

- ID: int

- socket_ptr: QTcpSocket*

+ generateAccountNumber(): qint64

+ viewBankDatabase(): QString

+ onReadyRead slot(): void

+ onDisconnect slot(): void

run(): void

+ encrypt(input: QString): QString

+ decrypt(input: QString): QString

```
Client
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ip: QString

- port: qint32

socket: QTcpSocket

loginConfirmed: bool

AdminCheck: bool

- UserCheck: bool

UsernameCheck: bool

PasswordCheck: bool

newUserCheck: bool

- updateUserCheck: bool

- deletedUserCheck: bool

- accountNumberCheck: bool

- makeTransactionCheck: bool

transferCheck: bool

- databaseCheck: bool

accountNumber: QString

- currentUser: QString

transferMessage: QString

- transactionHistory: QString

database: OString

- balance: gint32

+ Client(parent: QObject*)

+ ConnectToDevice(ip: QString, port: qint32): void

+ Disconnect():void

+ SendRequest(request: QString, Data: QString): void

+ getLocallPAddresses(): QString

+ encrypt(const input: QString): QString

+ decrypt(const input: QString): QString

+ Connection(): void

+ Disconnected(): void

+ ErrorOccurred(socketError:

QAbstractSocket::SocketError): void

+ StateChanged(socketState:

QAbstractSocket::SocketState): void

+ ReadyRead(data: QString): void

Slots

onConnection(): void

- onDisconnected(): void

- onErrorOccurred(socketError:

QAbstractSocket::SocketError): void

- onStateChanged(socketState:

QAbstractSocket::SocketState): void

onReadyRead(): void

MainWindow

ui: Ui::MainWindow*

loop: QEventLoop

msgBox: QMessageBox

client: Client

+ MainWindow(parent: QWidget*)

+ ~MainWindow()

showMessageBox(title: QString, text: QString, icon: QMessageBox::Icon, button: QMessageBox::StandardButton): void

resetUI(): void

—Composition—

Slots:

+ onConnectionDevice(): void

+ onDisconnectedDevice(): void

+ onReadyReadDevice(data: QString): void

- on ConnectButton clicked(): void

on LoginButton clicked(): void

on CreateButton clicked(): void

- on UpdateButton clicked(): void

on Delete clicked(): void

on GetButton clicked(): void

on_GetButton_2_clicked(): void

on ViewButton clicked(): void

on_ViewButton_2_clicked(): void

on ViewButton 3 clicked(): void

on ViewButton 5 clicked(): void

on ViewButton 6 clicked(): void

on Clear clicked(): void

on Clear 2 clicked(): void

on Clear 3 clicked(): void

on Clear 4 clicked(): void

on Clear 5 clicked(): void

on ExitButton clicked(): void

on ExitButton 2 clicked(): void

on ExitButton 3 clicked(): void

on StartButton clicked(): void

on StartButton 2 clicked(): void