User(<u>username</u>, password)
Admin(<u>username (FK)</u>, name)
Admin.username references User.username
Client(<u>username</u>(FK), national id, name, DOB, phone number, address, banker_username (FK))
Client.username references User.username
Client.banker_username references Banker.username

Banker(<u>username</u>(FK), employee id, name, email)
Banker.username references User.username

Transaction(<u>transaction id</u>, date, amount, type, banker_username (FK), owner_username (FK))
Transaction.owner_username references Client.username
Transaction.banker_username references Banker.username

CreditCardTransaction(<u>transaction id</u>(FK), credit_card_number)
CreditCardTransaction.transaction_id references Transaction.transaction_id

BankAccountTransaction(<u>transaction_id</u>(FK), account number (FK))
BankAccountTransaction.transaction_id references Transaction.transaction_id

Request(<u>request id</u>, date, client_username (FK), banker_username(FK))
Request.client_username references Client.username
Request.banker_username references Banker.username

CreditCardApplication(<u>request_id</u>(FK), monthly_salary, limit, username (FK))
CreditCardApplication.request_ID references Request.request_id
CreditCardApplication.username references Client.username

LoanApplication(<u>request_id</u>(FK), account number, purpose, collateral, date, type, amount, username (FK))
LoanApplication.request_ID references Request.request_id
LoanApplication.username references Client.username

Notification(<u>notification_id</u>, message, type, admin_username (FK))
Notification.username references Admin.username

Reminder(<u>reminder_id</u>, message, category, client_username (FK))
Reminder.client_username references client.username

CreditCard(<u>Credit_Card_Number</u>, expiry_date, CVV, PIN, amount, limit, transaction_history, state, banker_username (FK), owner_username (FK))

CreditCard.owner_username references Client.username
CreditCard.banker_username references Banker.username

Points(Credit_Card_Number (FK), amount, expiry date)
Points.credit_card_number references CreditCard.credit_card_number

Loan(loan_id, type, date, total_amount, remaining_amount, client_username (FK))
Loan.username references client.username

Transfer(transfer_id, amount, reason, time, date)

InternalTransfer(transfer_id(FK))
InternalTransfer.transfer_id references Transfer.transfer_id

DomesticTransfer(transfer_id (FK), receiver IBAN, receiver SWIFT)
DomesticTransfer.transfer_id references Transfer.transfer_id

InternationalTransfer(transfer_id (FK), destination country, fee, amount in foreign currency)
InternationalTransfer.transfer_id references Transfer.transfer_id

Bill(bill_id, date, deadline, type, total_amount, paid_amount, outstanding_amount)

BankAccount(account_number, type, IBAN, balance, blocked, owner_username(FK),
open/close_username (FK))
BankAccount.owner_username references client.username
BankAccount.open/close_username references client.username

Report(report_id, message, reason, banker_username (FK), client_username(FK))
report.client_username references Client.username
report.banker_username references Banker.username

TechnicalIssue(report_id(FK), message, username(FK))
TechnicalIssue.report_id references Report.report_id
TechnicalIssue.username references Admin.username

CreditCardIssue(report_id(FK), credit_card_number)
CreditCardIssue.report_id references report.report_id

pays(username (FK), bill_id (FK), account_number (FK))
pays.username references client.username
pays.bill_id references bill.bill_id

pays.account_number references bankAccount.account_number

transfers(sender_account_number (FK), receiver_account_number (FK), transfer_id (FK))
transfers.sender_account_number references bankAccount.account_number
transfers.receiver_account_number references bankAccount.account_number
transfers.transfer_id references transfer.transfer_id

receivesNotification(notification_ID (FK), username(FK))
receivesNotification.notification_ID references Notification.notification_ID
receivesNotification.username references User.username