Relational Schema

User (<u>user_id</u>, username, password, first_name, last_name, email, national_id)

Client (<u>user_id</u>, phone_number, date_of_birth, country, city, street, credit_score, income, employee_status)

Client.user_id references User

Banker (<u>user_id</u>, hire_date, years_of_experience)

Bank.user_id references User

Bank.years_of_experience As Year (current_date) – Year(hire_date)

Admin (<u>user_id</u>)

Admin.user_id references User

Account (<u>account_number</u>, <u>Iban</u>, balance, interest_rate, type, date_opened, <u>client_id</u>, <u>banker_id</u>) Account.client_id references Client

Account.banker_id references Banker

Credit Card (<u>credit_card_id</u>, amount, type, credit_limit, credit_score, interest_rate date_opened, <u>client_id</u>,<u>banker_id</u>)

Credit Card.client_id references Client

Credit Card.banker_id references Banker

Credit Card Bill (<u>bill_id</u>, amount, type, due_date, <u>credit_card_id</u>, <u>account_number</u>, <u>reminder_id</u>, <u>client_id</u>)

Credit Card Bill.credit_card_id references Credit Card

Credit Card Bill.account_number references Account

Credit Card Bill.(reminder_id,user_id) references Payment Reminder

Reward Points (<u>credit_card_id</u>, <u>points_id</u>, number)

Reward Points.credit_card_id references Credit Card

Loan (<u>loan_id</u>, amount, interest_rate, income, employee_status, start_date, due_date, status, credit_score, duration, <u>client_id</u>, <u>banker_id</u>)

Loan.client_id references Client

Loan.banker_id references Banker

Loan.duration As Current(date_time) – (start_date)

Personal Loan (<u>loan_id</u>)
Personal Loan.loan_id references Loan

Car Loan (<u>loan_id</u>, car_model, car_model_year)
Car Loan.loan_id references Loan

Bank Transfer (<u>transfer_id</u>, amount, transfer_date, transfer_status, <u>sender_account_number</u>, <u>receiver_id</u>)

Bank Transfer.sender_account_number references Account

Bank Transfer.receiver_id references Beneficiary

Own (<u>transfer_id</u>)
Own.transfer_id references Bank Transfer

Internal (<u>transfer_id</u>)
Internal.transfer_id references Bank Transfer
Domestic (<u>transfer_id</u>, city, bank_name)

Domestic.transfer_id references Bank Transfer

International (transfer_id, country, city, bank_name)

International.transfer_id references Bank Transfer

Beneficiary (beneficiary_id, beneficiary_name, receiver_account_number, receiver_iban)

Payment Reminder (client_id, reminder_id, type, amount, due_date_time, bill_id)

Payment Reminder.client_id references Client

Payment Reminder.bill_id references Bill

Bill (bill_id, bill_amount, late_payment_fee, bill_type, due_date, status, owner_account_number)

Bill.owner_account_number references Account

Reports (report_id, type, status, date_time, description, banker_id, client_id)

Reports.banker_id references Banker

Reports.client_id references Client

Request (request_id, amount, interest_rate, issued_date, type, banker_id, client_id)

Loan Request (request_id, documents, payment_option)

Loan Request.request_id references Request

Credit Card Request (request_id)

Credit Card Request.request_id references Request