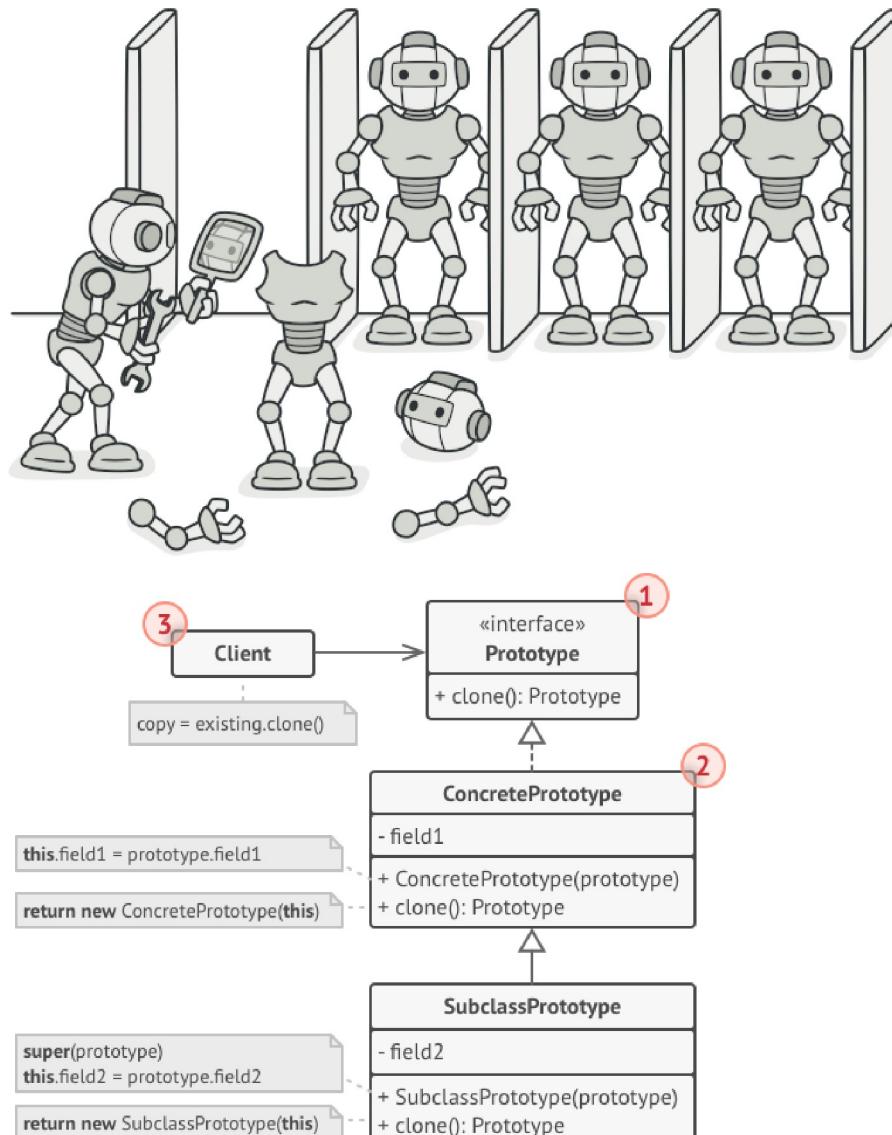
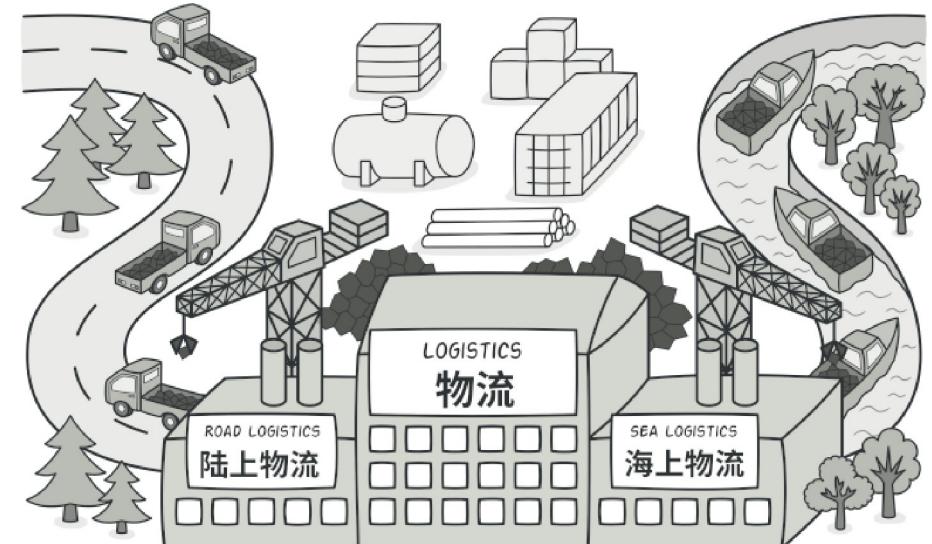


## 1.4 Prototype

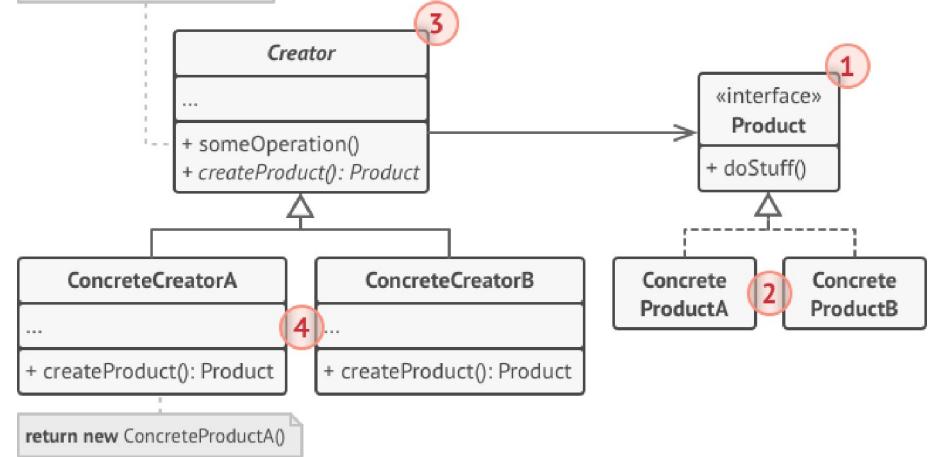


## 1. Creational Patterns

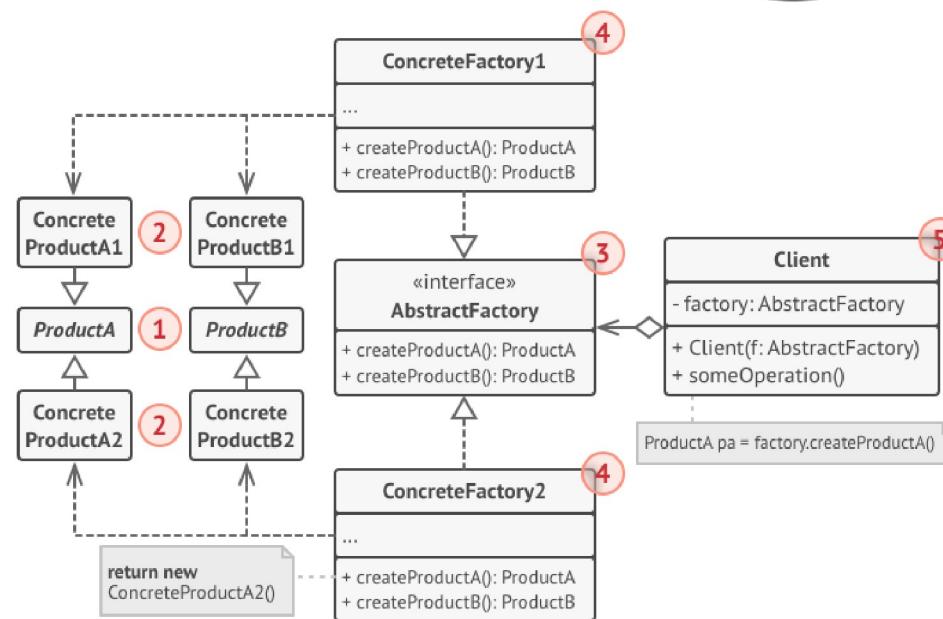
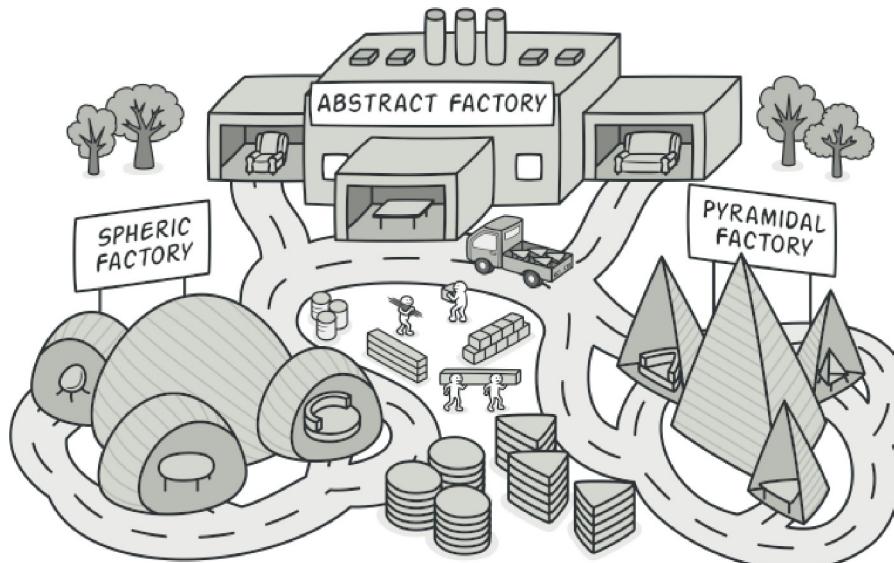
### 1.1 Factory Method



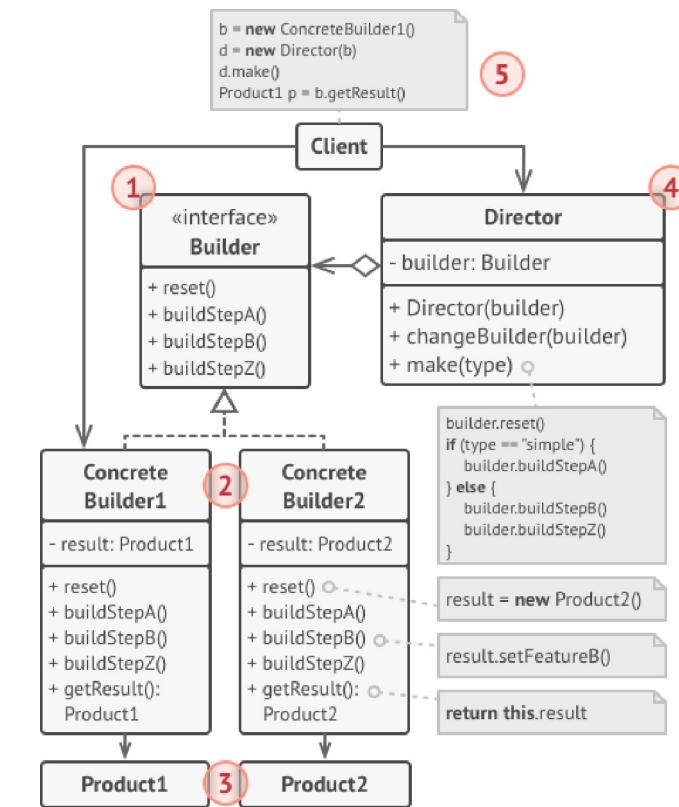
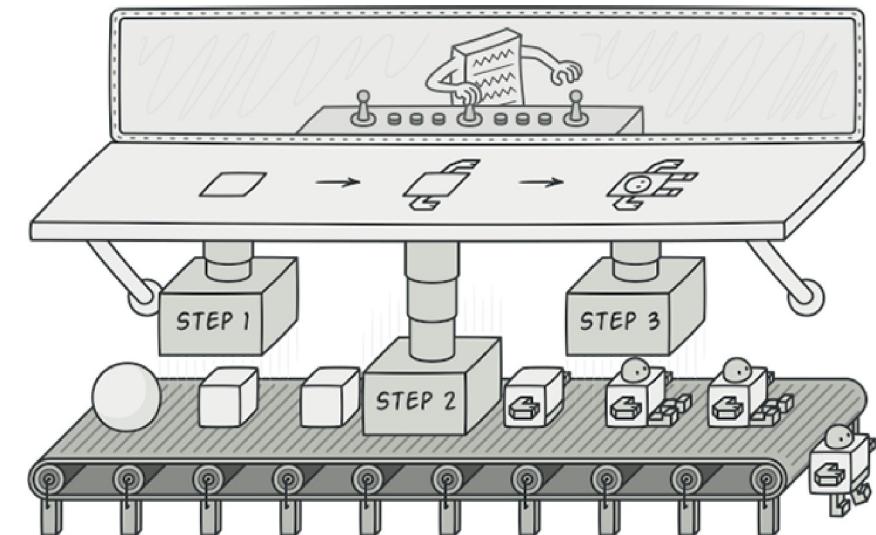
```
Product p = createProduct()
p.doStuff()
```



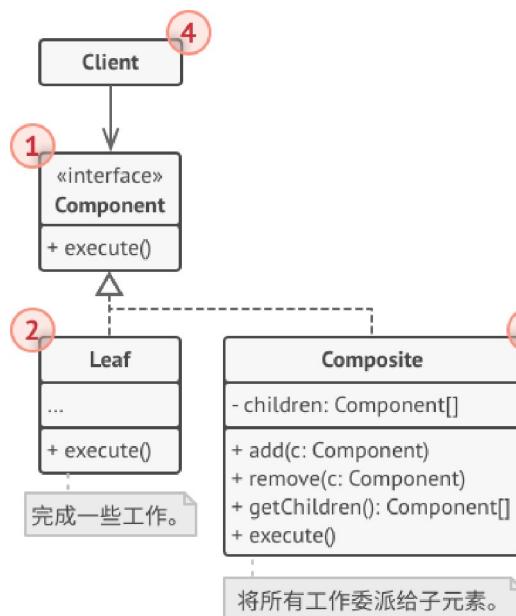
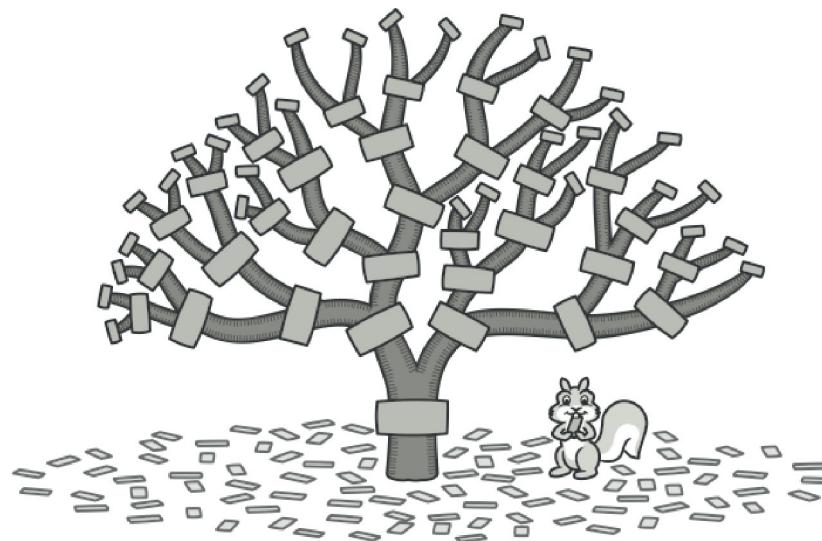
## 1.2 Abstract Factory



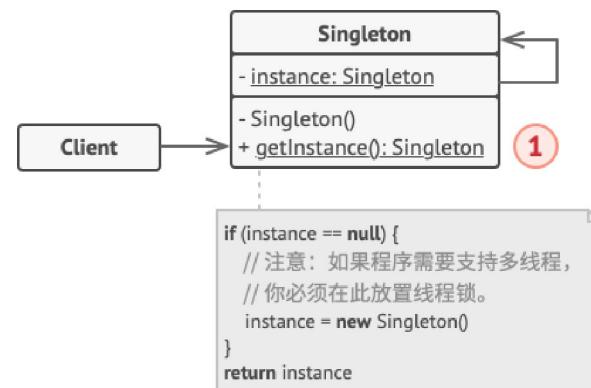
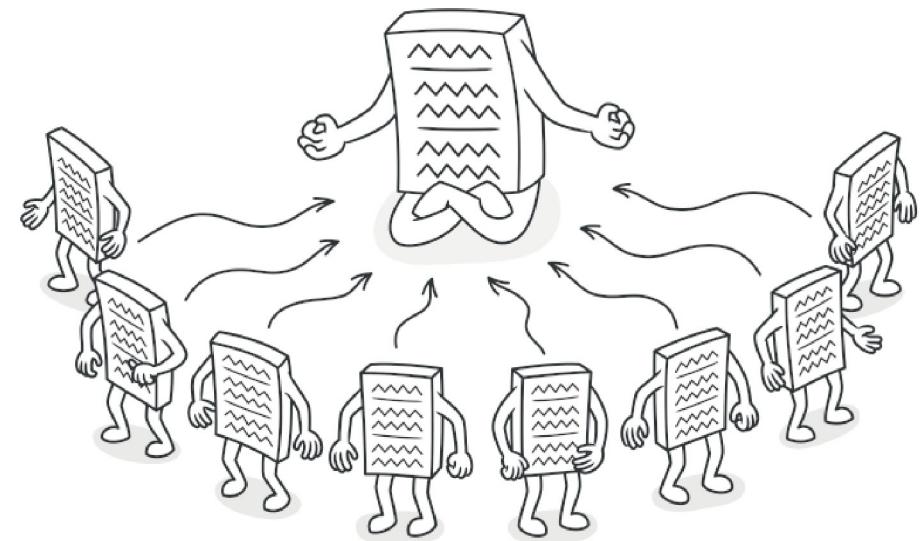
## 1.3 Builder



## 2.3 Composite

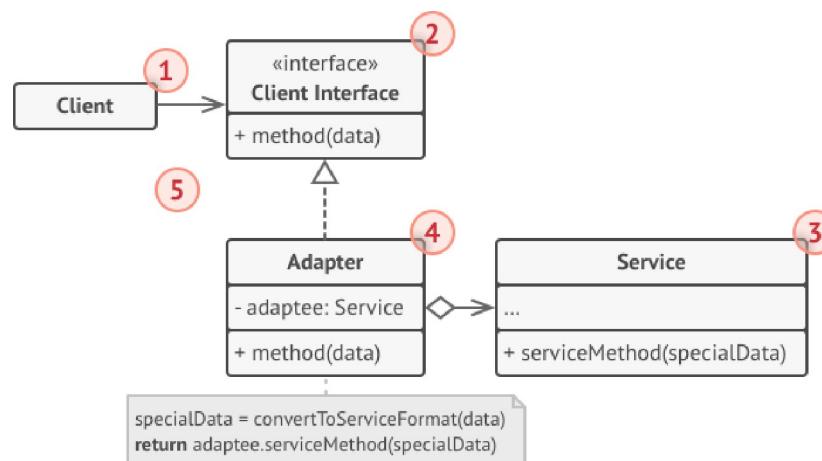
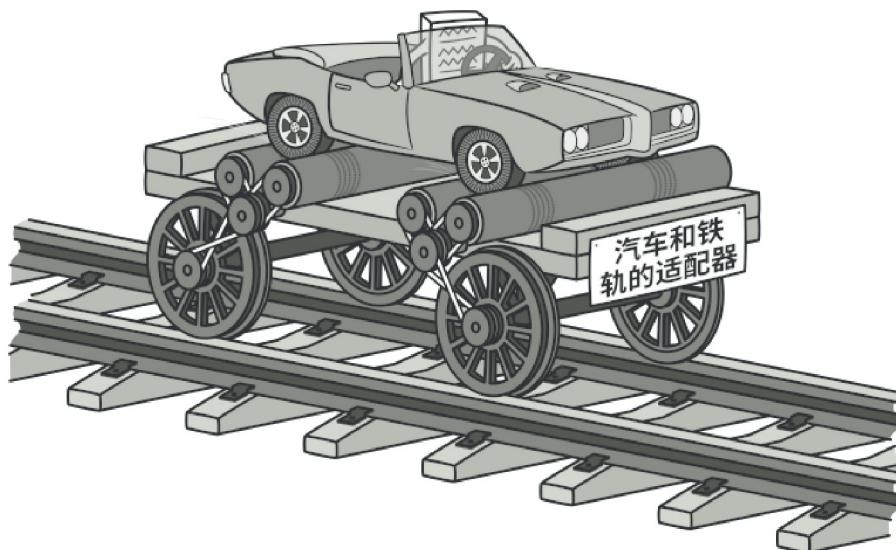


## 1.5 Singleton

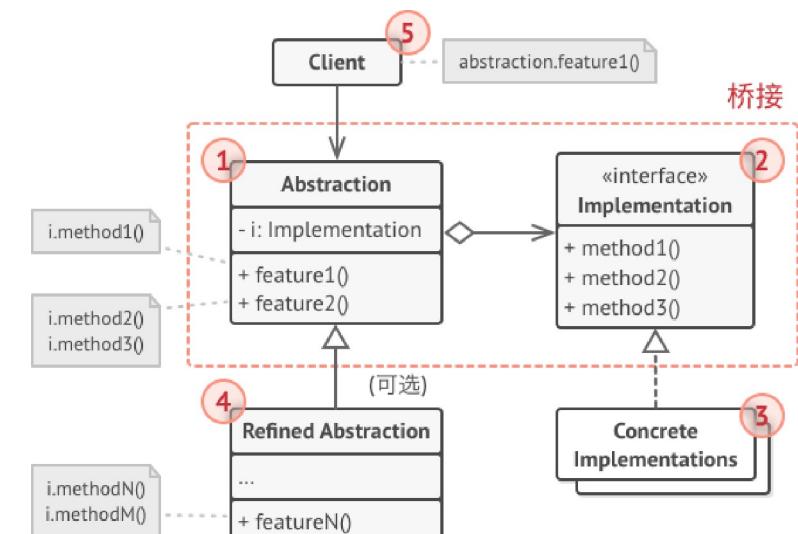
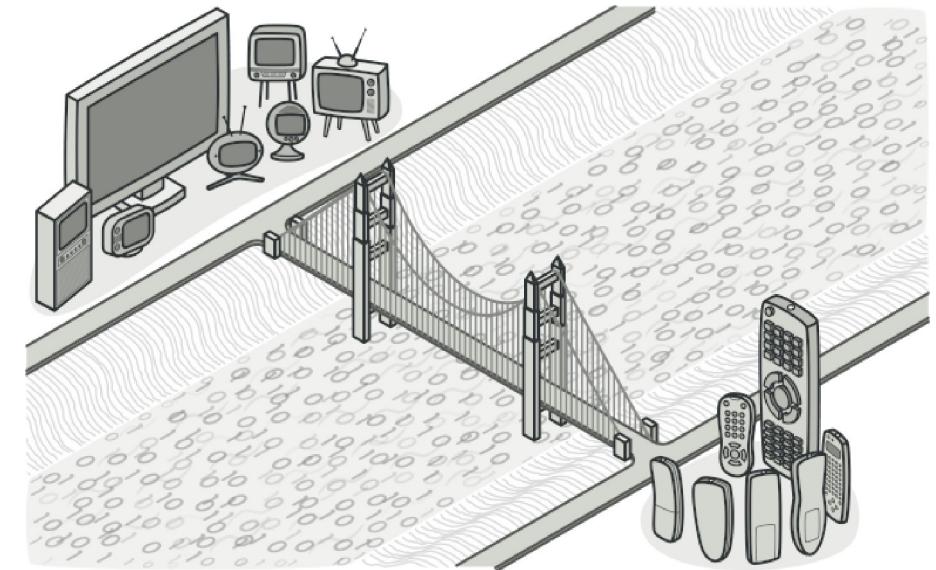


## 2. Structural Patterns

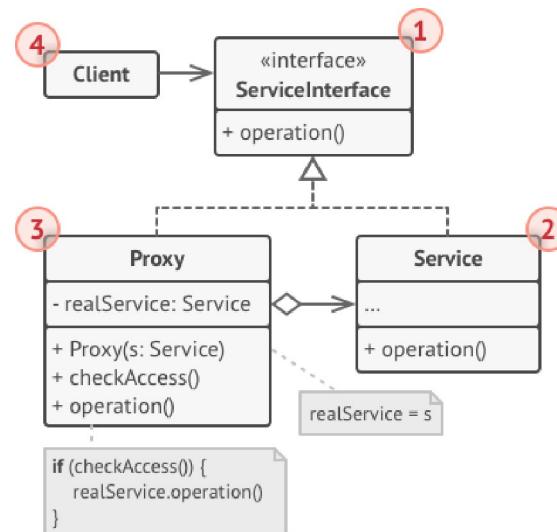
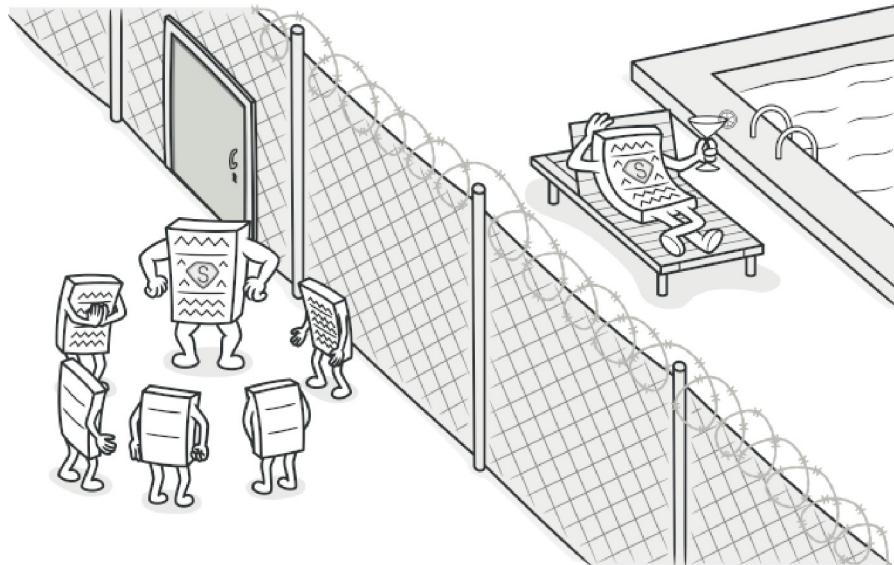
### 2.1 Adapter



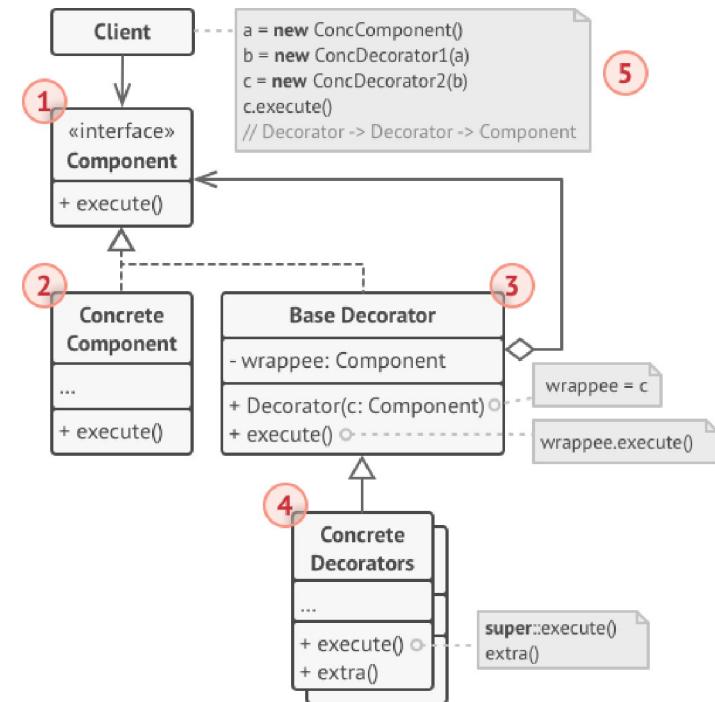
### 2.2 Bridge



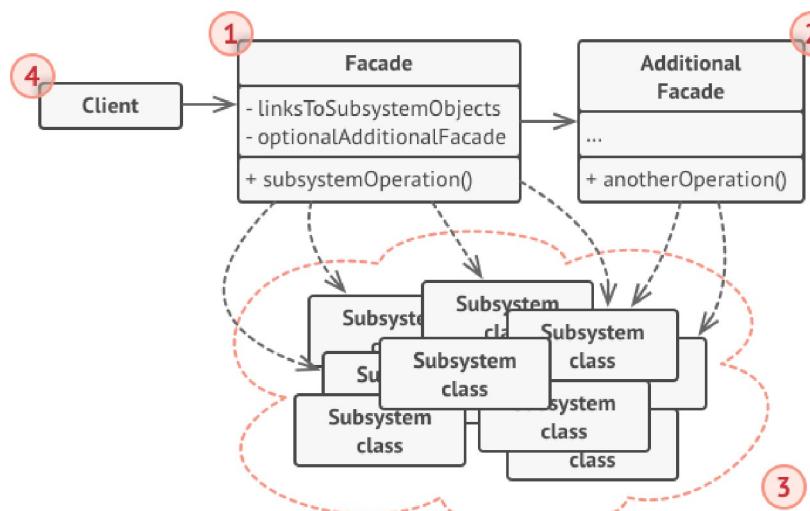
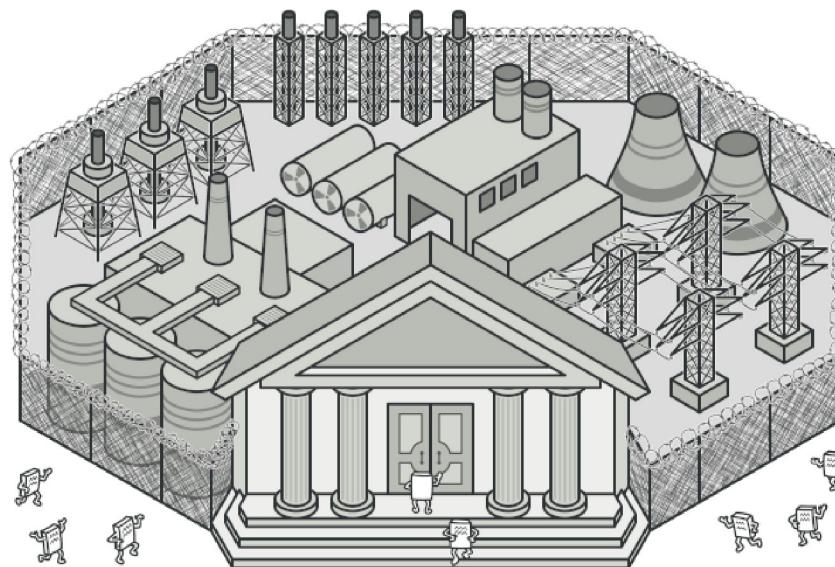
## 2.7 Proxy



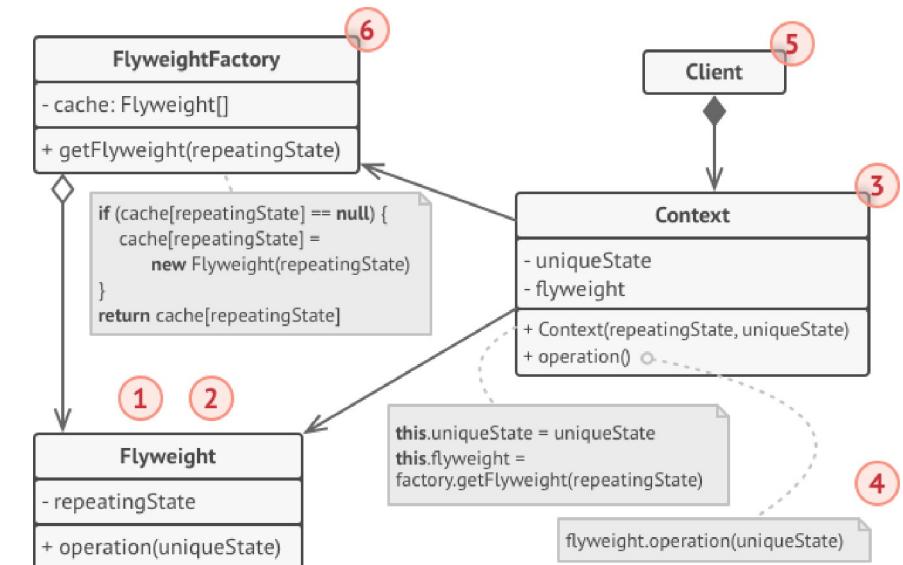
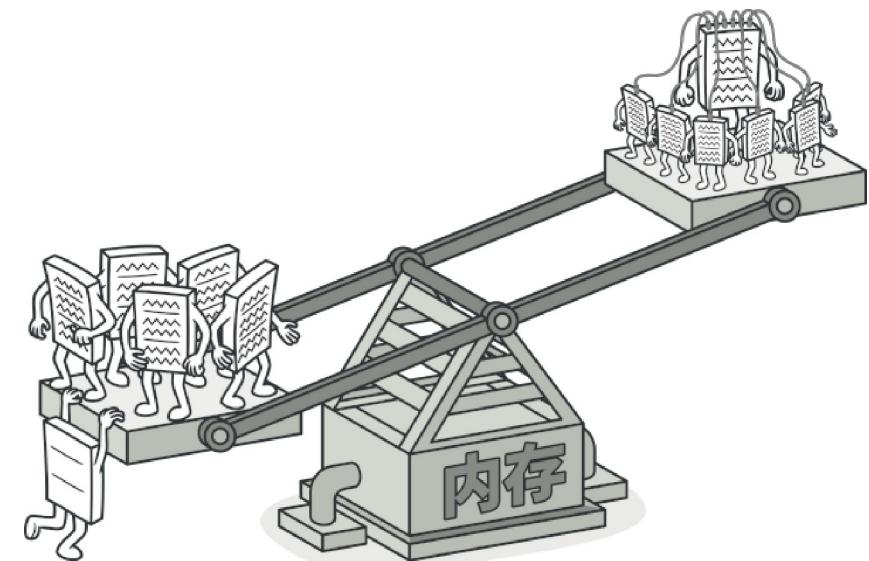
## 2.4 Decorator



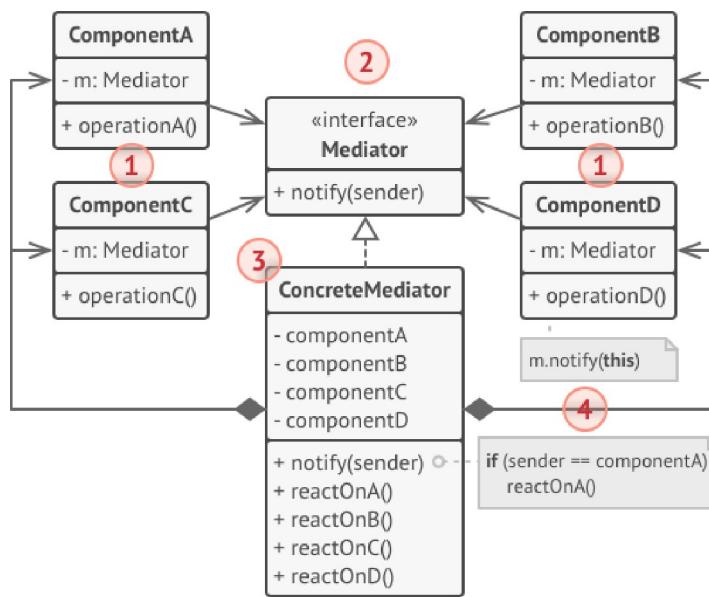
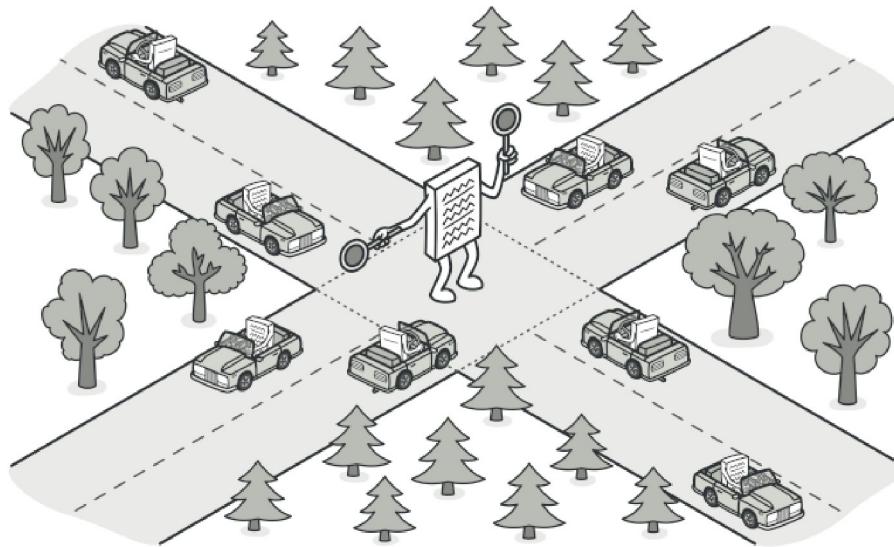
## 2.5 Facade



## 2.6 Flyweight

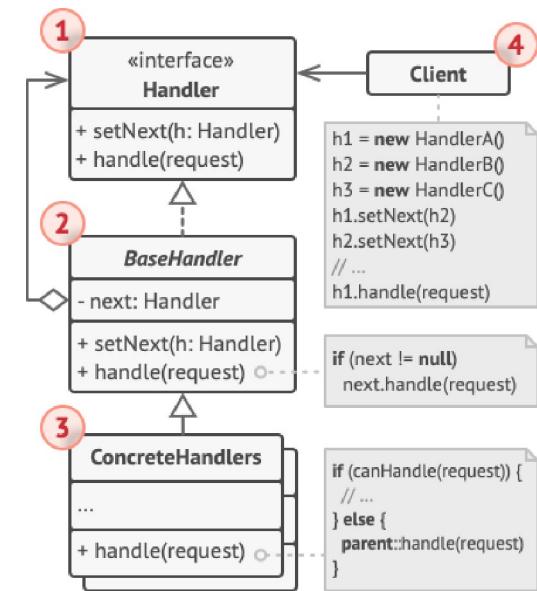
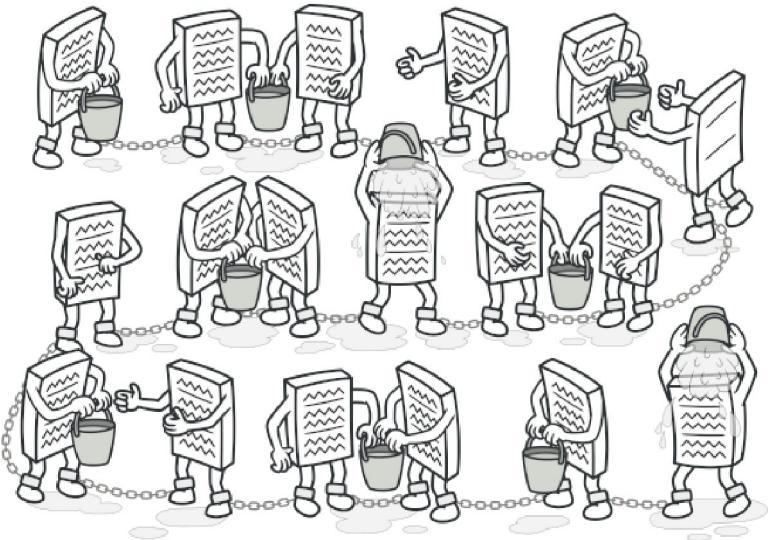


## 3.4 Mediator

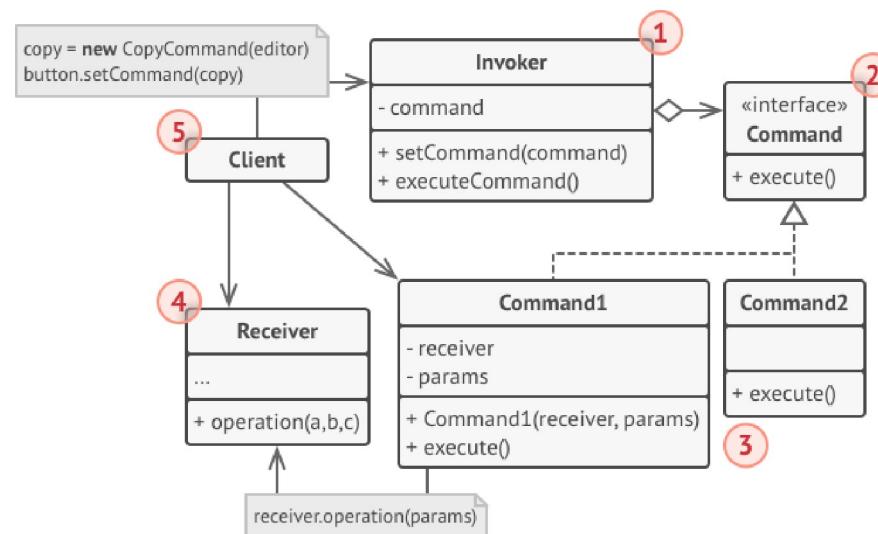
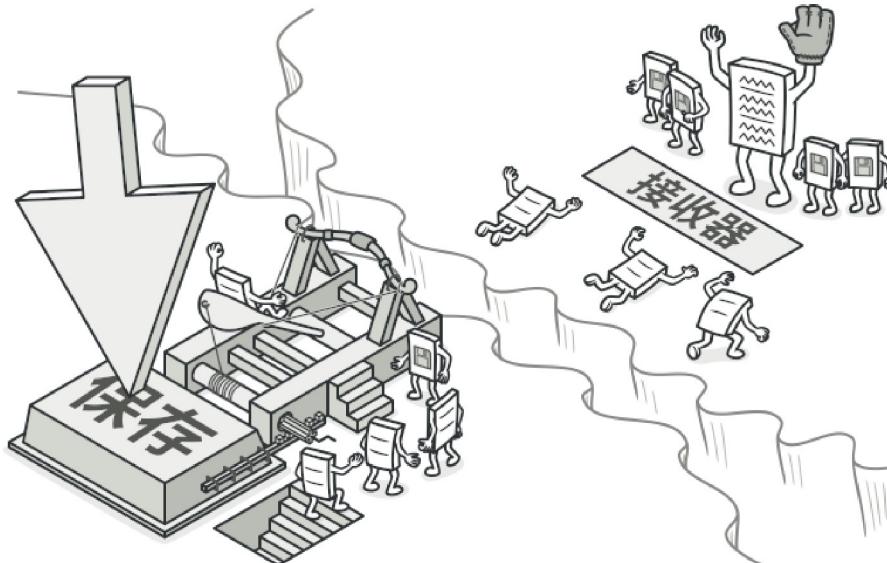


## 3. Behavioral Patterns

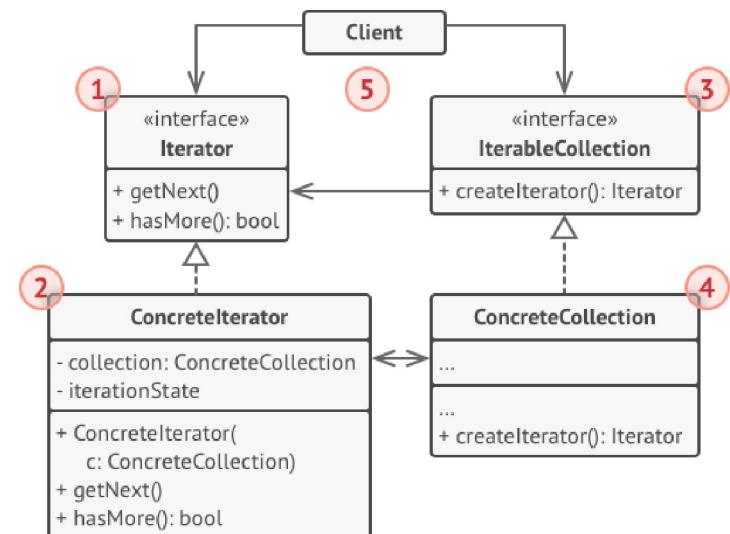
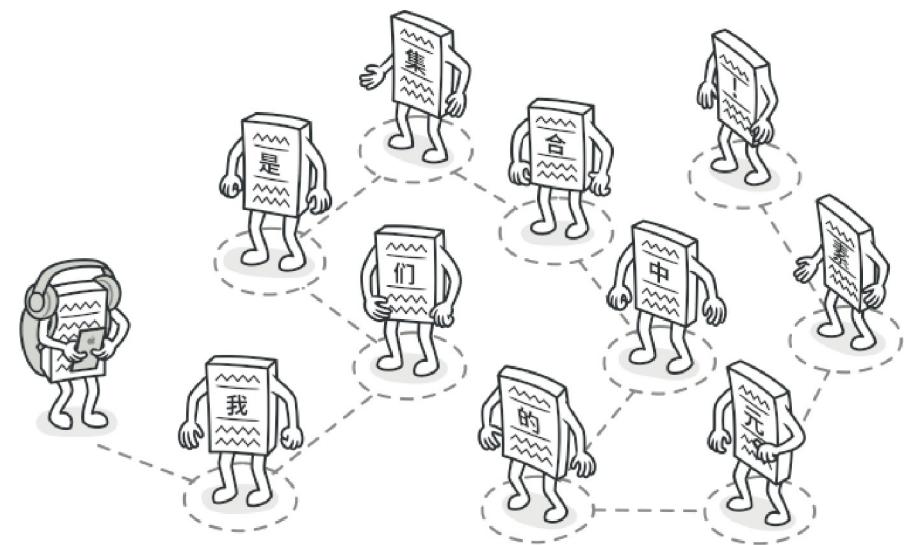
### 3.1 Chain of Responsibility



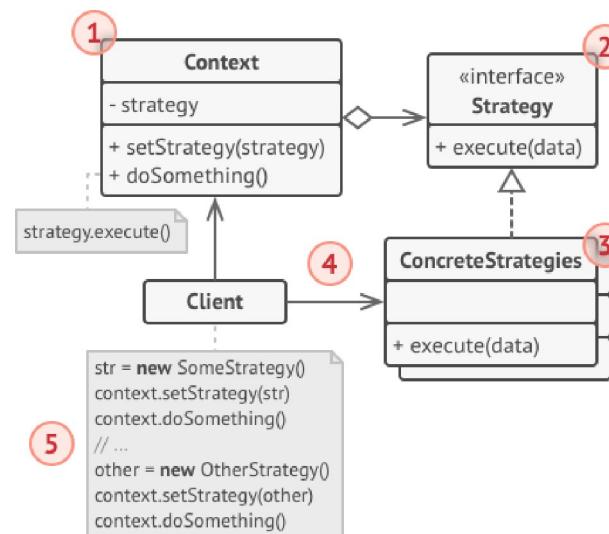
### 3.2 Command



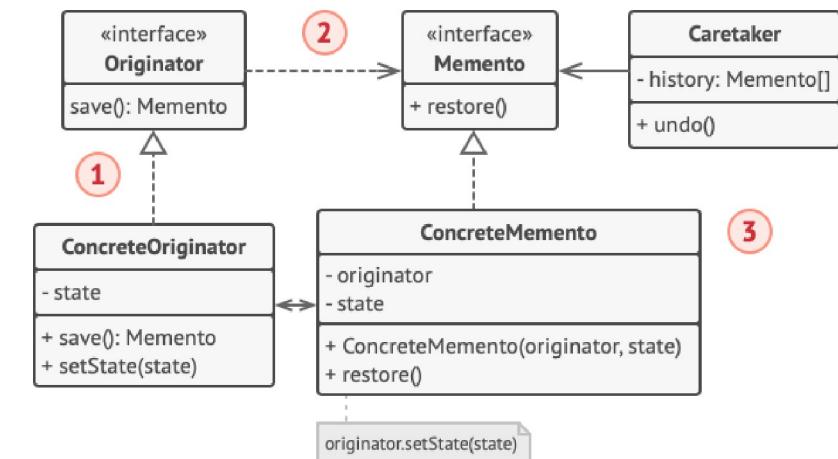
### 3.3 Iterator



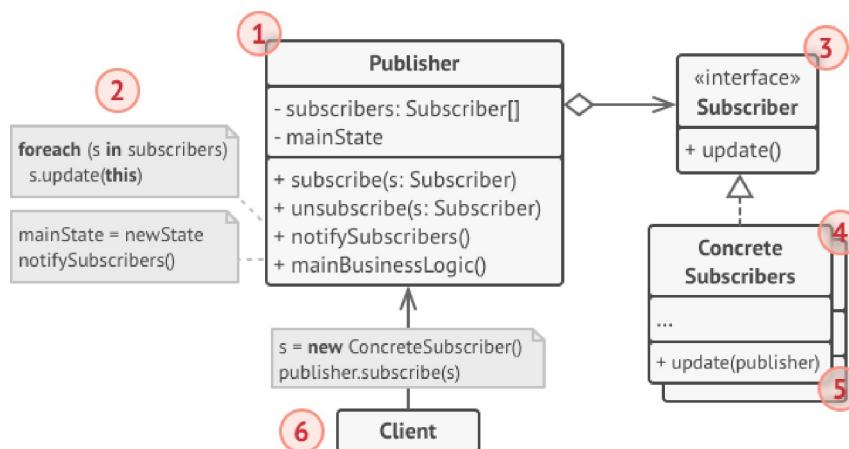
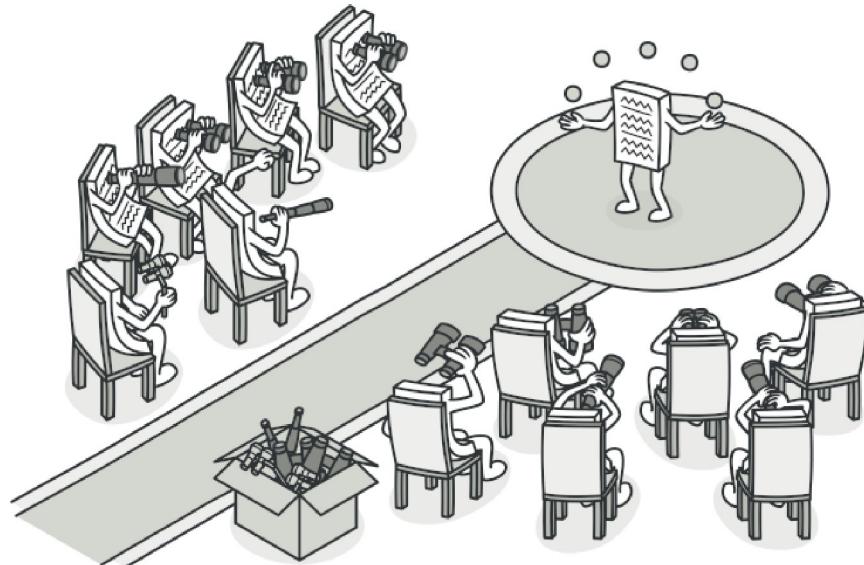
### 3.8 Strategy



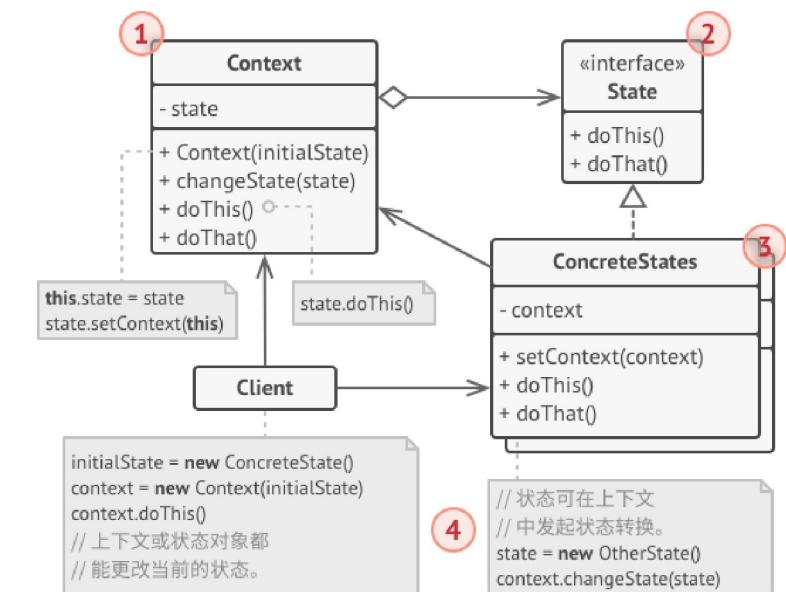
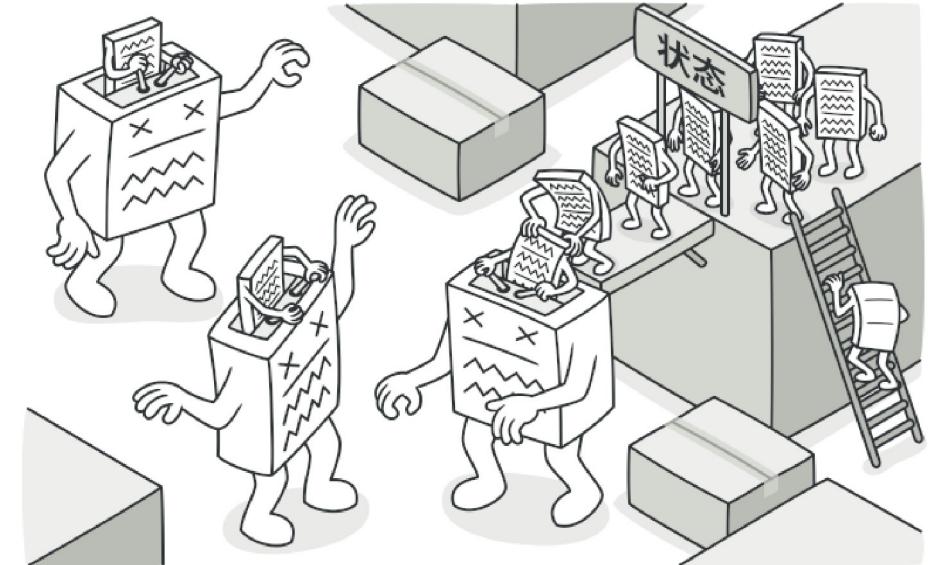
### 3.5 Memento

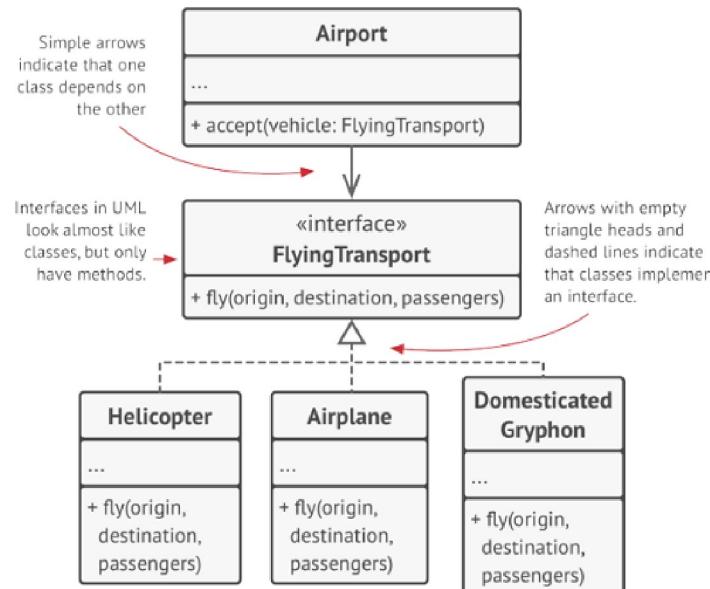


### 3.6 Observer



### 3.7 State





UML diagram of several classes implementing an interface.



UML Association. Professor communicates with students.



UML Dependency. Professor depends on salary.

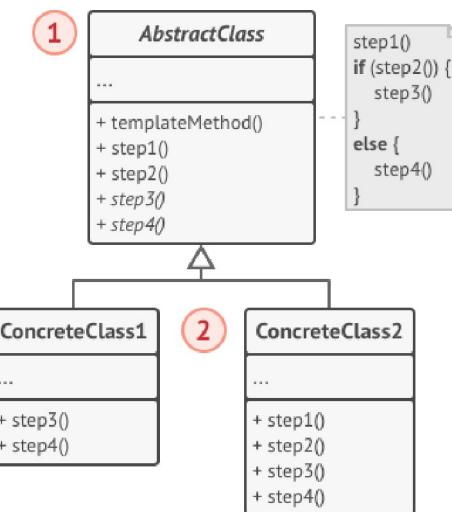
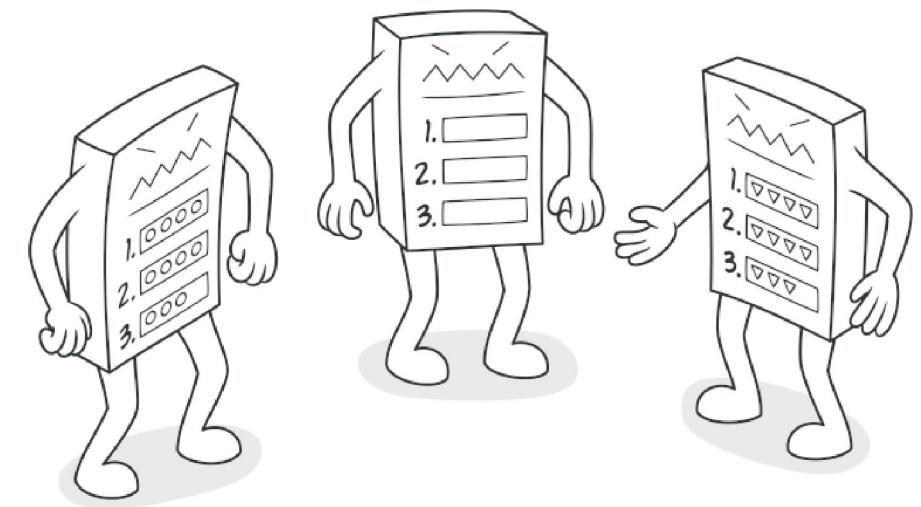


UML Composition. University consists of departments.

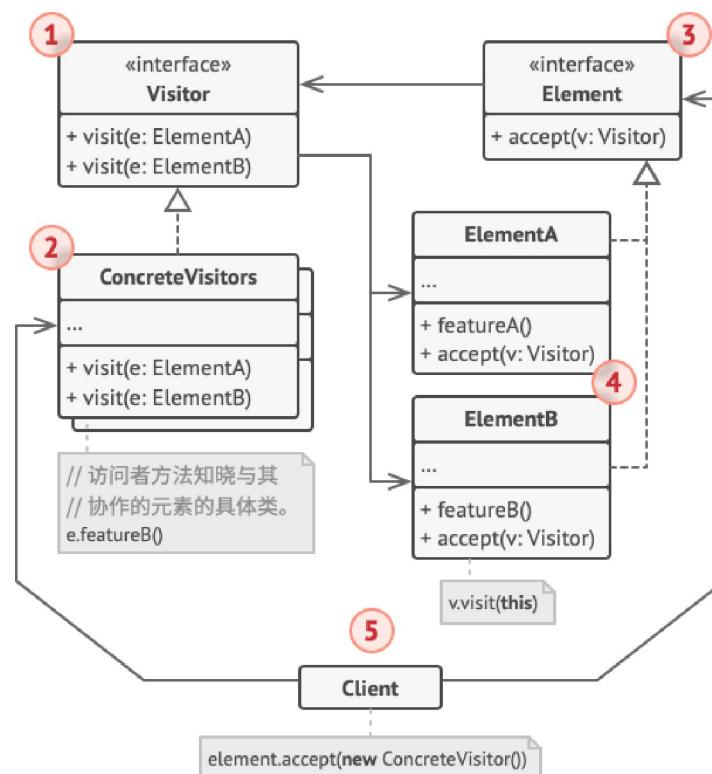
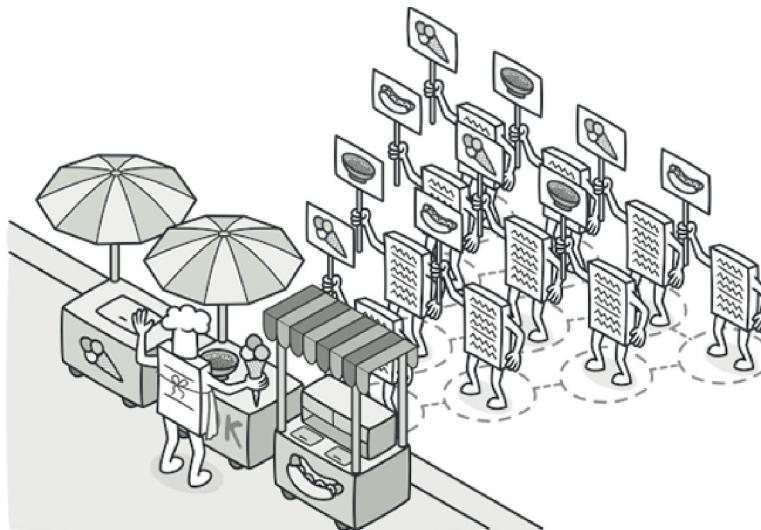


UML Aggregation. Department contains professors.

### 3.9 Template Method



### 3.10 Vistor



4 UML

