Milestone 1

Relational Schema

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<u>Schema</u>

User(User_id , National_id , Phone_no. , First_name , Last_name)

Login_credentials(<u>Username</u>, password, security_questions, User_id)

Login_credentials.User_id references User.User_id

Branch(Branch_id, Address, Location, Phone_no.)

Banker(<u>Banker_id</u>, Branch_id)

Banker_id references User.User_id

Banker.Branch_id references Branch.Branch_id



Relational

```
Admin(Admin_id)
Admin.Admin id references User.User id
Technical_issues(Issue_id , Date , Description , Admin_id)
Technical_issues.Admin_id references Admin.Admin_id
Client(Client_id, Address)
Client.Client_id references User.User_id
Blind(Voice_id, Client_id)
Blind.Client_id references Client.Client_id
Account(Account_no., balance, Interest_rate, status, Client_id)
Account.Client_id references Client.Client_id
Curent_account(<u>Account_no.</u>, Monthly_fees)
Current_account.Account_no. references Account.Account_no.
Savings_account(<u>Account_no.</u>, Minimum_balance)
Savings_account.Account_no. references Account.Account_no.
```

Frequently_asked_questions(Question_id, Question, Answer)

Application(Application_id, Date, Status, Client_id, Submitted_documents) Application.Client_id references Client.Client_id Card_application(Application_id) Card application. Application id references Application. Application id Loan_application(Application_id) Loan application. Application id references Application. Application id Review(Application_id, Banker_id, Status) Review.Application id references Application.Application id Review.Banker_id references Banker.Banker_id Customer_report(Report_id, Type, Date, Content, Client_id) Customer_report.Client_id references Client.Client_id CreditCard_Report(Report_id, Card_no.) CreditCard_Report.Report_id references Customer_report.report_id CreditCard_Report.Card_no. references Credit_card.Card_no. Notifications(Notification_id, Description) Receive(Notification_id, Client_id) Receive. Notification.id references Notifications. Notification.id Receive.Client_id references Client.Client_id

Banking_notifications(banker_id , Notification_id)
-----Banking_notifications.banker_id references Banker.Banker_id

Announcements(Admin_id , <u>Announcement_id</u>)

Announcements.Admin_id references Admin.Admin_id

Announcements.Announcement id references Notifications.Notification.id

Banking_notifications.Notification.id references Notifications.Notification.id

Reminders_notifications(Notification_id, Reminder_id)

Reminders_notifications.Notification.id references Notifications.Notification.id Reminders_notifications.Reminder_id references Reminders.Reminder_id

Reminders(<u>Reminders_id</u>, Due_date, name, Client_id)

Reminders.Cliend_id references Client.Client_id

Card_reminders(<u>Reminder_id</u>, Card_payment_id)

Card_reminders.Reminder_id references Reminder.Reminder_id

Card_reminders.Card_payment_id references Card_payments.Card_payment_id

Loan_reminders(<u>Reminder_id</u>, Loan_payment_id)

Loan_reminders.Reminder_id references Reminder.Reminder_id

Loan_reminders.Loan_payment_id references Loan_payments.Loan_payment_id

Bill_reminders(<u>Reminder_id</u>, Transaction_id)

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Bill_reminders.Reminder_id references Reminder.Reminder_id
Bill_reminders.Transaction_id references Bill_payment.Transaction_id
Credit_card(Card_no., Limit, Current_balance, Expiration_date, Current_points, Card_bill,
Status, Application_id, Client_id)
Credit_card.Client_id references Client.Client_id
Credit_card.Application_id references Card_application.application_id
Card_payments(Card_no., Card_payment_id, Date, Amount, Client_id)
Card payments.Card no. references Credit card.Card no.
Card_payments.Client_id references Client.Client_id
Loan(Loan_id, Current_dept, Type, Amount, Interest_rate, Application_id, Client_id)
Loan.Application_id references Loan_application.Application_id
Loan.Client_id references Client.Client_id
Loan_payments(Loan_payment_id, Loan_id, Amount, Date, Client_id)
Loan_payments.Loan_id references Loan.Loan_id
Loan_payments.Client_id references Client.Client_id
Transactions(Transaction_id , Date , Amount , Status , Client_id)
Transactions.Client_id references Client.Client_id
ThirdPartyApi(Name,ApiKey, EndPoint, ResponseType)
```

Bill_payment(<u>Transaction_id</u>, Type, Company_id, ApiKey)

Bill_payment.Transaction_id references Transaction.Transaction_id

Bill_payment.Company_id references External_billing_companies.Company_id Bill_payment.ApiKey references ThirdPartyApi.ApiKey

External_billing_companies(<u>Company_id</u>, Name, Phone_no., E-mail, Type, Bank_name, Bank_account_no.)

 $Deposit/Withdrawal(\underline{Transaction_id}\;,\; Type)$

Deposit/Withdrawal.Transaction_id references Transaction.Transaction_id

Credit_card_transactions(<u>Transaction_id</u>, Receiving_entity, Card_no.)

Credit_card_transactions.Transaction_id references Transaction.Transaction_id Credit_card_transactions.Card_no. references Credit_card.Card_no.

transfers(Transaction_id)

transfers.Transaction_id references Transaction.Transaction_id

international(<u>Transaction_id</u>, Exchange_rate, Country, Bank_name, Receiver_account_no.)

international. Transaction id references transfers. Transaction id

domestic(<u>Transaction_id</u>, Bank_name, Receiver_account_no.)

domestic.Transaction_id references transfers.Transaction_id

 $Internal(\underline{Transaction\ id}\ ,\ Client_id)$

Internal.Transaction_id references transfers.Transaction_id internal.Client_id references Client.Client_id