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Instructions

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How is it???

0 responses

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Tell me if you have problems with practictical tasks

Agenda

- Recall what was learned
- Look at current topic practice
- Check current topic knowledge

Total Recall

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What are the key components of the chain of responsibility pattern?

- Client ✓
- Handler Interface ✓
- Server ✗
- Concrete Handlers ✓

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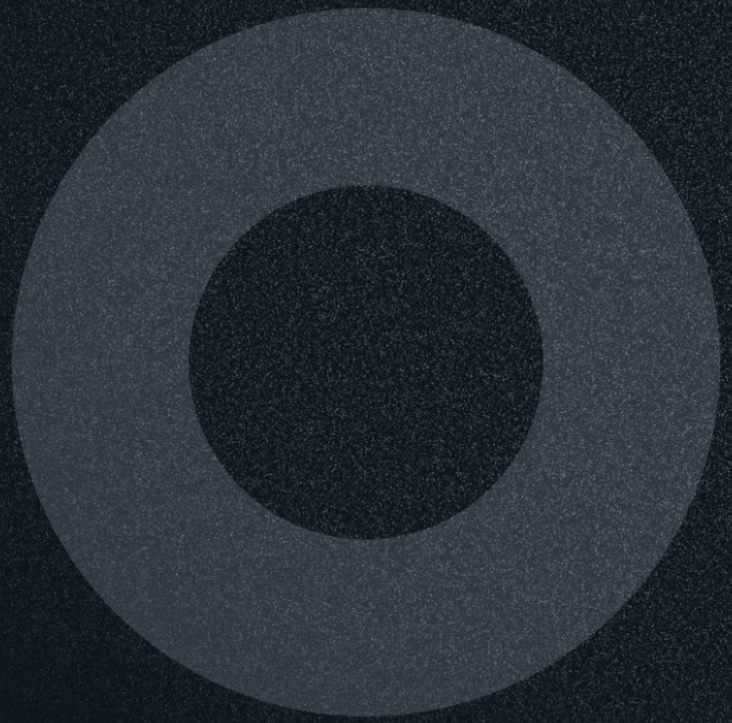
Select all usage scenarios in which Chain of Responsibility can be particularly beneficial:



- Event Handling in UI Frameworks ✓
- Approval Processes ✓
- Command Processing ✓
- Memory Optimization ✗

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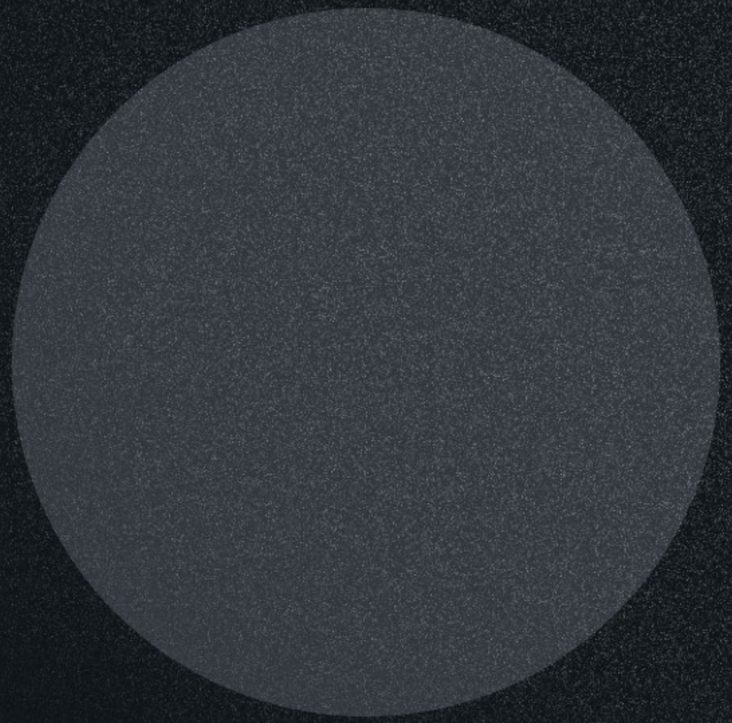
In the Chain of Responsibility, if an object can handle a request, what should it do next?



- A) Pass the request to all successor handlers irrespective of its own ability to handle it.
- B) Handle the request and decide whether to pass it to the next handler in the chain.
- C) Modify the request and send it back to the sender.
- D) Terminate the program.

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Discuss current topic

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Over 90% of the world's currency is digital.

Between credit cards, debit cards, online purchases, and cryptocurrency, only 8% of global currency is physical money.

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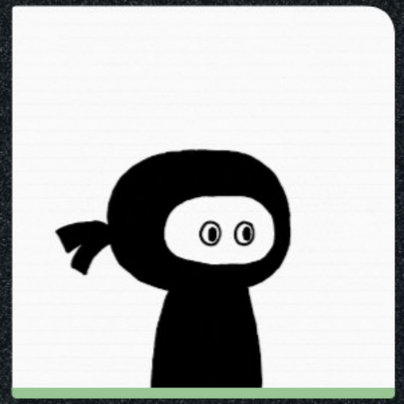
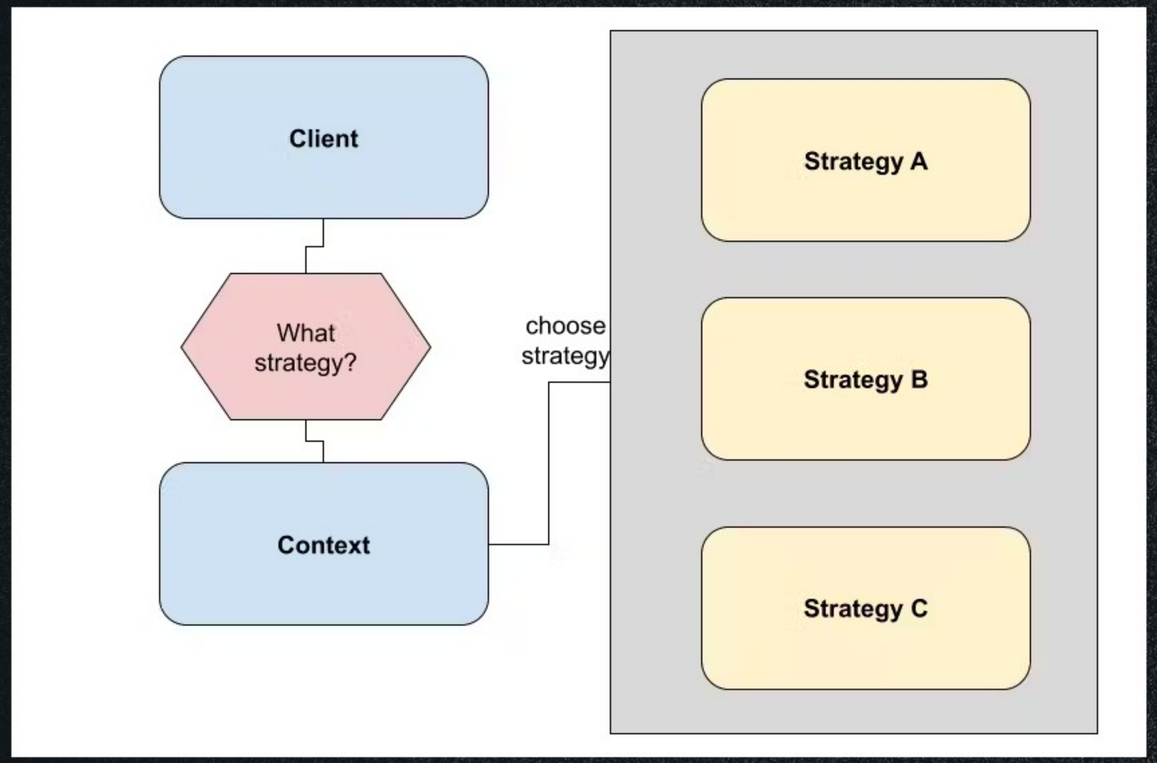
Have you looked at todays' materials?

yes	no	partially	i'm the author
0	0	0	0





Advanced Patterns: Strategy

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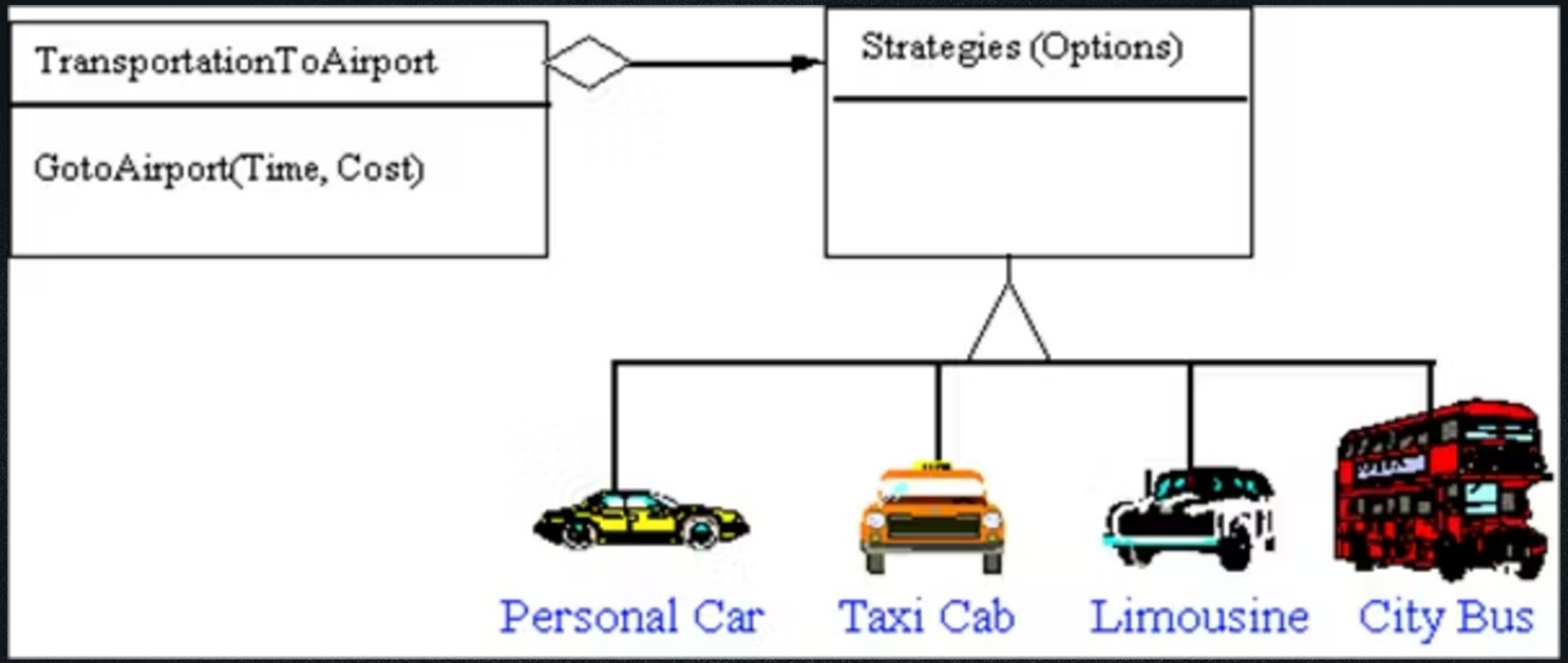

Descriptive real-world example

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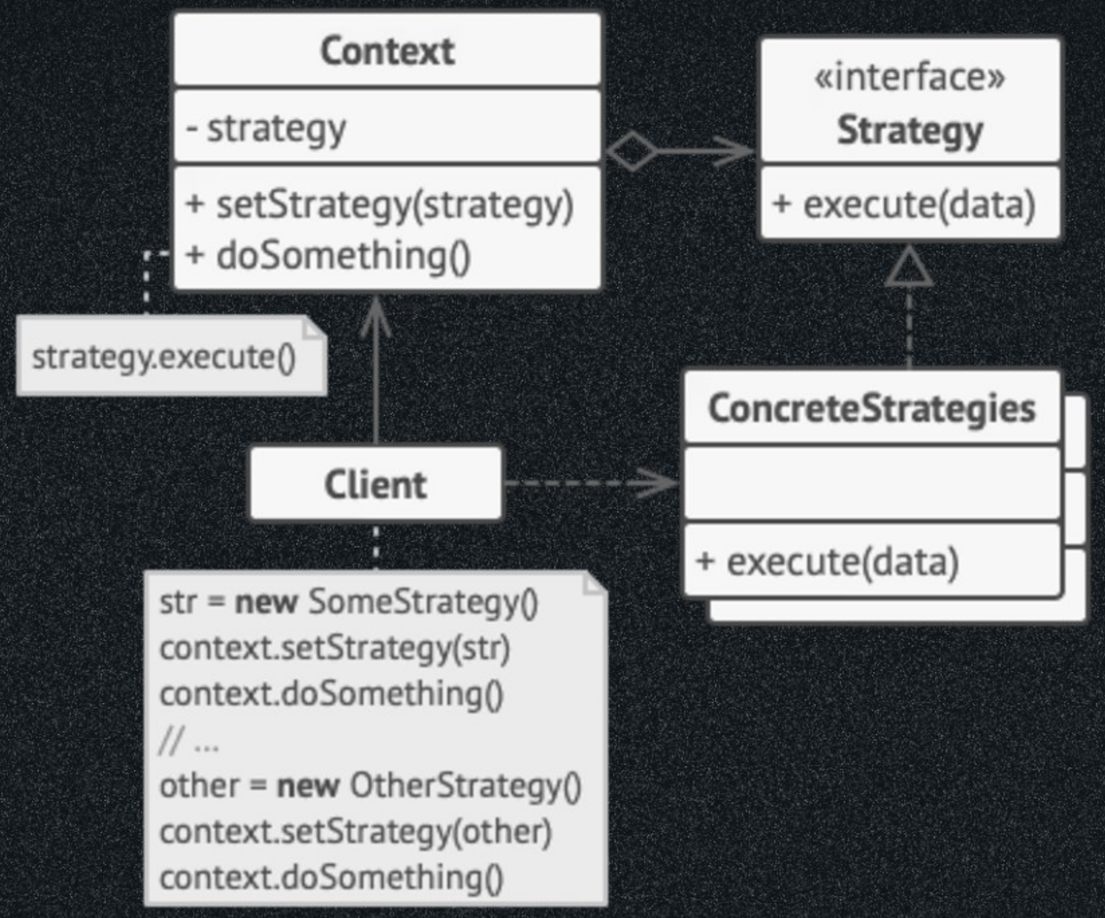

Original structure of Strategy

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Considerations and Best Practices

- Consistent interfaces: Ensure all strategies implement a consistent interface to facilitate interchangeability.
- Document: Clearly document each strategy and when it should be used.
- Moderate use: Avoid creating excessive unnecessary strategies that complicate the system.

Benefits

- You can swap algorithms used inside an object at runtime.
- You can isolate the implementation details of an algorithm from the code that uses it.
- You can replace inheritance with composition.
- Open/Closed Principle. You can introduce new strategies without having to change the context.

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Disadvantages

1. If you only have a couple of algorithms and they rarely change, there’s no real reason to overcomplicate the code.
2. Clients must be aware of the differences between strategies to be able to select a proper one.
3. Today you can use decrative approach to avoid adding classes and setting structures from them.

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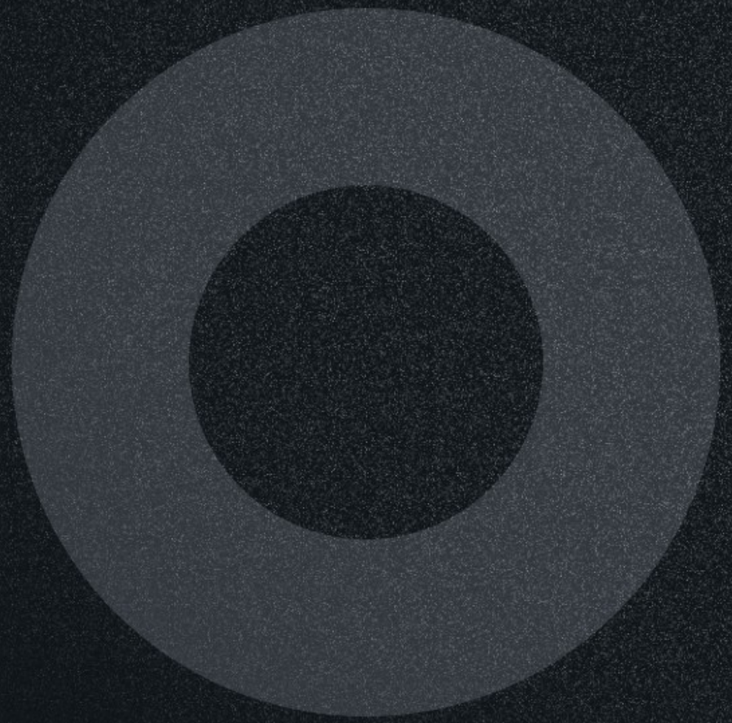
What is the primary purpose of the Strategy design pattern?



- A) To encapsulate algorithms, making them interchangeable ✓
- B) To create objects dynamically ✗
- C) To set relations between objects ✗
- D) None of above ✗

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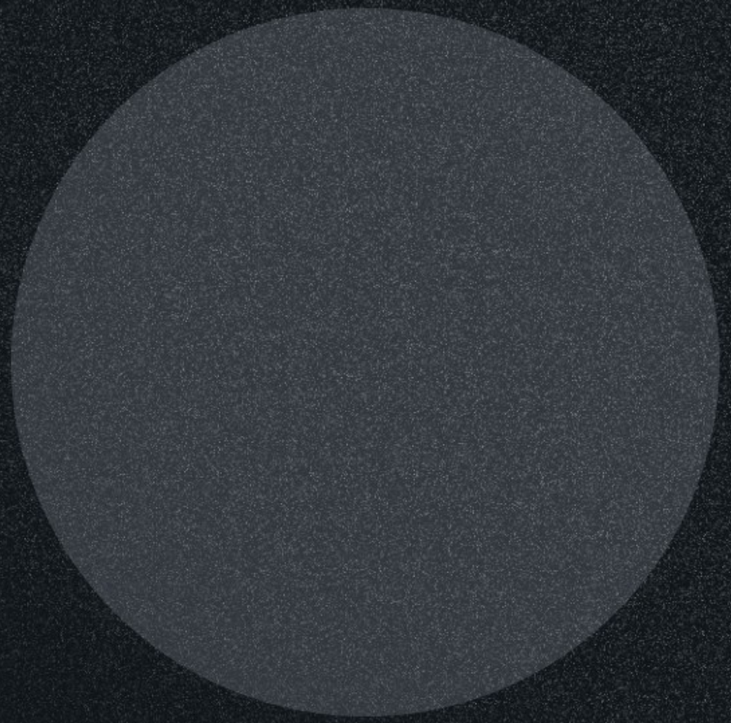
Which of the following is a fundamental component of the Strategy pattern?



- A) Factory
- B) Singleton object
- C) Context
- D) Mediator

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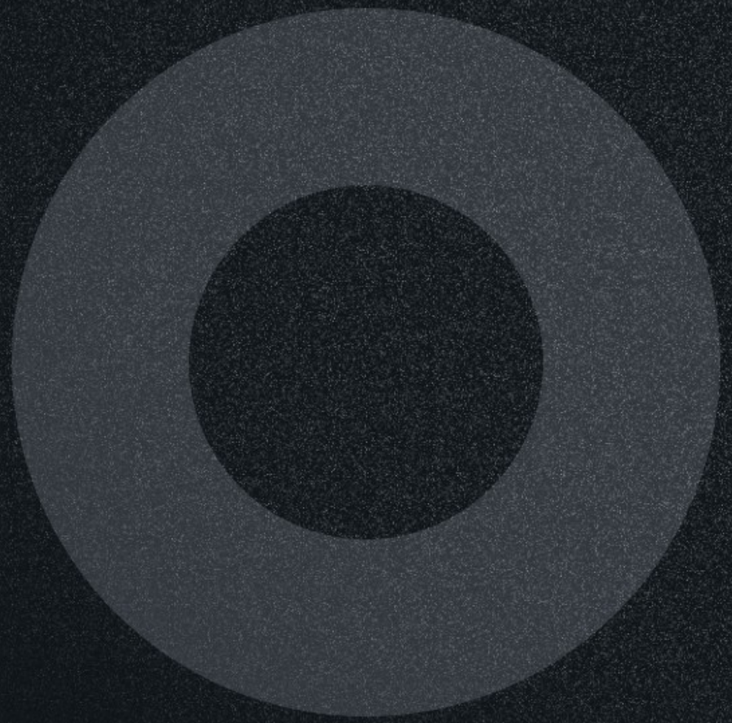
How does the Strategy pattern contribute to a software application's maintainability?



- A) By allowing the addition of new behaviors without modifying existing system code ✓
- B) By providing a means to store object states ✗
- C) By managing several databases simultaneously ✗
- D) By keeping all algorithms in a single class ✗

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In the Strategy pattern, what role does the 'Strategy' class play?

- A) It defines an interface common to all supported strategies ✓
- B) It maintains a reference to a Strategy object ✗
- C) It integrates different databases ✗
- D) It ensures there is only one instance of an object throughout the system ✗

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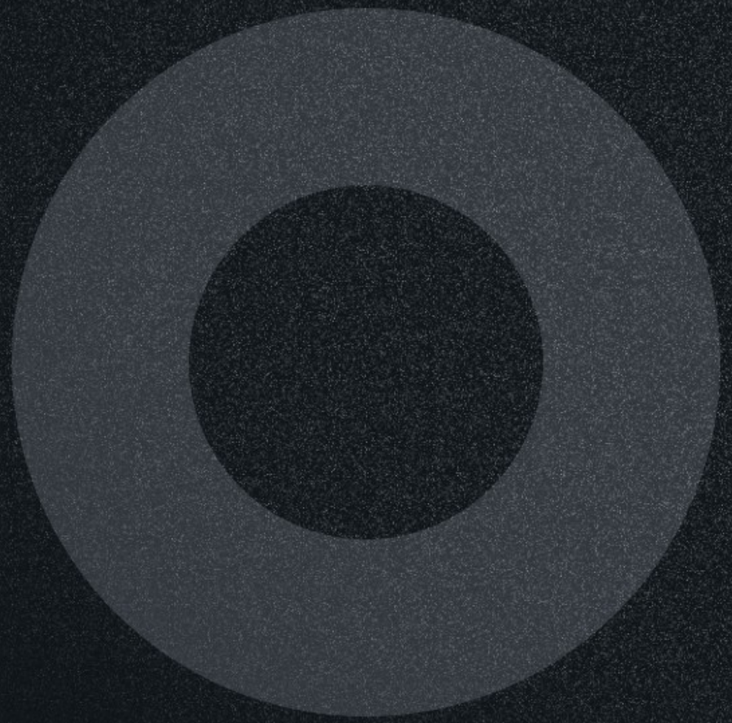
When applying the Strategy pattern, how would you allow a program to change its behavior at runtime?



- A) By modifying the algorithms used directly in the code
- B) By utilizing polymorphism to change behaviors dynamically using a Strategy interface
- C) By using a central mediator to control changes
- D) By creating new objects for each change in behavior

Exam

- Exam Format: same as before - a test on learned materials
- Exam Rules: questions = 18, time = 45, maxScore = 25
- Materials to prepare: passed modules at learning platform
- Q&A: reach out if you still have any sort of concern

More tips for you can be found here

https://teams.microsoft.com/l/message/19:f8b004c0d1534b598803a160d4d4b939@thread.v2/1734398266870?context=%7B%22contextType%22%3A%22chat%22%7D

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Q&A part

0 questions
0 upvotes