Module Review

Latest Submission Grade 100%

1. True or False? Collections can hold any valid java object but cannot hold primitives or arrays.   **1 / 1 point**

   ⦿ True

   ◯ False

   > ✓ **Correct**
   > That's right. Collections can hold any valid java object but cannot hold primitives or arrays.

2. Which of the following are the implementing classes of **List**? Select all that apply.   **1 / 1 point**

   ☑ Stack

   > ✓ **Correct**
   > Yes!

   ☐ Iterator

   ☑ Vector

   > ✓ **Correct**
   > That's right!

   ☐ Comparator

   ☑ LinkedList

   > ✓ **Correct**
   > That's right!

   ☑ ArrayList

   > ✓ **Correct**
   > That's right!

3. Why is an **ARRAY LIST** more flexible than an **ARRAY**?   1 / 1 point

   ⦿ We do not have to know the maximum number of items to store.

   ○ We can reuse them between applications.

   ○ We do not have to declare the types of items to store.

   > ⊘ **Correct**
   > Yes. We can use an array list without knowing the number of items we will be storing.

4. A **collections framework** is a unified architecture for representing and manipulating collections. Which of the following must ALL collections frameworks contain?   1 / 1 point

   ☐ Maps

   ☑ Algorythms

   > ⊘ **Correct**
   > Yes. All collections frameworks must contain algorythms.

   ☑ Implementations

   > ⊘ **Correct**
   > Yes. All collections frameworks must contain implementations.

   ☑ Interfaces

   > ⊘ **Correct**
   > Yes. All collections frameworks must contain interfaces.

   ☐ Inheritance

5. What are **implementations**?   1 / 1 point

   ⦿ These are the reusable data structures.

   ○ These are the methods that perform useful computations.

   ○ These are abstract data types that represent collections.

   > ⊘ **Correct**
   > Yes. These are the concrete implementations of the collection interfaces. In essence, they are reusable data structures.

6. Which of the following are advantages of **collections**? (select all that apply)

☑ Increases performance

> ✓ **Correct**
> Yes, Collections help increase performance.

☐ Reduces API interoperability

☑ Reduces programming effort

> ✓ **Correct**
> Yes. Collections help reduce programming effort.

☑ Fosters software reuse

> ✓ **Correct**
> Yes, collections foster software reuse.

7. What is a **Convenience Implementation**?

◉ A high-performance "mini-implementation" of the collection interface.

○ A static method that performs useful functions on collections.

○ A primary implementation of the collection interface.

> ✓ **Correct**
> Correct.

8. What are **Java Streams**?

◉ Streams are wrappers around a data source that allow us to operate with that data source, making bulk processing convenient and fast.

○ Streams are used when you wish to be able to iterate over array contents in a defined order.

○ Streams provide simple methods for accessing the elements of a container from first to last. The two most important are next() and hasNext().

> ✓ **Correct**
> Correct.

9. Which of the following is a **collection** in which the elements have been placed in a specific order?

1 / 1 point

◉ List

○ Set

○ Map

> ✓ **Correct**
> Right. A list is a collection in which the elements have been placed in a specific order. You can specify the exact position of any element in the list.

10. Instead of using an **iterator class**, what are other options to iterate through a scenario?

1 / 1 point

☑ enhanced for loop

> ✓ **Correct**
> Yes. You can use an enhanced for loop to iterate through a scenario.

☑ for/each method

> ✓ **Correct**
> Yes. You can use the for/each method to iterate through a scenario.

☐ process-until method

☐ do/while loop