

## Behavioral Design Patterns

**Memento:** Allows restoring an object to a previous state.

**State:** Allows an object to behave differently depending on the state it is in.

**Iterator:** Allows iterating over an object without having to expose the object's internal structure (which may change in the future).

**Strategy:** Allows passing different algorithms (behaviours) to an object.

Allows defining a template (skeleton) for an operation. Specific steps will then be implemented in subclasses.

**Command:** Allows decouple a sender from a receiver. The sender will talk to the receiver through a command. Commands can be undone and persisted.

**Observer:** Allows an object notify other objects when its state changes.

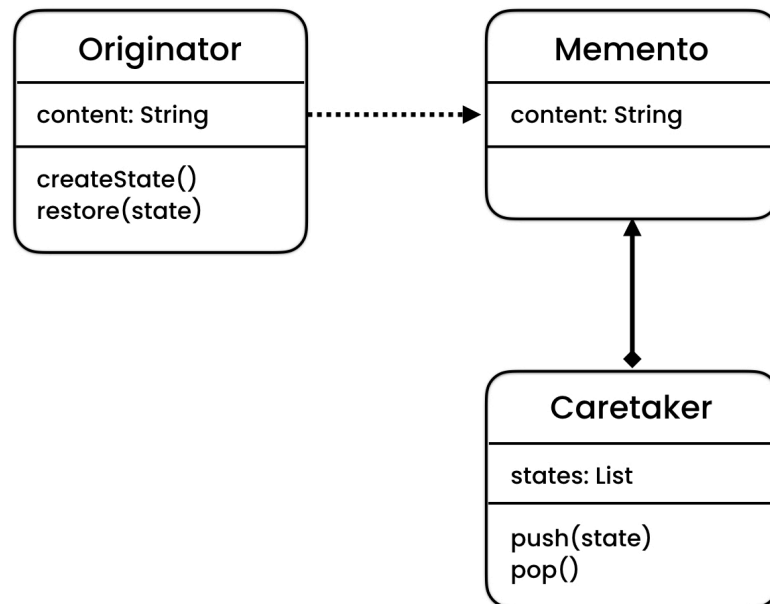
**Mediator:** Allows an object to encapsulate the communication between other objects.

**Chain of Responsibility:** Allows building a chain of objects to process a request.

**Visitor:** Allows adding new operations to an object structure without modifying it.

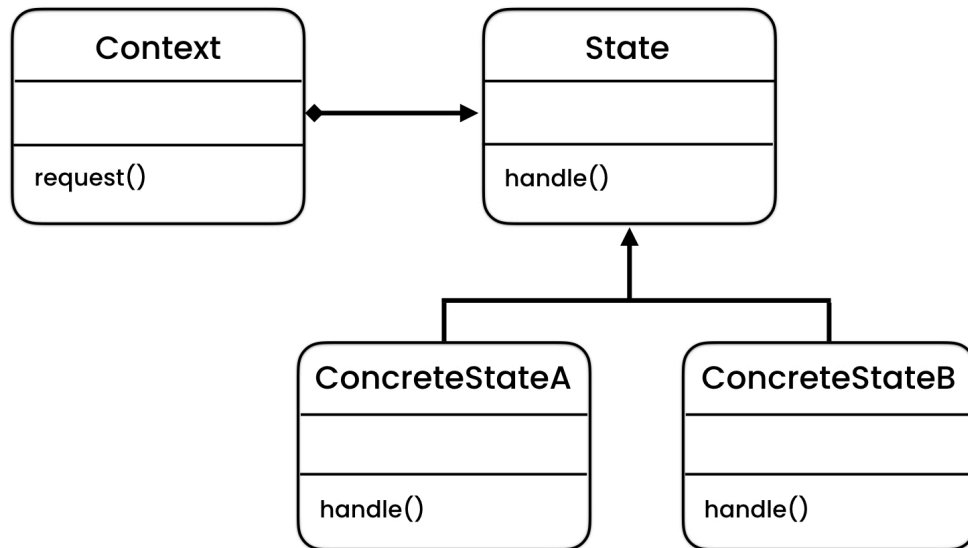
## Memento Pattern

Allows restoring an object to a previous state.



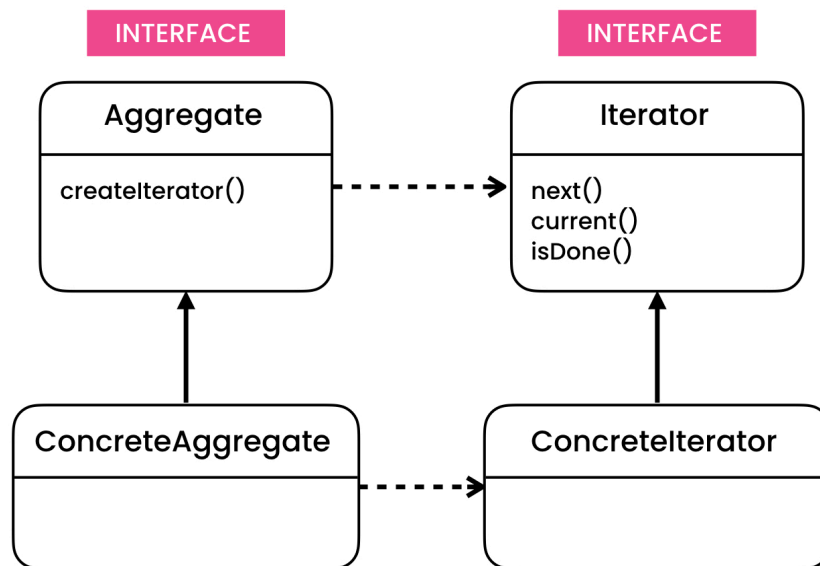
## State Pattern

Allows an object to behave differently depending on the state it is in.



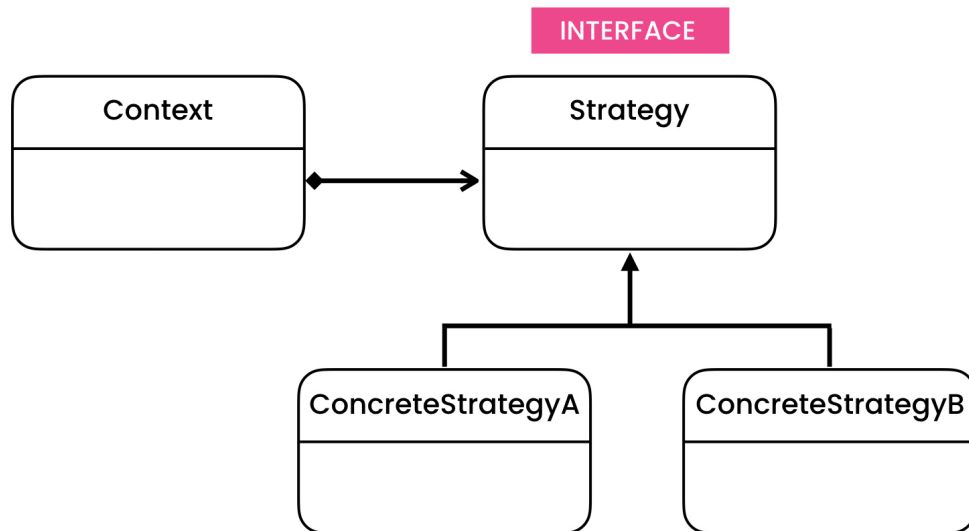
## Iterator Pattern

Allows iterating over an object without having to expose the object's internal structure (which may change in the future).



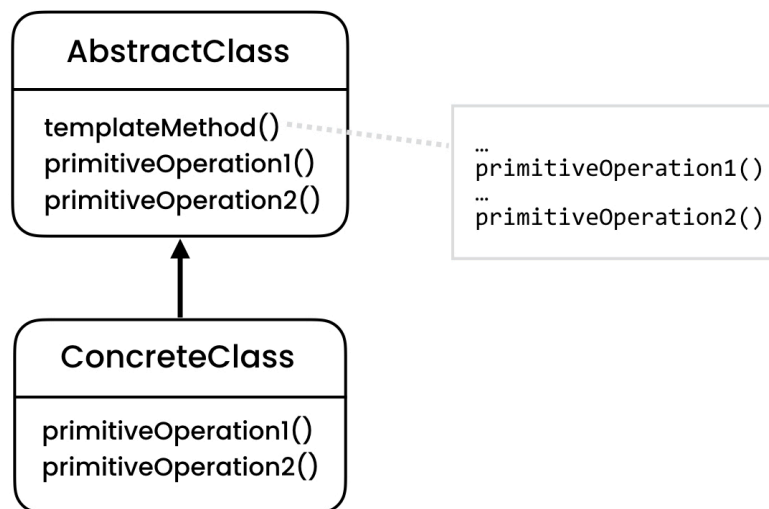
## Strategy Pattern

Allows passing different algorithms (behaviours) to an object.



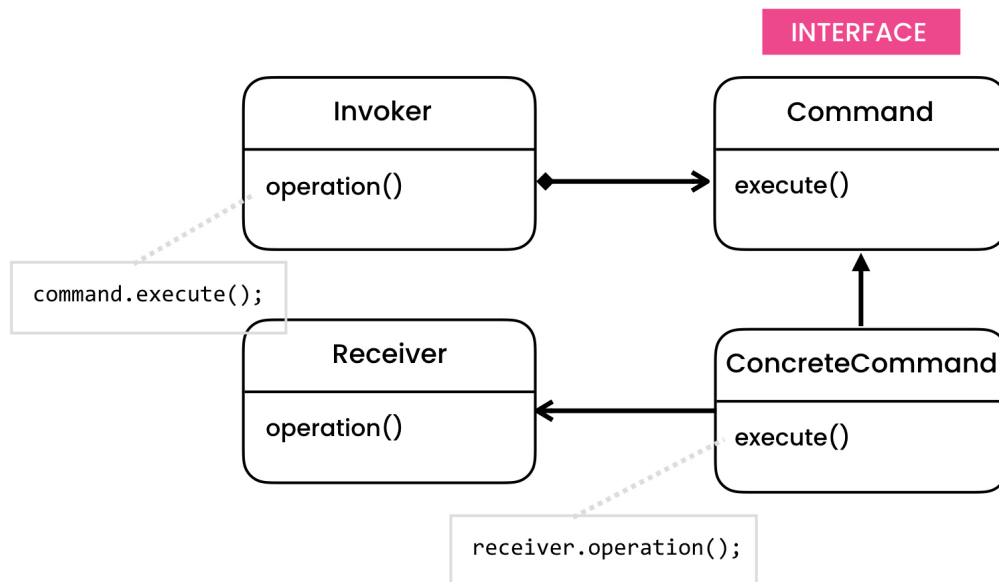
## Template Method Pattern

Allows defining a template (skeleton) for an operation. Specific steps will then be implemented in subclasses.



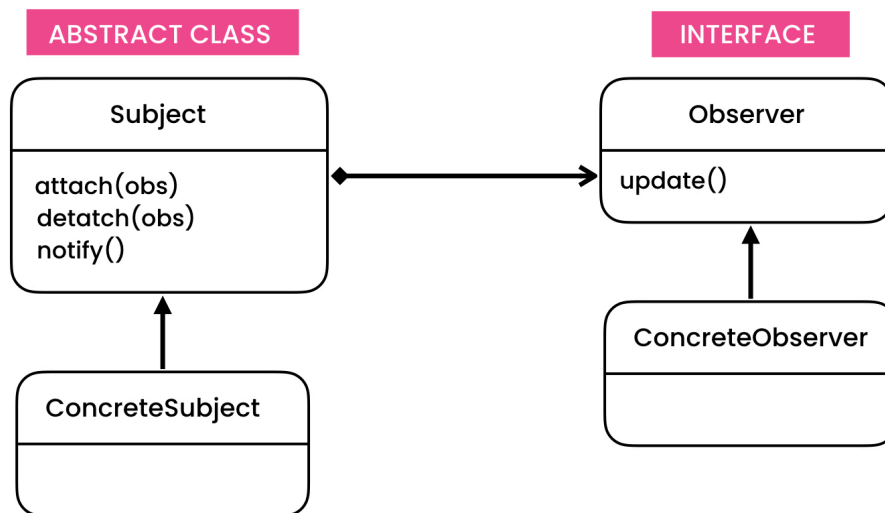
## Command Pattern

Allows decouple a sender from a receiver. The sender will talk to the receiver through a command. Commands can be undone and persisted.



## Observer Pattern

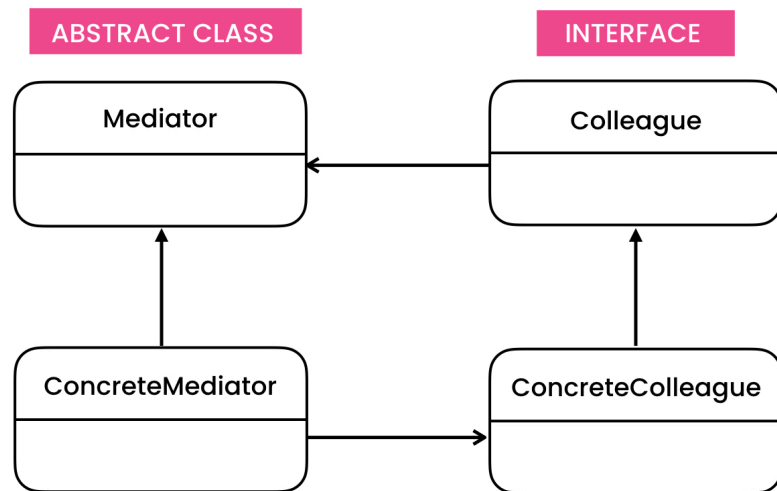
Allows an object notify other objects when its state changes.





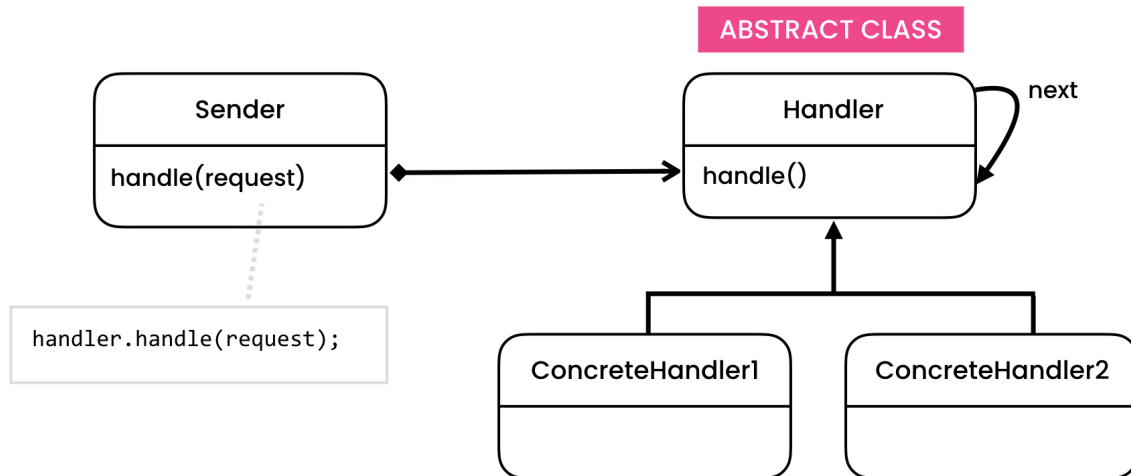
## Mediator Pattern

Allows an object to encapsulate the communication between other objects.



# Chain of Responsibility Pattern

Allows building a chain of objects to process a request.



## Visitor Pattern

Allows adding new operations to an object structure without modifying it.

