  
OwnTransferto.transferID references OwnTransfer

InternalTransferto (transactionID, transferID, distAccNumber)  
InternalTransferto.transactionID references Transaction  
InternalTransferto.transferID references Transfer  
InternalTransferto.distAccNumber references InternalTransfer

DomesticTransferto (transactionID, transferID, accNumber, bankName)  
DomesticTransferto.transactionID references Transaction  
DomesticTransferto.transferID references DomesticTransfer

InternationalTransferto (transactionID, transferID, accNumber, bankName)  
InternationalTransferto.transactionID references Transaction  
InternationalTransferto.transferID references InternationalTransfer

PayBills(transactionID, paymentID)  
PayBills.transactionID references Transaction  
PayBills.paymentID references Payment

PayBillsThirdPartyApps(transactionID, paymentID, bill\_ID, applD, amount)  
PayBillsThirdPartyApps.transactionID references Transaction  
PayBillsThirdPartyApps.paymentID references Payment  
PayBillsThirdPartyApps.bill\_ID references Bill  
PayBillsThirdPartyApps.applD references ThirdPartyApp