

Relational Schema

User(national_id, full_name, username, password, email, date_of_birth)

UserPhoneNumbers(national_id, phone_number)

- UserPhoneNumbers.national_id references User.national_id

UserAddresses(national_id, address)

- UserAddresses.national_id references User.national_id

Client(national_id)

- Client.national_id references User.national_id

Admin(national_id)

- Admin.national_id references User.national_id

Banker(national_id)

- Banker.national_id references User.national_id

Notification(notification_id, title, message, time_sent)

Announcement(notification_id)

- Announcement.notification_id references Notification.notification_id

SpecificNotification(notification_id)

- SpecificNotification.notification_id references Notification.notification_id

Receive_notification(notification_id, national_id)

- Receive_notification.notification_id references SpecificNotification.notification_id

- Receive_notification.national_id references User.national_id

ApplicationForm(app_id, annual_income, occupation, status)

CreditCardApplication(app_id, national_id_client, national_id_banker)

- CreditCardApplication.app_id references ApplicationForm.app_id

- CreditCardApplication.national_id_client references Client.national_id

- CreditCardApplication.national_id_banker references Banker.national_id

BankAccountApplication(app_id, national_id_client, national_id_banker, account_type)

- BankAccountApplication.app_id references ApplicationForm.app_id

- BankAccountApplication.national_id_client references Client.national_id

- BankAccountApplication.national_id_banker references Banker.national_id

LoanApplication(app_id, national_id_client, national_id_banker, loan_type, loan_amount)

- LoanApplication.app_id references ApplicationForm.app_id
- LoanApplication.national_id_client references Client.national_id
- LoanApplication.national_id_banker references Banker.national_id

BankAccount(account_number, account_type, balance, national_id)

- BankAccount.national_id references Client.national_id

Bank_transfer(account_number_sender, account_number_receiver, transfer_type)

- Bank_transfer.account_number_sender references BankAccount.account_number
- Bank_transfer.account_number_receiver references BankAccount.account_number

Close_account(account_number, national_id, status)

- Close_account.national_id references Client.national_id
- Close_account.account_number references BankAccount.account_number

Bill(bill_id, amount, type, due_date, is_overdue, account_number)

- Bill.account_number references BankAccount.account_number

CreditCard(card_number, card_type, credit_limit, reward_points, expiry_date, national_id)

- CreditCard.national_id references Client.national_id

Loan(loan_id, amount, loan_type, interest_rate, repayment_period, national_id)

- Loan.national_id references Client.national_id

Report(report_id, issue_date, message)

TechnicalIssueReport(report_id, national_id)

- TechnicalIssueReport.report_id references Report.report_id
- TechnicalIssueReport.national_id references Admin.national_id

CardIssueReport(report_id, card_issue_type, replace_card, card_number, national_id)

- CardIssueReport.report_id references Report.report_id
- CardIssueReport.national_id references Banker.national_id
- CardIssueReport.card_number references CreditCard.card_number

Transaction(transaction_id, transaction_date, amount, type)

BankAccountTransaction(transaction_id, account_number)

- BankAccountTransaction.account_number references BankAccount.account_number

CreditCardTransaction(transaction_id, card_number)

- CreditCardTransaction.card_number references CreditCard.card_number
