Quiz: Object-oriented Basics

Test your basic OOP concepts explained in this chapter with a quiz.

We'll cover the following

Match the answers

You're a game developer who's been tasked with developing some of the popular games such as tic-tac-toe, Sudoku, and so on. To define the requirements and implement an initial structure of your project, you decide to use object-oriented programming that helps in establishing relationships and visualizing them.

An example of how the structure of this project will be defined is given below:

```
-> Game : class
    -> playerNum : int
    -> makeMove() : void
    -> getPlayers() : string

-> TicTacToe : Game
    -> isHuman : bool
    -> getIsHuman() : bool

-> Sudoku : Game
    -> value : int
    -> setValue() : void
```

The structure of OOP classes

Using the scenario given above, match the OOP principles in the left column with their correct examples from the right column.

Match The Answer

Select an option from the left-hand side

Encapsulation	Each game will have its specific way of making a move. Hence, the `makeMove()` function will be unique to each game.
Abstraction	The `TicTacToe` and `Sudoku` classes are able to use the public attributes and methods of the `Game` class.
Inheritance	Only interested in the `makeMove()` method, which simply performs the move and doesn't go into the depth of how the move is being made.
Polymorphism	The method `getPlayers()`, `getIsHuman()`, and `setValue()` are examples of this principle.

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MCQs

Challenge yourself by solving the following quiz questions.

1 Which OOP principle describes reusability?

A) Encapsulation

B) Abstraction

C) Inheritance

D) Polymorphism

Submit Answer

Question 1 of 5
0 attempted

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