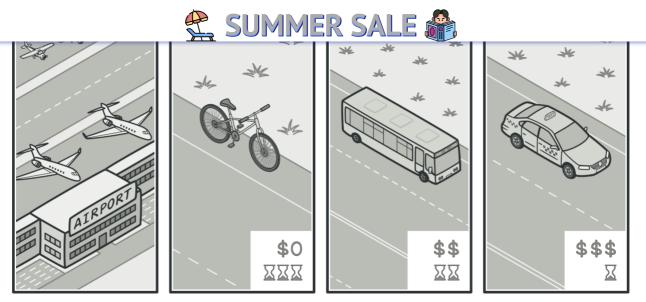
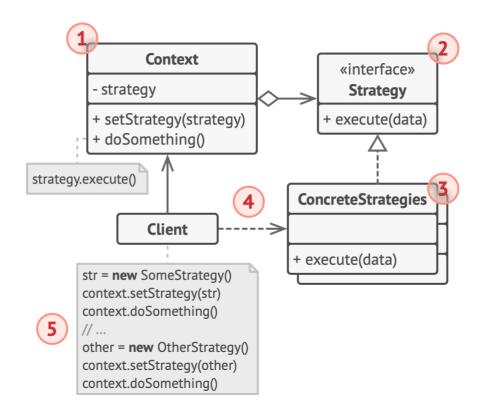
6/12/23, 12:44 AM Strate



Various strategies for getting to the airport.

Imagine that you have to get to the airport. You can catch a bus, order a cab, or get on your bicycle. These are your transportation strategies. You can pick one of the strategies depending on factors such as budget or time constraints.

## 品 Structure



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- 2. The **Strategy** interface is common to all concrete strategies. It declares a method the context uses to execute a strategy.
- 3. **Concrete Strategies** implement different variations of an algorithm the context uses.
- 4. The context calls the execution method on the linked strategy object each time it needs to run the algorithm. The context doesn't know what type of strategy it works with or how the algorithm is executed.
- 5. The **Client** creates a specific strategy object and passes it to the context. The context exposes a setter which lets clients replace the strategy associated with the context at runtime.

## # Pseudocode

In this example, the context uses multiple **strategies** to execute various arithmetic operations.

```
// The strategy interface declares operations common to all
// supported versions of some algorithm. The context uses this
// interface to call the algorithm defined by the concrete
// strategies.
interface Strategy is
    method execute(a, b)
// Concrete strategies implement the algorithm while following
// the base strategy interface. The interface makes them
// interchangeable in the context.
class ConcreteStrategyAdd implements Strategy is
    method execute(a, b) is
        return a + b
class ConcreteStrategySubtract implements Strategy is
    method execute(a, b) is
        return a - b
class ConcreteStrategyMultiply implements Strategy is
    method execute(a, b) is
        return a * b
// The context defines the interface of interest to clients.
class Context is
    // The context maintains a reference to one of the strategy
    // objects. The context doesn't know the concrete class of a
    // strategy. It should work with all strategies via the
```