

Quiz 04

Due Sep 23 at 12pm**Points** 10**Questions** 10**Time Limit** None

Instructions

There is no time limit, but you may only make one submission.

Attempt History

	Attempt	Time	Score
LATEST	<u>Attempt 1</u>	48 minutes	9 out of 10

Score for this quiz: **9** out of 10

Submitted Sep 16 at 4:02am

This attempt took 48 minutes.

Question 1

1 / 1 pts

According to the textbook, what is the simple JUnit philosophy regarding the number of test classes and the number of classes being tested.

☐ One test class for the entire application

☒ One test class per class tested

☐ Many test classes per class tested

☐ Many classes tested per test class

Correct!

Question 2

1 / 1 pts

In JUnit 4, how do we annotate the methods that are intended as test cases?

Correct!

- ☐ assertEquals()
- ☒ @Test
- ☐ using a method name that ends with "Test"
- ☐ @Assert

Question 3**1 / 1 pts**

Checking new code with older tests, to ensure nothing that was working has been broken, is called:

- ☐ Test suites
- ☐ Cycling
- ☒ Regression testing
- ☐ White box testing

Correct!**Question 4****1 / 1 pts**

Comparing floating-point numbers using assertEquals() requires the expected and the actual values, along with a tolerance value (often called "epsilon"). Why is this tolerance value needed?

- ☐ Because we need a way to distinguish floating-point values from int values
- ☒ Because tiny inaccuracies are generally inevitable in any floating-point arithmetic

Correct!

- ☐ Because precision can be lost when casting from float to double
- ☐ Because the compiler needs to distinguish between type float and type double

Question 5**0 / 1 pts**

Which of the following is NOT a typical advantage of unit testing over using a tester class that just exercises the code and prints out the expected and actual values.

Correct Answer**You Answered**

- ☐ Unit tests are written in Java code
- ☒ Unit tests provide faster processing of results, because human interpretation of results is not required
- ☐ Unit test cases are inherently independent from each other
- ☐ Unit tests allow trivial verification of results that may not be easy for humans to read

Question 6**1 / 1 pts**

When an assertion in a unit test fails, which combination of the following reasons is possible?

- I. The code is not working as expected
- II. The code is working as expected, but the assertion is wrong

Correct!

- ☐ Reason II. only
- ☒ Both Reason I. and Reason II.
- ☐ Reason I. only
- ☐ Neither Reason I. nor Reason II.

Question 7**1 / 1 pts**

What kind of testing does Allardice propose as the basis for Test Driven Development (TDD)?

Correct!

- ☐ Performance testing, to ensure the application runs quickly
- ☐ Usability testing, to ensure humans find the application easy to use
- ☒ Unit testing, for programmers to ensure each method is correct and complete
- ☐ Stress testing, to ensure the application scales to many users

Question 8**1 / 1 pts**

According to Allardice, which of the following is NOT a fundamental attribute of the Test Driven Development (TDD) process?

Correct!

- ☐ Tests are expected to initially fail
- ☒ The test suite for the entire application must be written before any code
- ☐ Test cases are generally developed before each module of code being tested

- ☐ TDD is meant to augment, rather than replace, other forms of testing

Question 9**1 / 1 pts**

Once an assertion fails within a test case of a unit test, what happens next?

- ☐ Testing pauses for the programmer to decide whether to continue or not
- ☒ That test case immediately halts; other test cases continue as normal
- ☐ All the test cases in the same test suite are immediately halted
- ☐ That test case continues, counting how many subsequent assertions pass or fail

Correct!**Question 10****1 / 1 pts**

In unit testing, what is the purpose of an assertion?

- ☐ To display an output message during the testing process
- ☐ To stop the testing process once everything has passed
- ☐ To force an outcome to be a specified result
- ☒ To make a statement or claim about certain expected truths

Correct!**Quiz Score: 9 out of 10**