Javascript Prototyping Application

CSC324 Advanced Programming

Define a prototype BankAccount that provides the basic behaviors for bank checking and savings accounts. All accounts have a number, balance, and support deposits and withdrawals. Define additional prototypes: CheckingAccount which extends BankAccount, SavingsAccount which extends BankAccount, BonusSavingsAccount which extends SavingsAccount.

In addition:

* checking accounts do not pay interest but have overdraft protection (up to $500).
* savings accounts pay interest at a certain rate (3%).
* bonus savings accounts pay a bonus ($50/month) on top of the savings account interest as long as the balance is above a certain amount ($5000). A fixed penalty ($10) is charged for each withdrawal.

Demonstrate your prototypes by writing a program that:

* creates a CheckingAccount object instance with a starting balance of $200. Do 2 withdrawals ($150, $150), a deposit ($50) and a final withdrawal ($300).
* creates a SavingsAccount object instance with a starting balance of $200. Do 2 withdrawals ($150, $150), a deposit ($50) and a final withdrawal ($100).
* creates a BonusSavingsAccount object instance with a starting balance of $5300. Do 2 withdrawals ($150, $150), a deposit ($50) and a final withdrawal ($50).

At the end of the month you should print out a statement for each account. The statement begins with the account name, followed by a list of transactions, followed by a deposit based on the interest computed on the account balance at the end of the month, followed by the final balance.

The statement should be constructed using a combination of javascript, html, and css.

#### Grading

Your assignment with be evaluated based on:

* proper use of javascript prototyping
* clean separation of presentation (css), processing (javascript), and content (javascript and html).
* correct output
* impressive looking bank statement

Thanks to Imagine! Java: Programming Concepts in Context by Frank M. Carrano for the basic idea behind this project.