Lab 6

Bank Account Model

Data validation Checklist

National ID

- cannot be null (@NotNull)
- consists of only 10 digits (@Pattern(regex))

Full Name

- Cannot be empty
- Consists of only characters (@Pattern)

Account Number

- cannot be null
- consists of only 16 digits (@Pattern)

phone Number

- cannot be null
- consists of only 11 digits and start with +966 (@Pattern)

email

- cannot be null
- must be valid email (@Email)

address

- Cannot be null

Balance

- Must be set to zero initially.
- Must be positive

Transactions history

Account creation date

Validation Rules and consequence of failing

1- National identity
The national id number must consists of 10 digits since every Saudi National ID has 10 digits, and it must be authenticated and validated in order to avoid fraud and fake identities.

2- Full name
The national identity must match the name of its holder.

3- Bank Account number
Each bank has its own format for account number, banks may have variations in their account number formats, it usually has a specific length and structure, the bank account number is generated, and it should match a specific format.

4- Phone number
Phone number must be a valid phone number and should be authenticated and validated, failing to validate a phone number will result the bank to not have the ability to contact the customer through the phone number.

5- Balance
It must be set to zero once the account is created and it must be only positive, failing to meet this validation rule will result in fraud as someone could just manipulate the balance of the account.

Processes validation checklist

1- Transaction: the customer shall be able to transfer an amount to an account number and subtract the amount from the account holder balance. Verify that the account number exists in the bank and the account holder has sufficient funds in balance. Failing to validate the transaction rules will result in faults or fraudulence.

2- Transaction history: store any transaction with the amount that was transferred and the account number of the sender and the receiver. Storing transactions will give the ability to the bank to monitor suspicious transactions and report any suspicious activities, failing to store customer transactions may result in money laundering.