Fortis Bank Management System

*Fortis Bank* hired you to implement a banking application system to manage *customers’ accounts as well as customers’ transactions*.

The job of the manager is to create customers and their accounts.

Furthermore; when the customer is created with his accounts, he can do transaction (debit, credit) and, can check his balance.

A customer has an identification number, first name, last name (the list is not exhaustive)

A customer must have at least a checking account.

A customer can open a saving account and a credit account and, a currency account (if necessary).

A customer can close an account at any time (except the checking account)

An account is defined by an account number, pin (personal identification number), account type, opened date, available balance.   
  
An account has a list of transactions.

A customer has two types of accounts: checking account and saving account. He can have also a credit account.

A checking account has a free limit number of transactions (only 4 free transactions per month) and extra-fees

A saving account has: annual interest rate, annual gain, extra-fees

A transaction is defined by a transaction number, description, transaction date, amount and, transaction type (deposit, withdraw)  
  
You must define the characteristics and the behavior of each object of the bank’s system.

**Part I : Analysis and Implementation**  
 1- Building the ***middle-tiers*** (business layer)

1. Define the domain of the system according to the business rules.
2. Design the class diagram and the relationships between classes
3. Implement the business system

2- Building the ***first-tier*** (presentation layer)

Test your business layer in a console application

Requirements:

Use the Object-Oriented Concepts to implement this information system.

* Data abstraction
* Encapsulation
* Inheritance
* Polymorphism

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