W07 Lea

Quiz submitted

- Due Oct 14 at 11:59pm
- Points 10
- Questions 10
- Available until Oct 16 at 11:59pm
- Time Limit None
- Allowed Attempts 3

Instructions

1. **Complete** the **Week 07 Learning Activity (https://byui-cse.github.io/cse210-ww-course/week07/prepare.html)** .
2. **Submit** this quiz to demonstrate your understanding of the material.
3. **Conditions:** You are welcome to use notes and the course materials while taking this quiz.

Take the Quiz Again

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	2 minutes	10 out of 10

Correct answers are hidden.

Score for this attempt: 10 out of 10
Submitted Oct 15 at 12:13pm
This attempt took 2 minutes.

Question 1
1 / 1 pts
What is inheritance in programming?

- The use of the keyword 'base' to define a class.
- An approach to protect member variables
- The ability to access private data directly.
- The process by which a class acquires properties and methods of another class.

Question 2
1 / 1 pts
What is the correct term for a class that inherits from another class?

- Abstract class

- Derived class
- Parent class
- Base class

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Question 3

1 / 1 pts

Which access modifier allows access to a variable only by the class itself and any classes derived from it?

- private
- internal
- public
- protected

Question 4

1 / 1 pts

What does the Liskov Substitution Principle refer to?

- The idea that classes should not be inherited from other classes.
- The idea that methods should only be overridden if they are empty in the base class.
- The idea that a public method should substitute for private variables.
- The idea that derived classes should be able to be used anywhere the base class is used.

Question 5

1 / 1 pts

What is one major caution when using inheritance?

- Derived classes can always access private data from the base class.
- Inheritance eliminates the need for polymorphism.
- Deep inheritance chains can make the code hard to manage.
- Inheritance can make a program run dramatically slower.

Question 6

1 / 1 pts

What is an example of polymorphism in programming?

- When the same line of code can call different functions depending on the context.
- When more than one class is derived from a single base class.
- When the same kind of variable can be reused in different places in a program.
- When the same method can be called from multiple places in a program.

Question 7

1 / 1 pts

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What does method overriding allow a derived class to do?

- (•) Change the behavior of a method inherited from the base class.
- ( ) Prevent method inheritance from the base class.
- ( ) Implement multiple inheritance.
- ( ) Use the same method name with different parameters.

Question 8

1 / 1 pts

What is an abstract method?

- ( ) A method that provides a default implementation in a base class.
- ( ) A method that cannot be inherited.
- ( ) A method that cannot be overridden.
- (•) A method with no body that must be implemented by derived classes

Question 9

1 / 1 pts

When overriding a method from a base class, can you define different types of parameters than those from the base class?

- (•) No, you must use the exact same order and data types for the parameters.
- ( ) No, you cannot have parameters in method that overrides a base class method.
- ( ) Yes, you can add new parameters as long as the original ones are still present.
- ( ) Yes, you can define any parameters you like.

Question 10

1 / 1 pts

If a function receives a base class object as a parameter (for example, `Employee`), but when it is called, the calling code passes a derived class object (for example, `HourlyEmployee`), which methods can be called in the function?

- ( ) Any method from either the base or the derived class.
- (•) Only those explicitly defined in the base class.
- ( ) Only those explicitly defined in the derived class.
- ( ) None. (An error will occur in this case.)

Quiz Score: 10 out of 10