Bank Account Interest and Fee “What If” Analyzer

Image a simple program that helps bank administrators experiment with new interest and fee policies for bank accounts. The program would accept the following as input:

Filename of an XML file containing one or more bank account objects

Number of periods (e.g. month) for which to run the analysis

Interest Calculation Type, as one of the following:

* Compounded Interest (paid on current balance for period)
* Compounded Interest with a graduated rate based on balance

Interest Rate or Table of Balance Ranges and Interest Rates

Fee Calculation Type, as one of the following

* Flat Fee
* Graduated rate based on balance

Fees or Table of Balance Ranges and Fees

After gathering the necessary input information, it will execute a “What If” analysis involve those parameters. This analysis will do the following:

1. open the input file
2. load all of the bank account objects into a set or list,
3. loop through all bank account objects and for each one
   1. compute the interest
   2. compute the fees
   3. adjust the balance
4. keep track of and display the starting balances for all accounts, the ending balances, the total interest paid, and the total fees collection