

Quiz 05

Due Sep 30 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>	25 minutes	10 out of 10

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

Submitted Sep 21 at 2:16pm

This attempt took 25 minutes.

Question 1

1 / 1 pts

Which class does not require an import statement at the beginning of the program that uses it?

☐ `java.util.GregorianCalendar`☐ `java.awt.Color`☒ `java.lang.Double`☐ `java.math.BigDecimal`**Correct!**

Question 2

1 / 1 pts

A class named `CurrencyTranslator` would most probably fall into which of the following class categories?

Correct!

- ☐ Abstract entities
- ☐ Utility classes
- ☒ Actor classes
- ☐ Starter classes

Question 3**1 / 1 pts**

Which of the following is NOT a good reason to place classes into a package?

Correct!

- ☐ to show authorship of source code for classes
- ☐ to avoid name clashes
- ☒ to make it easier to include a set of frequently used but unrelated classes
- ☐ to organize related classes

Question 4**1 / 1 pts**

In order to solve complex tasks, you should apply an important skill:

Correct!

- ☒ simplify the problem, and solve the simpler problem first.
- ☐ involve users in the process from the very beginning.
- ☐ learn to direct others with clear, simple instructions.
- ☐ organize classes based on performance and need.

Question 5**1 / 1 pts**

Which of the following is true regarding side effects of methods?

☐

Modification of private instance variables is only considered as a side effect with primitive instance variables

☐

Modification of parameter variables as a side effect is not allowed by the compiler

☒

Side effects that go beyond modification of private instance variables should generally be avoided

☐

Side effects involving standard output should be limited to String objects only

Correct!**Question 6****1 / 1 pts**

Which of the following is considered by the text to be the most important consideration when designing a class?

☐

Each class should represent an appropriate mathematical concept.

☐

Each class should represent no more than three specific concepts.

☐

Each class should represent multiple concepts only if they are closely related.

☒

Each class should represent a single concept or object from the problem domain.

Correct!

Question 7**1 / 1 pts**

In which of the following cases might a static variable be declared as something other than private?

- ☐ Never; static variables must always be declared as private
- ☒ When implementing static constants
- ☐ When it will be modified by objects of other classes
- ☐ When declared inside a private method

Correct!**Question 8****1 / 1 pts**

Under which of the following conditions would the public interface of a class be considered cohesive?

- ☐ All of its features are public and none of its features are static.
- ☐ It is obvious that the public interface refers to multiple concepts.
- ☒ All of its features are related to the concept that the class represents.
- ☐ The quality of the public interface is rated as moderate to high.

Correct!**Question 9****1 / 1 pts**

Suppose we want to model several different physical bookshelves full of books. Which of the following would represent the best structure in Java?

Correct!

a Shelf class, where each object represents the bookshelf and all of its books



a Book class, where each book is an object, and a Shelf class, where each bookshelf is an object



a Book class, where each book is an object, and a HashSet of Book objects, where each Set represents a bookshelf



a Book class, where each object represents a book along with the details of the shelf it is in

Question 10**1 / 1 pts**

A theater needs a `TicketCounter` to keep track of the number of tickets sold. There are two types of ticket: regular and discount. Which technique would be the best approach to printing the number of tickets sold?



Make the instance variables public so programs can access the values and print them.



Create a `getValues(int regular, int discount)` method that will return the number of discount and regular priced tickets sold.



Create a `print()` method that will print out the number of discount and regular priced tickets sold.

Correct!

Create a `toString()` method in the class that creates a representation with the number of discount and regular priced tickets sold.

Quiz Score: **10** out of 10