

Online Banking System Relational Schema

Transaction (date, amount, transactionID)

AccountTransaction (date, amount, transactionID)

CreditCardTransaction (date, amount, transactionID)

BankAccount (IBAN, BIC)

OtherBankAccount (IBAN, BIC)

MyBankAccount (IBAN, BIC, balance, accountType, clientID)

MyBankAccount.clientID *references* Client

CreditCard (limit, cardNumber, state, cvv, expiryDate, PIN, points, cardHolderName, clientID, bankerID)

CreditCard.clientID *references* Client

CreditCard.bankerID *references* Banker

Loan (loanID, state, type, settlementPlan, amount, interest, clientID, bankerID)

Loan.clientID *references* Client

Loan.bankerID *references* Banker

User (address, phoneNumber, username, name, password, e-signature, birthDate)

Client (address, phoneNumber, username, clientID, name, password, e-signature, birthDate)

Banker (address, phoneNumber, username, bankerID, name, password, e-signature, birthDate)

Admin (address, phoneNumber, username, adminID, name, password, e-signature, birthDate)

Report (reportID, details, adminID, bankerID, clientID)

Report.clientID *references* Client

Report.bankerID *references* Banker

Report.adminID *references* Admin

Notification (type, notificationID, message, adminID, bankerID, clientID)

Notification.clientID *references* Client

Notification.bankerID *references* Banker

Notification.adminID *references* Admin

Reminder (time, type, reminderID, clientID)

Reminder.clientID *references* Client

ThirdPartyApplication (name, applID, clientID)

ThirdPartyApplication.clientID *references* Client

TransferMyAccountToOtherAccount (type, myClientID, myIBAN, otherIBAN)

TransferMyAccountToOtherAccount.myClientID *references* Client

TransferMyAccountToOtherAccount.myIBAN *references* MyBankAccount

TransferMyAccountToOtherAccount.otherIBAN *references* OtherBankAccount

ViewAccountTransaction (IBAN, clientID, transactionID)

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ViewAccountTransaction.clientID *references* Client

ViewAccountTransaction.IBAN *references* MyBankAccount

ViewAccountTransaction.transactionID *references* AccountTransaction

ViewCreditCardTransaction (cardNumber, clientID, transactionID)

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ViewAccountTransaction.clientID *references* Client

ViewCreditCardTransaction.cardNumber *references* CreditCard

ViewAccountTransaction.transactionID *references* CreditCardTransaction

ApplyForCreditCard (state, cardNumber, clientID, bankerID)

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ApplyForCreditCard.cardNumber *references* CreditCard

ApplyForCreditCard.clientID *references* Client

ApplyForCreditCard.bankerID *references* Banker

OpenBankAccount (state, clientID, bankerID, IBAN)

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OpenBankAccount.IBAN *references* MyBankAccount

OpenBankAccount.clientID *references* Client

OpenBankAccount.bankerID *references* Banker

CloseBankAccount (state, clientID, bankerID, IBAN)

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CloseBankAccount.IBAN *references* MyBankAccount

CloseBankAccount.clientID *references* Client

CloseBankAccount.bankerID *references* Banker

PayCreditCardBillWithAccount (cardNumber, clientID, IBAN)

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PayCreditCardBillWithAccount.cardNumber *references* CreditCard

PayCreditCardBillWithAccount.clientID *references* Client

PayCreditCardBillWithAccount.IBAN *references* MyBankAccount

GetCreditCardPoints (amount, transactionID, cardNumber)

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GetCreditCardPoints.cardNumber *references* CreditCard

GetCreditCardPoints.transactionID *references* CreditCardTransaction

ReportCreditCard (issue, clientID, cardNumber)

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ReportCreditCard.cardNumber *references* CreditCard

ReportCreditCard.clientID *references* Client