UML CLASS DIAGRAMM - BANKING APP -
IRONHACK FINAL PROJECT
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User (Abstract)

- id: Long
- name: String
- password: String
- roles: Set<Roles>

Role

- id: Long
- role: String

0..* — Relation — 0..*

ThirdParty

- hashedKey: String

+ makeThirdPartyTransfer(Transaction): Account
+ receiveThirdPartyTransfer(Transaction):Account

AccountHolder

- dateOfBirth: LocalDate
- primaryAddress: Address
- mailingAddress(Optional): Address
- primaryAccounts: List<Account>
- secondaryAccounts: List<Account>

+ getBalance(): BigDecimal
+ makeTransfer(): Transaction
+ getAllAccounts(): List<Account>

Admin

Account (Abstract)

- id: Long
- balance: BigDecimal
- primaryOwner: AccountHolder
- secondaryOwner(Optional):AccountHolder
- PENALTY_FEE: BigDecimal = 40
- creationDate: LocalDate
- status: Status

+ getBalance()
+ setBalance()
+ sendMoney()

1..* — Relation — 1

Address

- addressName: String
- city: String
- postalCode: String
- country: String

CheckingAccount

- secretKey: String
- minimumBalance: BigDecimal = 250
- MONTHLY_MAINTENANCE_FEE: BigDecimal = 12
- lastMonthlyMaintenanceFeeAppplied: LocalDate
- lastPenaltyFeeApplied: LocalDate

+ applyPenaltyFee()
+ deductMonthlyMaintenanceFee()

StudentAccount (age<24)

- secretKey:String

SavingsAccount

- secretKey:String
- minimumBalance: BigDecimal = 1000 (min. 100)
- interestRate: BigDecimal = 0.0025 (max. 0.5)
(annualy)
- lastInterestRateApplied: LocalDate
- lastPenaltyFeeApplied

+ addInterestRate()
+ applyPeanltyFee()

CreditCard

- creditLimit: BigDecimal = 100 (max. 100000)
- interestRate: BigDecimal = 0.2 (min 0.1)
(monthly)
- lastInterestRateApplied: LocalDate
- lastPenaltyFeeApplied: LocalDate

+ addInterestRate()
+ applyPenaltyFee()

Transaction

- id: Long
- senderAccountId: Long
- recieverAccountId: Long
- receiverName: String
- amount: BigDecimal
- transactionDate: LocalDate

Status(Enum)

FROZEN, ACTIVE

APIS
Controller: ThirdParty ("api/thirdparty-area/")**

+ PUT: makeThirdPartyTransferSendMoney
+ PUT: makeThirdPartyTransferReceiveMoney

APIS
Controller: AccountHolder ("/api/accountholder-area/")**

+ POST: makeTransfer(Transaction)
+ GET: getBalance(id)
+ GET: getAccounts(name)

+ PATCH: updateAccountHolderInfo(id, AccountHolder): AccountHolder
+ PUT: addMailingAddressInfo(id,Address): AccountHolder

APIS
Controller: Admin ("/api/admin/")**

+ POST: createCheckingAccount(CheckingAccount) // (createStudentAccount())
+ POST: createSavingsAccount(SavingsAccount)
+ POST: createCreditCard(CreditCard)
+ DELETE: deleteAccount(id)

+ GET: getAccount (accountId)
+ GET: getAllAccounts

+ GET: getBalance(accountId)
+ PATCH: updateBalanceADD(accountId, BigDecimal)
+ PATCH: updateBalanceSUBTRACT(accountId, BigDecimal)

+ POST: addThirdParty(ThirdParty)
+ POST: addAccountHolder(AccountHolder)
+ POST: addAdmin(Admin)
+ DELETE: deleteUser(id)

+ GET: getUser(Id)
+ GET: getAllUsers