

Programming Assignment 3-1

A few classes (Account, Employee, etc.) have been provided in the lab folder.

In this assignment, do the following:

1. Refactor the Account class so that the three account types CHECKING, SAVINGS, RETIREMENT, are the three instances of an enumerated type called `AccountType`; like Java classes, the `enum` should be placed in a separate file. After defining this `enum` and removing the account types from the Account class, make the necessary changes to instance variables and the constructors of Account.
2. Add the following methods to the Account class:

```
//updates the balance field
public void makeDeposit(double val);

//updates the balance field and returns true, unless
//withdrawal amount is too large (larger than balance);
//in that case,
//it does not modify the balance field, and returns false
public boolean makeWithdrawal(double amount)
```
3. Add public accessor methods for the fields `acctType` and `balance`.
4. Correct the implementation of `getHireDay()` in Employee, as discussed in the lecture.
5. Create a class Main having a main method that does the following:
 - a. It creates a new Employee object `employee` (you can invent your own name, hireday, salary, etc., to be used in the constructor)
 - b. Then it creates a checking account, savings account and retirement account for `employee`, each with a starting balance of \$300.
 - c. Then it prints to the console the account data for each of these accounts (making use of the `toString()` method that has been provided in Account)