## Enum Class Status

• FROZEN, ACTIVE

## Embeddable Class Adress

- String street;
- int num;
- long zipCode;
- String city;
- String district;

# Class Checking

- Money Balance
- String secreKey
- AccountHolders PrimaryOwner
- AccountHolders Secondary Owner
- Money minimumBalance
- Money penaltyFee
- Money monthlyMaintenanceFee
- LocalDate creationDate
- Status status

setPrimaryOwner (f age is less than 24, then it's a StudentAccount) setMinimumBalance( 250) setMonthlyMaintenanceFee( 12) setPenaltyFee (40) discountPenaly(if balance is less than minimum balance, apply penalty fee)

# Class StudentChecking extends Chcking

- Money Balance
- String secreKey
- AccountHolders PrimaryOwner
- OptionalAccountHolders Secondary Owner
- Money penaltyFee
- LocalDate creationDate
- Status status

setPenaltyFee (40)
discountPenaly(if balance is less
than minimum balance, apply
penalty fee

# Class Savings extends Chcking

- Money Balance
- String secreKey
- AccountHolders PrimaryOwner
- AccountHolders Secondary Owner
- Money minimumBalance
- Money penaltyFee
- double interestRate
- LocalDate creationDate
- Status status
- LocalDate creationDate

setInterestRate(default is 0.0025 max is 0.5) setMinimumBalance(default 1000, no less than 100) setPenaltyFee (40) discountPenaly(if balance is less than minimum balance, apply penalty fee payInterest(yearly payment)

# Class CreditCard

- Money Balance
- AccountHolders PrimaryOwner
- AccountHolders Secondary Owner
- Money creditLimit
- double interestRate
- Money penaltyFee

setCreditLimit(default 100, maximum 100000) setInterestRate(default 0.2, no lles than 0.1) setPenaltyFee (40) discountPenaly(if balance is less than minimum balance, apply penalty fee applyInterest(apply1% each month)

### Class AccountHolders

- Money name
- String secreKey
- Adress PrimaryAdress
- OptionalAdress mailingAdress
- + getBalance() +transferMoney( only if enough funds, accountHolder.name or seconday required, accounld)

#### Class Admin

- String name
- + createNewAccount()
- + acces account()

## Class ThirdParty

- String harshedKey
- String name
- + sendMoney(Account account)
- + receiveMoney

# **Fraud Detection:**

- if Transaction bigger than 150% of previous 24 hours periods, FREEZE
- If t2 ransaction in less than a second, FREEZE