

- User(USER\_ID, USERNAME, PASSWORD, EMAIL, PHONE\_NUMBER)
- Banker(USER\_ID, BRANCH\_ID)
  - Banker.USER\_ID references User.USER\_ID
- System\_Admin(USER\_ID)
  - System\_Admin.USER\_ID references User.USER\_ID
- Client(USER\_ID, DATE\_OF\_BIRTH, ADDRESS, BLIND)
  - Client.USER\_ID references User.USER\_ID
- Bank\_Account(ACCOUNT\_NUMBER, BALANCE, ACCOUNT\_TYPE, OPEN\_DATE, STATUS, USER\_ID)
  - Bank\_Account.USER\_ID references client.USER\_ID
- Credit\_Card(CARD\_NUMBER, CARD\_TYPE, CREDIT\_LIMIT, CURRENT\_BALANCE, AVAILABLE\_BALANCE, STATUS, ACCOUNT\_NUMBER, APPLICATION\_ID, POINTS)
  - Credit\_Card.ACCOUNT\_NUMBER references Bank\_account.ACCOUNT\_NUMBER
  - Credit\_Card.APPLICATION\_ID references Credit\_Card\_Application.APPLICATION\_ID
- Loan(LOAN\_NUMBER, AMOUNT, INTEREST\_RATE, TERM, PAYMENT\_DUE\_DATE, STATUS, CLIENT\_ID, APPLICATION\_ID)
  - Loan.CLIENT\_ID references ID references client.USER\_ID
  - Loan.APPLICATION\_ID references Loan\_Application.APPLICATION\_ID
- PERSONAL\_LOAN(LOAN\_NUMBER)
  - personal\_loan.loan\_number references loan.loan\_number
- CAR\_LOAN(LOAN\_NUMBER, CAR\_TYPE)
  - car\_loan.loan\_number references loan.loan\_number
- Bills(BILL\_NUMBER, AMOUNT\_DUE, DUE\_DATE, STATUS, IS\_PAID, IS\_OVERDUE)
- Credit\_Card\_Bill(BILL\_NUMBER, CREDIT\_CARD\_NUMBER, AMOUNT\_DUE, DUE\_DATE, STATUS, PARTIAL)
  - Credit\_Card\_Bill.BILL\_NUMBER references Bills.BILL\_Number
- Utility\_Bill(BILL\_NUMBER, UTILITY\_TYPE, ACCOUNT\_NUMBER, AMOUNT\_DUE, DUE\_DATE, STATUS)
  - Utility\_Bill.BILL\_NUMBER references Bills.BILL\_Number
- Loan\_Bill(BILL\_NUMBER, LOAN\_NUMBER, AMOUNT\_DUE, DUE\_DATE, STATUS)
  - Loan\_Bill.BILL\_NUMBER references Bills.BILL\_Number
- Reminders(REMINDER\_ID, MESSAGE, DATE, STATUS, REMINDER\_DATE, CLIENT\_ID, BILL\_NUMBER)
  - Reminders.CLIENT\_ID references ID references client.USER\_ID
  - Reminders.BILL\_NUMBER references ID references BILLS.BILL\_NUMBER
- Reports(REPORT\_ID, TYPE, GENERATION\_DATE, STATUS)
- Technical\_Report(REPORT\_ID, GENERATION\_DATE, STATUS, DETAILS, USER\_ID)
  - Technical\_Report.REPORT\_ID references Reports.REPORT\_ID
  - Technical\_Report.USER\_ID references ID references USER.USER\_ID

- Credit\_Card\_Report(REPORT\_ID, GENERATION\_DATE, STATUS, CREDIT\_CARD\_NUMBER, DETAILS, USER\_ID)
  - Technical\_Report.REPORT\_ID references Reports.REPORT\_ID
  - Credit\_Card\_Report.CREDIT\_CARD\_NUMBER references Credit\_Card.CARD\_NUMBER
  - Credit\_Card\_Report.USER\_ID references client.USER\_ID
- Applications(APPLICATION\_ID, TYPE, SUBMISSION\_DATE, STATUS, CLIENT\_ID, BANKER\_ID)
  - Application.CLIENT\_ID references Client.USER\_ID
  - Application.BANKER\_ID references Banker.USER\_ID
- Loan\_Application(APPLICATION\_ID, SUBMISSION\_DATE, STATUS, AMOUNT, INTEREST\_RATE, TERM)
  - Loan\_Application.APPLICATION\_ID references Application.APPLICATION\_ID
- Credit\_Card\_Application(APPLICATION\_ID, SUBMISSION\_DATE, STATUS, CARD\_TYPE, CREDIT\_LIMIT, IS\_REPLACEMENT)
  - Credit\_Card\_Application.APPLICATION\_ID references Application.APPLICATION\_ID
- Transactions(TRANSACTION\_ID, DATE, TYPE)
- Credit\_Card\_Transaction(TRANSACTION\_ID, CREDIT\_CARD\_NUMBER, MERCHANT\_NAME, AMOUNT)
  - Credit\_Card\_Transaction.TRANSACTION\_ID references Transactions.TRANSACTION\_ID
  - Credit\_Card\_Transaction.Credit\_Card\_Number references Credit\_Card.CARD\_NUMBER
- Bill\_Transaction(TRANSACTION\_ID, BILL\_NUMBER, BILL\_TYPE, AMOUNT, IS\_THIRD\_PARTY)
  - Bill\_Transaction.TRANSACTION\_ID references Transactions.TRANSACTION\_ID
  - Bill\_Transaction.BILL\_NUMBER references Bill.BILL\_ID
- Bank\_Transfer\_Transaction(TRANSACTION\_ID, SENDER\_ACCOUNT\_NUMBER, RECEIVER\_ACCOUNT\_NUMBER, AMOUNT, DOMAIN)
  - Bank\_Transfer\_Transaction.TRANSACTION\_ID references Transactions.TRANSACTION\_ID
  - Bank\_Transfer.SENDER\_ACCOUNT\_NUMBER references Bank\_Account.ACCOUNT\_NUMBER
  - Bank\_Transfer.RECEIVER\_ACCOUNT\_NUMBER references Bank\_Account.ACCOUNT\_NUMBER
- DEBIT\_Transaction(TRANSACTION\_ID, SENDER\_ACCOUNT\_NUMBER, AMOUNT)
  - Bank\_Transfer\_Transaction.TRANSACTION\_ID references Transactions.TRANSACTION\_ID
  - Bank\_Transfer.SENDER\_ACCOUNT\_NUMBER references Bank\_Account.ACCOUNT\_NUMBER
- BANK\_ANNOUNCEMENTS(ANNOUNCEMENT\_ID, TYPE, DATE, TITLE, DETAILS, EXPIRATION\_DATE)
- ISSUE\_RESOLUTION(RESOLUTION\_ID, REPORT\_ID, TYPE, ISSUE\_DATE, STATUS, ISSUE\_DESCRIPTION, RESOLUTION\_DATE)
  - ISSUE\_RESOLUTION.REPORT\_ID REFERENCES REPORTS.REPORT\_ID