

Relational schema

CreditCard (Credit_Card_Number, Pin, Date_Issued, Type ,
Points, Credited_Amount , Expiry_Date, Monthly_Income, Limit,
B_ID, C_ID)

-CreditCard.C_ID references Client

-CreditCard.B_ID references Banker

ApplyCC (C_ID, Card_Number, New/Replacement)

-ApplyCC.C_ID references Client

-ApplyCC.Card_Number references CreditCard

Pay_off_Bill (Credit_Card_Number, Account_no. , Partially/Fully)

-Pay_off_Bill.Credit_Card_Number references CreditCard

-Pay_off_Bill.Account_no.references Account

Credit_Card_Payment(Transaction_ID, Payment_ID, Interest,
Card_Number)

-Credit_Card_Payment.Transaction_ID references Transactions

-Credit_Card_Payment. Card_Number references CreditCard

User (User_ID, Password)

Client (User_ID, C_National_ID, Full_Name, Address, Email, Points)

-Client.User_ID references User

-Client.Points references Points

Client_Phones (C_National_ID, Phone_Number)

-Client_Phones.C_National_ID references Client

Admin (User_ID)

-Admin.User_ID references User

Banker (User_ID, B_National_ID, Full_Name, Address, Email)

Banker.B_National_ID references User

Banker_Phones (B_National_ID, Phone_Number)

-Banker_Phones.C_National_ID references Banker

Reports (Report_Number, Type, Date_issued, Issuing_Client, Responding_Admin, Responding_Banker)

-Reports.Issuing_Client references Client

-Reports.Responding_Banker references Banker

-Reports.Responding_Admin references Admin

Certificate (Certificate_ID, Maturity_Date, Interest,
Duration,Client_ID)

-Certificate.Client_ID references Client

Redeem_Certificate (Client_ID, Certificate_ID, Partially/Fully)

-Redeem_Certificate.Client_ID references Client

-Redeem_Certificate. Certificate_ID references Certificate

Account (Account_No., IBAN, Current_Balance, Type, Currency,
Opening_Date, Client_ID)

-Account.Client_ID references Client

Loan (Loan_ID, Loaned_Amount, Due_Amount, Loan_purpose,
Type, Monthly_Income, Date_issued, Deadline, BaseInterest,
Client_ID, Banker_ID)

-Loan.Client_ID references Client

-Loan.Banker_ID references Banker

Transactions (Transaction_ID, Amount)

LoanPayment(Transaction_ID, Payment_ID, InterestOverDue,
Loan_ID)

-LoanPayment.Transaction_ID references Transactions

-LoanPayment.Loan_ID references Loan

Donation (Transaction_ID, Donation_ID, Type, Institute,
Account_no)

-Donation.Transaction_ID references Transactions

-Donation.Account_no references Account

BillPayment(Transaction_ID, Payment_ID, Type,
Account_Number)

-BillPayment.Transaction_ID references Transactions

-BillPayment.Account_Number references Account

InternalPayment (Bill_ID)

-InternalPayment.Bill_ID references BillPayment

ThirdPartyPayment(Bill_ID, NameofThirdParty)



-ThirdPartyPayment.Bill_ID references BillPayment

ViewTransactions (Transaction_ID, Account_no, Type, TimeFrame)



-ViewTransactions.Transaction_ID references Transactions

-ViewTransactions.Account_no references Account

Points (Amount, ExpiryDate)

Transfers(Transaction_ID, Transfer_ID, Reason, TimeFrame, Amount, TransferTime, Currency)



-Transfers.Transaction_ID references Transactions

InternalTransfer (Transfer_ID)



-InternalTransfer.Transfer_ID references Transfer

DomesticTransfer (Transfer_ID)



-DomseticTransfer.Transfer_ID

InternationalTransfer(Transfer_ID, IBAN)



-InternationalTransfer.Transfer_ID

OwnTransfer(Transfer_ID, SourceAccount, DestinationAccount)

-OwnTransfer.SourceAccount references Account

-OwnTransfer.DestinationAccount references Account

-OwnTransfer.Transfer_ID references Transfer

Beneficiary (National_ID, Account_no, IBAN , FullName ,
BankName, Country)

PerformsForeign(Benf_ID, Source_Account, InterTransfer)

-PerformsForeign.Benf_ID references Beneficiary

-PerformsForeign.Source_Account references Account

-PerformsForeign.InterTransfer references InternationalTransfer

PerformsDom (Benf_ID, Source_Account, InterTransfer)

-PerformsDom.Benf_ID references Beneficiary

-PerformsDom.Source_Account references Account

-PerformsDom.DomesticTransfer references Domestic

PerformsInternal (Benf_ID, Source Account, InternalTransfer)

-PerformsInternal.Benf_ID references Beneficiary

-PerformsInternal.Source_Account references Account

*-PerformsInternal.InternalTransfer references
InternationalTransfer*

NotificationsHub (Title, Reason)

ReceiveNotifs (Client_ID, NotifTitle)

ReceiveNotifs.Client_ID references Client

ReceiveNotifs.NotifTitle references NotificationsHub

Reminders(Title, Time)

SetReminder (Title, Client_ID)

SetReminder.Client_ID references Client

SetReminder.NotifTitle references NotificationsHub