

Design Patterns

Laboratory 3

Problem:

Bank Management Propose a model for managing a bank. An empirical model for the system contains the following entities:

- a) Bank – that contains a list of clients and a bank code
- b) Bank account - that has a number and an amount of money
- c) Client – that has a name, address, a list of accounts (minimum one, maximum five)

The accounts can have RON and EUR currency. For RON accounts the interest is calculated as follow: 0.3 RON/day for amounts less than 500 RON and 0.8 RON/day for bigger amounts. The EUR accounts the interest is 0.1 EUR/day. The allowed operations on account are depositing and retrieving money.

REQUIREMENTS:

Starting from the modification done to the project in previous laboratory, add the following functionalities:

- Use Commander pattern in order to realize different account operations
 - Implement mediator pattern in order to allow banks to communicate information to clients and also bank client to communicate to each other (anonymous or not)
- At the end of the laboratory present the modification done in the initial project in order to obtain laboratory evaluation mark , if not all the requirements are implemented present at the next laboratory the project