German University in Cairo

Software Engineering - **CSEN 603**

Milestone 2
Team 91 - Naafy

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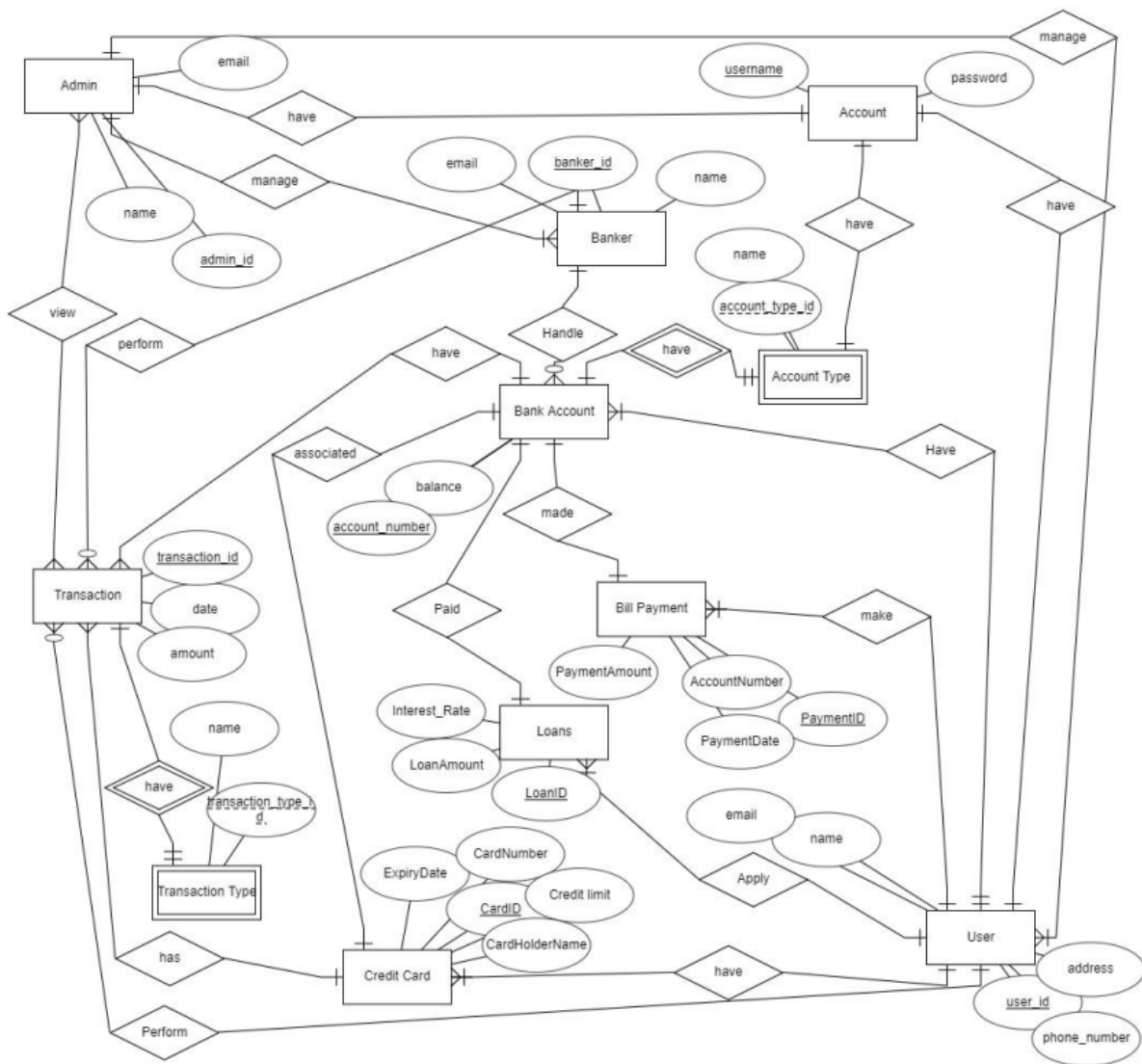Aly Elhussein 52-3402
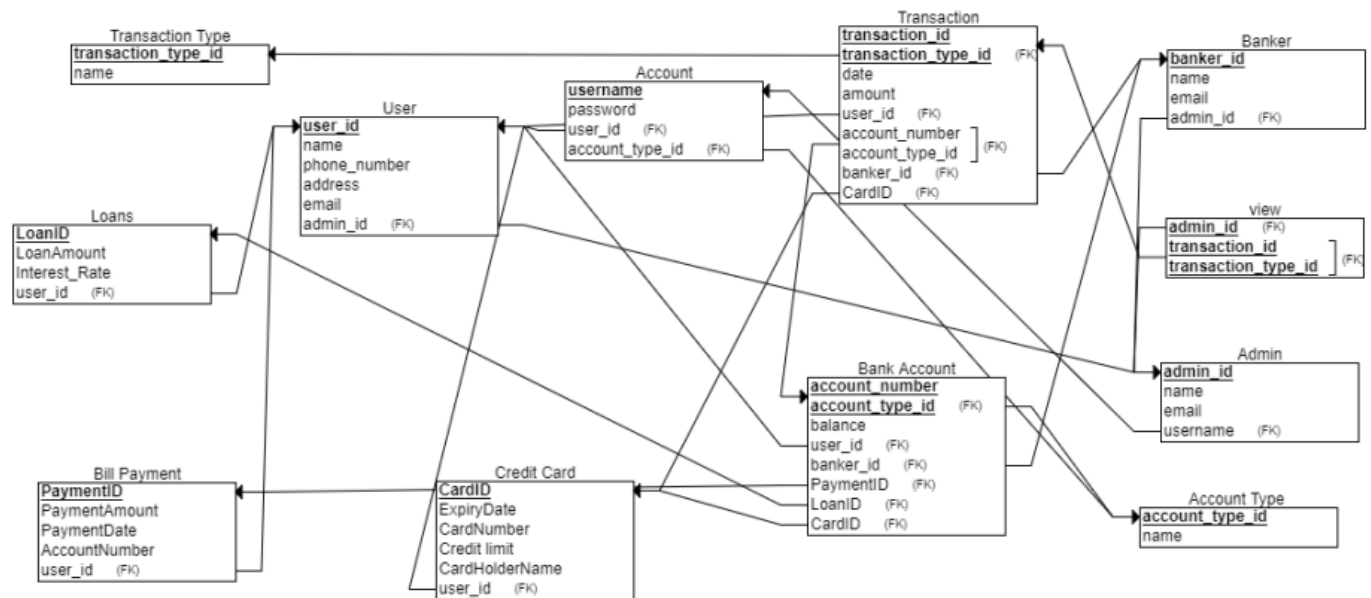Adham Hesham 52-20555

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ERD

Schema

Transaction Type
transaction_type_id
name

Transaction
transaction_id
transaction_type_id (FK)
date
amount
user_id (FK)
account_number
account_type_id (FK)
banker_id (FK)
CardID (FK)

Banker
banker_id
name
email
admin_id (FK)

Account
username
password
user_id (FK)
account_type_id (FK)

User
user_id
name
phone_number
address
email
admin_id (FK)

view
admin_id (FK)
transaction_id
transaction_type_id (FK)

Loans
LoanID
LoanAmount
Interest_Rate
user_id (FK)

Bank Account
account_number
account_type_id (FK)
balance
user_id (FK)
banker_id (FK)
PaymentID (FK)
LoanID (FK)
CardID (FK)

Admin
admin_id
name
email
username (FK)

Bill Payment
PaymentID
PaymentAmount
PaymentDate
AccountNumber
user_id (FK)

Credit Card
CardID
ExpiryDate
CardNumber
Credit limit
CardHolderName
user_id (FK)

Account Type
account_type_id
name

Component Diagram

Online Banking System

<<Subsystem>>User & info management

User info Storage

Admin / banker / client info

User Session

Authenticate / login / signup

User authentication / Regestration

Manage Credit Cards

<<Subsystem>> credit cards & loans

Freeze / Add Credit Card

Manage Loans

Ask for Loan

<<Subsystem>>bills & payements/ Donations

Bill Payement History

Donate to Charity

<<Subsystem>> personal financial management

Manage Accounts

Account Balances

Manage Transactions

Transaction History

Class Diagram