Design Patterns

Laboratory 1

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 operation on account are depositing and retrieving money.

REQUIREMENTS:
- Download the archive bank.jar and create a Java Project and add the sources
- Analyze the code and make a list with logical problems observed in the code
- Refractory the code in order to sole some of the problems observed in code
- Add the ability to create reports on a bank. Minimum report list should contain:
  o Daily report of the operations done on a bank
  o Daily report of the added/removed clients from the bank

OBS
At the end of the laboratory present the modification done in the initial project in order to obtain laboratory evaluation mark