Relational Schema

- Credit_Card_Reports (<u>ID</u>, Type, Description, <u>user_id</u>)
 Credit_Card_Reports.user_id references User
- 2. User (<u>user id, username, password, email, Registration Date, name, National ID, bank code</u>)

User.National_ID references Person User.bank_code references Bank

3. Notification (<u>Notification Id</u>, Content, Date_sent, Notification _Type, <u>User id</u>, <u>bank code</u>)

Notification.user_id references User Notification.bank_code references Bank

- 4. Person (National ID)
- 5. Loan (<u>Loan id</u>, <u>user id</u>, Status, Loan_type, Amount, intersent_Rate, start_date, end_date)

Loan.user_id references User

- 6. Technical_issues (<u>ID</u>, Description, Technical issues _Type, <u>user_id</u>)
 Technical_issues.user_id references User
- CreditCard (<u>Card_number</u>, available_credit, Credit_Limit, points, bills, <u>user_id</u>)
 CreditCard.user_id references User
- 8. Credit_card_transcations (<u>ID</u>, Amount_of_money , To, <u>user_id</u>, <u>card_number</u>)

 Credit_card_transcations.user_id references User

 Credit_card_transcations.card_number references CreditCard
- 9. Credit_card_payment(<u>payment_id</u>, <u>user_id</u>, payment_amount, payment_type , payment_date, <u>card_number</u>)

Credit_card_payment.user_id references User Credit_card_payment.card_number references CreditCard

10. Services (<u>service_id</u>, bill_type, <u>user_id</u>)
Services.user_id references User

- 11. Bank_Account (<u>Account_number</u> , <u>user_id</u> , status, balance , account_type)

 Bank_Account.user_id references User
- 12. Bank_Account_transaction (<u>id</u>, Amount of money, To, bankAccount, <u>user_id</u>, <u>account_number</u>)

Bank_Account_transaction.user_id references User
Bank_Account_transaction.account_number references Bank_Account

- 13. Third Party App (id, type)
- 14. Bills (<u>bills_id</u>, <u>Due_Date</u>, bill_type, <u>user_id</u>, reminder_date)

 Bills.user_id references User
- 15. Bank(<u>code</u>, name, address)
- 16. Respond (<u>code</u>, <u>user ID</u>, <u>Tech id</u>, response)

Response.code references bank
Response.user_ID references User
Response.Tech id references Technical issues

17. ApplyLoan (bank code, user id)

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ApplyLoan.bank_code references Bank ApplyLoan.user_id references User

18. ApplyCreditCard (bank code, user id, cc type)

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ApplyCreditCard.bank_code references Bank ApplyCreditCard.user_id references User

19. IssueLoan (Loan id, bank code, user id)

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IssueLoan.loan_id references Loan IssueLoan.bank_code references Bank IssueLoan.user_id references User

20. IssueCreditCard (card number, bank code, user id)

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IssueCreditCard.card_number references CreditCard IssueCreditCard.bank_code references Bank IssueCreditCard.user_id references User

21. Pay_service_with_BankAcc (user_id, account_number, service_id)

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Pay_service_with_BankAcc.user_id references User
Pay_service_with_BankAcc.account_number references Bank_Account
Pay_service_with_BankAcc.service_id references Services

22. Pay_service_with_App (user_id, account_number, app_id)

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Pay_service_with_App.user_id references User
Pay_service_with_App.app_id references Third_Party_App
Pay service with App.service id references Services

- 23. Internal Bank Account (Account number, status, balance, account type)
- 24. Domestic_Bank_Account (Account number, status, balance, account_type)
- 25. International_Bank_Account (Account_number, status, balance, account_type)