CS 5004 Individual Quiz 1

Due Jan 16 at 12p.m. **Points** 10 **Questions** 10
Available until Jan 16 at 12p.m. **Time Limit** 30 Minutes

Instructions

Some of these questions may appear to have more than one correct answer. Please choose the best answer.

You will get one attempt. After answering the question, your response will be locked, and you will not be able to go back and change your answer.

The team quiz will draw from the same pool of questions, and you will have an opportunity to discuss the answers with your team to agree on a best answer.

There is a time limit, so make sure you have viewed all the material before starting the quiz.

This quiz was locked Jan 16 at 12p.m..

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	9 minutes	9 out of 10

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

Submitted Jan 11 at 8:22p.m.

This attempt took 9 minutes.

Question 1

1 / 1 pts

When should a method be `public`?

- Only when the method will be called by another method within the same class.
- When the method returns an object.
- Methods should always be set to public.
- When the method needs to be called from outside the class.

Correct!

Question 2

1 / 1 pts

With respect to unit testing, what would it mean for your code to have 100% coverage?

- A method has tests for all possible input
- All your tests return "true"

Correct!

- (selected) All class methods have tests
- You get 0 errors and 0 failures

Question 3

1 / 1 pts

When assigning a value to a variable in Python, we don't have to declare the type of variable (example: *x = 7.3*). Because of this, we can say the following.

- Python is better than Java
- Python is a statically-typed language

Correct!

- (selected) Python is a dynamically-typed language
- Python should not be used for object-oriented programming

Question 4

1 / 1 pts

What is an example of a good Javadoc-style comment for the following method?

```
public String getNickname() {
  return this.nickname;
}
```

```
/*
 * Get the nickname of this person.
 * @return the nickname of this person
 */
```

```
/*
 * Get the first name of this person.
 * @return the first name of this person
 */
```

Correct!

```
/**
 * Get the nickname of this person.
 * @return the nickname of this person
 */
```

```
/**
 * Get the nickname of this person.
 * @param nickname the nickname of this person
 */
```

Question 5

0 / 1 pts

Which of the following "Hello, world!" Java applications will **not** run?

Correct Answer

```
/**
*
* @author Julia C
*
*/
public class HelloWorld {
  public static void main(String[] args) {
    System.out.println("Hello, world!")
  }
}
```

```
public class HelloWorld {
  public static void main(String[] args) {
    System.out.println("Hello, world!");
  }
}
```

```
/**
*
* @author Julia C
*
*/
public class HelloWorld {
  public static void main(String[] args) {
    System.out.println("Hello, world!");
  }
}
```

You Answered

```
/**
*
* @author Julia C
*
*/
public class HelloWorld {
public static void main(String[] args) {
System.out.println("Hello, world!");
}
}
```

Question 6

1 / 1 pts

Assume the next variables are written in Python. How would you represent them in Java?

```
x = 10
y = 1.0
```

```
z = x + y
```

```
int x = 10;
float y = 1.0;
z = x + y;
```

Correct!

```
int x = 10;
float y = 1.0f;
float z = x + y;
```

```
x = 10;
y = 1.0f;
z = x + y;
```

```
int x = 10;
float y = 1.0;
float z = x + y;
```

Question 7

1 / 1 pts

These are accepted Java conventions

- Field names are written in snake_case, classes are written in TitleCase.

Correct!

- (●) Field names are written in camelCase, classes are written in TitleCase.
- ( ) Only the first letter in a class should be capitalized.
- ( ) Both classes and field names must be written in camelCase

Question 8

1 / 1 pts

In the next line (written in Java), `Person` is a class. What is `author`?

```
private Person author;
```

- ( ) A new class
- ( ) a unit test
- ( ) a String variable

Correct!

- (●) An instance of this class, known as an object

Question 9

1 / 1 pts

If primitive types in Java are lowercase (e.g., `boolean`, `float`), why is `String` capitalized?

- It is the most important primitive type and, therefore, we capitalize it.
- Using lowercase for primitive types is just a convention but we do not need to follow it.

Correct!

- It is actually a class.
- Trick question: `string` is actually never capitalized.

Question 10

1 / 1 pts

Let us assume you are writing the Rectangle class:

```
public class Rectangle {
  private final double cornerX;
  private final double cornerY;
```

```
  private final double width;
  private final double height;

  public Rectangle(double cornerX, double cornerY, double
width, double height) {
    this.cornerX = cornerX;
    this.cornerY = cornerY;
    this.width = width;
    this.height = height;
  }

  /** Outputs a rectangle as a string
   * The string is [cornerX, cornerY, width, height]
   *
   */
  public String toString() {
    String s = "[" + cornerX + "," + cornerY + "," + width
+ "," + height + "]";
    return s;
  }
}
```

You want to plan ahead, so that others can use Rectangle. You consider that someone may create an instance of Rectangle as follows:

```
Rectangle r = new Rectangle(10, 5, 15, 7);
```

You now consider that they may wish to find the width of `r`. What is the best thing you can do to your code to allow this?

Correct!

- (selected) You should add a public method called `getWidth()`
- Nothing. The variable is private because no one should need to know what its value is.
- Nothing needs to be done. They should simply use `r.width`
- You should make width a public variable.

Quiz Score: **9** out of 10