

Lab – Java – JUnit IntelliJ

Overview

Write an application that uses JUnit.

Create Console Application

Create a new Java console application. Name the project labjunit.

Employee Class

Create an Employee class. Add the following:

- Member variables for name and id.
- Get and set methods for all member variables.

Add Unit Test Class for Employee

Add a JUnit test class to the project for the Employee class. Add methods to test the get/set methods of the Employee class.

Add Maven Dependency

Add the Maven dependency to your project that will allow you to use JUnit 5.

Run the Tests

You can now run the JUnit tests.

Update 1

Break the code in the Employee setId method. For example, reverse the assignment or remove the assignment completely. Run the tests again and verify that the test fails (you should see failure messages). Once you are done restore the correct code and rerun the tests to make sure everything works again.

Update 2

Update the setId method so that it only allows an id that is greater than 0. Update the JUnit test for this method.

Hints: You need to make sure that if you put in a valid id it works. You also need to make sure that if you put in an invalid id, the id value does not change.

Update 3

Add a salary member variable to Employee. The setSalary method should only allow salaries between 1 and 100. Add a JUnit test for this method that sufficiently tests setting salaries.