## **Banking System Schema**

User(<u>username</u>, password)

Admin(<u>username</u>, admin\_id, name)

Banker(<u>username</u>, banker\_id, name)

Client Profile(<u>username</u>, client\_id)

-Client Profile. client \_id references Client.client\_id

Client(<u>client\_id</u>, full\_name, nationa\_id, phone\_num, address, email, gender, birth\_date)

Bank Account <u>id</u>, IBAN, type, currency, balance, status, <u>client\_id</u>)
-Bank Account.client\_id references Client.client\_id

Credit Card(<u>card\_id</u>, card\_number, issue\_date, expiry\_date, ccv, points, <u>client\_id</u>)
-Credit Card.client\_id references Client.client\_id

Account Transaction(<u>transaction\_id</u>, type, amount, timestamp, status, account\_id)

-Account Transaction.account\_id references Bank Account.account\_id

Credit Card Transaction(<u>transaction\_id</u>, type, amount, timestamp, status, <u>card\_id</u>)

-Credit Card Transaction.card\_id references Credit Card.card\_id

Internal Transfer(<u>transfer\_id</u>, amount, timestamp, status, sender\_acc\_id, receiver\_acc\_id)

-Internal Transfer.sender\_acc\_id references Bank Account.account\_id-Internal Transfer.receiver acc id references Bank Account.account id

External Transfer(<u>transfer\_id</u>, amount, timestamp, status, account\_id, recepient\_IBAN, BIC)

-External Transfer.account\_id references Bank Account.account\_id

Loan(<u>loan\_id</u>, amount, start\_date, end\_date, num\_of\_installments, interest\_rate, client\_id)

-Loan.client\_id references Client.client\_id

Personal Loan(<u>loan\_id</u>, type)

Car Loan(<u>loan\_id</u>, car\_model)

Bill(<u>bill\_id</u>, amount, due\_date, status, <u>client\_id</u>)
-Bill.client\_id references Client.client\_id

Utility Bill(bill\_id, type, recepient\_IBAN)

Credit Card Bill(bill id, type, card id)

-Credit Card Bill.card\_id references Credit Card.card\_id

Loan Bill(bill\_id, loan\_id)

-Loan Bill.loan\_id references Loan.loan\_id

Bill Reminder(<u>reminder\_id</u>, date, time, description, client\_id, bill\_id)

-Bill Reminder.client\_id references Client.client\_id

-Bill Reminder.bill\_id references Bill.bill\_id

Bank Announcement(<u>announcement\_id</u>, category, content, timestamp, banker\_id)

-Bank Annoucement.banker\_id references Banker.banker\_id

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Client Request(<u>request_id</u>, status, timestamp, client_id, banker_id)
  -Client Request.client id
                              references Client.client id
  -Client Request.banker id
                              references Banker.banker id
Credit Card Request(request id, annual income)
Loan Request(request_id, amount)
Card Replacement Request(request id, old card id)
  -Card Replacement Request.old card id
                                              references
                                                           Credit Card.card id
Client Request Supervisor(request id, banker id)
  -Client Request Supervisor.request id references
                                                     Client Request.request id
  -Client Request Supervisor.banker id references
                                                     Banker.banker id
Client Report(report id, report content, timestamp, status, client id)
  -Client Report.client id
                              references Client.client id
Credit Card Report(report id, banker id)
  -Credit Card Report.banker id
                                       references
                                                       Banker.banker id
Technical Report(report id, admin_id)
 -Technical Report.admin id references Admin.admin id
Credit Card Report Supervisor(report id, banker id)
  -Credit Card Report Supervisor.report id
                                                 references
      Credit Card Report.report id
  -Credit Card Report Supervisor.banker id
                                                 references
                                                             Banker.banker id
Technical Report Supervisor(report id, admin id)
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-Technical Report Supervisor.report id references Technical Report.report id

Admin.admin id

-Technical Report Supervisor.admin id references