

BankAccount.java

```
1
2 /**
3  * Allows users to deposit or withdraw money from a bank account.
4  *
5  * @author Sara Mathieson
6  * @version January 28, 2020
7  */
8 public class BankAccount {
9
10     /** one instance variable, the balance of the account (in dollars) */
11     private double balance;
12
13     /**
14      * Constructor for the BankAccount class (note that you can have multiple
15      * constructors as long as they have different signatures).
16      * @param initialBalance: the initial balance of the bank account
17      */
18     public BankAccount(double initialBalance) {
19         balance = initialBalance;
20     }
21
22     /**
23      * Default constructor (sets the balance to 0).
24      */
25     public BankAccount() {
26         this(0.0); // call the constructor with initialBalance equal to 0
27     }
28
29     /**
30      * Getter for the account's current balance.
31      * @return the current balance
32      */
33     public double getBalance() {
34         return balance;
35     }
36
37     /**
38      * Allow the user to add money to their account.
39      * @param amount: the amount to add to the balance
40      */
41     public void deposit(double amount) {
42         balance += amount;
43     }
44
45     /**
46      * Allow the user to withdraw money (if they have enough).
47      * @param amount: the amount to withdraw from the account
48      */
49     public void withdraw(double amount) {
50         if (amount > balance) {
51             System.out.println("You cannot withdraw more money than you have!");
52         } else {
53             balance -= amount;
54         }
55     }
56 }
57
```