

Primary Key: Underlined
Foreign Key: Highlighted Yellow
References: Foreground Color Red

BankAccount(Account_Number, National_ID, IBAN, Branch_Code, Balance)

BankAccount.National_ID references User.National_ID

InternationalTransfer(Transfer_ID, Amount, Timestamp, TransferType, SenderID, ReceiverID, Account_Number)

InternartionalTransfer.Account_Number references BankAccount.Account_Number

DomesticTransfer(Transfer_ID, Amount, Timestamp, TransferType, Sender_ID, Receiver_ID, Account_Number)

DomesticTransfer.Account_Number references BankAccount.Account_Number

InternalTransfer(Transfer_ID, Amount, Timestamp, TransferType, Sender_ID, Receiver_ID)

BankAccountInternalTransferBankAccount(SenderAccountNumber, Transfer_ID, ReceiverAccountNumber)

BankAccountInternalTransferBankAccount.SenderAccountNumber references BankAccount.Account_Number

BankAccountInternalTransferBankAccount.ReceiverAccountNumber references BankAccount.Account_Number

BankAccountInternalTransferBankAccount.Transfer_ID references InternalTransfer.Transfer_ID

Bank(Name, Bankers, Admins, Clients)

Constraint.Bank: Can only hold one record

CreditCard(CardNumber, CVV, Limit, Status, Points, Expiration_Date, Billing_Date, Debt, Account_Number)

CreditCard.Account_Number references BankAccount.Account_Number

Loan(LoanID, Amount, Status, PaymentStartegy, RemainingDebt, InterestRate, MonthsToPay, Remaining_Debt, Account_Number)

CreditCard.Account_Number references BankAccount.Account_Number

Pay(Account_Number, Loan_ID, Amount)

Pay.Account_Number references BankAccount.Account_Number

Pay.Loan_ID references Loan.Loan_ID

Transaction(Transaction_Id, Currency, Amount, Withdrawal_Account, Depositor_Account, Timestamp, Account_Number)

Transaction.Account_Number references BankAccount.Account_Number

LoanRequest(Request_ID, Status, Amount, National_ID, Account_Number)

LoanRequest.Account_Number references BankAccount.Account_Number

LoanRequest.National_ID references Banker.National_ID

CreditCardRequest(Request_ID, Limit, Status, National_ID, Account_Number)

CreditCardRequest.Account_Number references BankAccount.Account_Number

CreditCardRequest.National_ID references Banker.National_ID

NonTechnicalReport(Report_ID, Client_ID, Banker_ID, Lost_Card_Number)

NonTechnicalReport.Banker_ID references Banker.National_ID

NonTechnicalReport.Client_ID references Client.National_ID

NonTechnicalReport.Lost_Card_Number references CreditCard.Card_Number

TechnicalReport(Report_ID, Client_ID, Banker_ID, Admin_ID)

Client_ID XOR Banker_ID must be null

TechnicalReport.Admin_ID references Admin.National_ID

TechnicalReport.Client_ID references Client.National_ID

TechnicalReport.Banker_ID references Banker.National_ID

AdminTechnicalReport(Report_ID, National_ID)

AdminTechnicalReport.Report_ID references TechnicalReport.Report_ID

AdminTechnicalReport.National_ID references Admin.National_ID

Message(ID, Content, Timestamp, Report_ID)

Message.Report_ID references Report.Report_ID

Admin(National_ID, Phone_Number, Date_of_Birth, Fullname, Username, Password, Address, Email_Address, BName)

Admin.BName references Bank.BName

Banker(National_ID, Phone_Number, Date_of_Birth, Fullname, Username, Password, Address, Email_Address, BName)

Banker.BName references Bank.BName

Client(National_ID, Phone_Number, Date_of_Birth, Fullname, Username, Password, Address, Email_Address, Credit_Score, BName)

Client.BName references Bank.BName

Reminders(ID, Timestamp, Type, Account_Number)

Reminders.Account_Number references BankAccount.Account_Number