

JUnit 5 Test Suite

Due Date: Sunday, 09/19, by 11:59PM

Description:

In this homework, you will write unit tests for a possible solution to homework #1. You will fully test the **MyMoney** class and the **SavingsFormula** class.

Implementation Details:

I have provided a Maven project called Homework2. It is a possible solution to your first homework where you implemented methods in the **SavingsFormulas** class. It also includes some changes to the **MyMoney** class, making it a little different than what you had for homework #1.

Your job is to fully test both the **MyMoney** class as well as the **SavingsFormulas** class. You will find two test files: **MyMoneyTest.java** and **SavingsMethodTest.java**. Write unit tests for each class in its corresponding test file. Right now, those files just contain the class definition; you will fill in the rest.

I have also included new files for values.txt and values2.txt in the resources folder. You must use these, without changing them, for your testing when appropriate.

I have included an error in one of the constructors for the **MyMoney** class. When your unit tests uncover it, you will need to fix it in the code. I have also included two errors in the **SavingsFormulas** class. When your unit tests uncover those, you will also need to fix them. Other than those three errors, you can not change any of the code given to you in this project. If you write test cases that uncover another error in the code that's great! You do not have to fix the code, only fully test it to uncover errors if they exist.

Unit test requirements:

- You must include at least 2 unit tests per method in the **SavingsFormula** class
- You must include at least 2 unit tests per public method in the **MyMoney** class
- You need to test both constructors in the **MyMoney** class (this will be several unit tests)
- You need to use a parameterized test to check if the **cashValues** array contains all of the values loaded in by the **readInValues()** method
- You need to use the assertion **assertArrayEquals()** to check if the **interestValues** array contains all of the values loaded in by the **readInValues()** method

- You need to test that the **MyMoney** class arrays were initialized or not depending on the constructor called.

Electronic Submission:

Put the Maven template folder with your files in a .zip and name it with your netid + Homework2: for example, I would have a submission called mhalle5Homework2.zip, and submit it to the link on Blackboard course website.

Assignment Details:

Late work on a homework is **NOT ACCEPTED**. Anything past the deadline will result in a zero.

We will test all homework on the command line using Maven 3.6.3. You may develop in any IDE you chose but make sure your homework can be run on the command line using Maven commands. Any homework that does not run will result in a zero. If you are unsure about using Maven, come see your TA or Professor.

Unless stated otherwise, all work submitted for grading **must** be done individually. While we encourage you to talk to your peers and learn from them, this interaction must be superficial with regards to all work submitted for grading. This means you **cannot** work in teams, you cannot work side-by-side, you cannot submit someone else's work (partial or complete) as your own. The University's policy is available here:

<https://dos.uic.edu/conductforstudents.shtml>.

In particular, note that you are guilty of academic dishonesty if you extend or receive any kind of unauthorized assistance. Absolutely no transfer of program code between students is permitted (paper or electronic), and you may not solicit code from family, friends, or online forums. Other examples of academic dishonesty include emailing

your program to another student, copying-pasting code from the internet, working in a group on a homework assignment, and allowing a tutor, TA, or another individual to write an answer for you. It is also considered academic dishonesty if you click someone else's iClicker with the intent of answering for that student, whether for a quiz, exam, or class participation. Academic dishonesty is unacceptable, and penalties range from a letter grade drop to expulsion from the university; cases are handled via the official student conduct process described at <https://dos.uic.edu/conductforstudents.shtml>.