```
User(username, password, first_name, last_name, phone_no, address)
Client(<u>username</u>, points, sausername)
Client.username references User.username
Client.sausername references SystemAdmin.username
Banker(username)
Banker.username references User.username
SystemAdmin(username)
SystemAdmin.username references User.username
BankAccount(acc no, acc type, acc balance, acc currency,
username)
BankAccount.username references Client.username
Transaction(trans ID, trans date, trans amount, trans currency,
acc number)
Transaction.account number references BankAccount.acc number
Payment(trans_ID)
Payment.trans_ID references Transaction.trans_ID
BillPayment(trans_ID, bill name, service name)
BillPayment.trans ID references Transaction.trans ID
CreditCardPayment(<u>trans_ID</u>, payment_type, card_number)
CreditCardPayment.trans_ID references Transaction.trans_ID
```

```
CreditCardPayment.card number references CreditCard.number
LoanPayment(<u>trans_ID</u>, loan_number)
LoanPayment.trans ID references Transaction.trans ID
LoanPayment.loan_number references Loan.loan_number
Transfer(trans_ID)
Transfer.trans ID references Transaction.trans ID
OwnTransfer(<u>trans_ID</u>)
OwnTransfer.trans ID references Transaction.trans ID
Internal Transfer (\underline{trans\_ID})
InternalTransfer.trans_ID references Transaction.trans_ID
Domestic Transfer (\underline{trans\_ID})
DomesticTransfer.trans ID references Transaction.trans ID
International Transfer (\underline{\textbf{trans\_ID}})
International Transfer.trans ID references Transaction.trans ID
Loan(loan no, loan amount, loan tenor, min monthly income,
username)
Loan.username references Client.username
CreditCard(number, status, currency, due date, expiry date,
username)
CreditCard.username references Client.username
```

```
Beneficiary (beneficiary ID, beneficiary name)
Report(<u>report_ID</u>, report_date, report_status, username)
Report.username references Client.username
CardReplacementReport(<u>report_ID</u>, replacement_reason, username,
card number)
CardReplacementReport.report ID references Report.report ID
CardReplacementReport.username references Banker.username
CardReplacementReport.card number references CreditCard.number
TechnicalReport(report_ID, username)
TechnicalReport.report ID references Report.report ID
TechnicalReport.username references SystemAdmin.username
Application(app ID, app date, app status, busername, cusername)
Application.busername references Banker.username
Application.cusername references Client.username
LoanApplication(app_ID, loan_type, method_of_repayment)
LoanApplication.app_ID references Application.app_ID
CreditCardApplication(app_ID, card_type, credit_limit)
CreditCardApplication.app ID references Application.app ID
Notifies(cusername, busername, announcement)
```

Notifies.cusername references Client.username

Notifies.busername references Banker.username

OwnBankTransfer(<u>trans_ID</u>, <u>acc_no</u>)

OwnBankTransfer.trans_ID references OwnTransfer.trans_ID

OwnBankTransfer.acc_no references BankAccount.acc_no

 $Internal Bank Transfer (\underline{\textbf{trans_ID}}, \, \underline{\textbf{acc_no}})$

InternalBankTransfer.trans_ID references InternalTransfer.trans_ID

InternalBankTransfer.acc_no references BankAccount.acc_no

DomesticBankTransfer(<u>beneficiary_ID</u>, <u>trans_ID</u>)

DomesticBankTransfer.beneficiary_ID references

Beneficiary_ID

DomesticBankTransfer.trans_ID references DomesticTransfer.trans_ID

InternationalBankTransfer(<u>beneficiary_ID</u>, <u>trans_ID</u>)

InternationalBankTransfer.beneficiary_ID references Beneficiary.beneficiary_ID

InternationalBankTransfer.trans_ID references InternationalTransfer.trans_ID