

Visitor Pattern

Problem

Sometimes you have

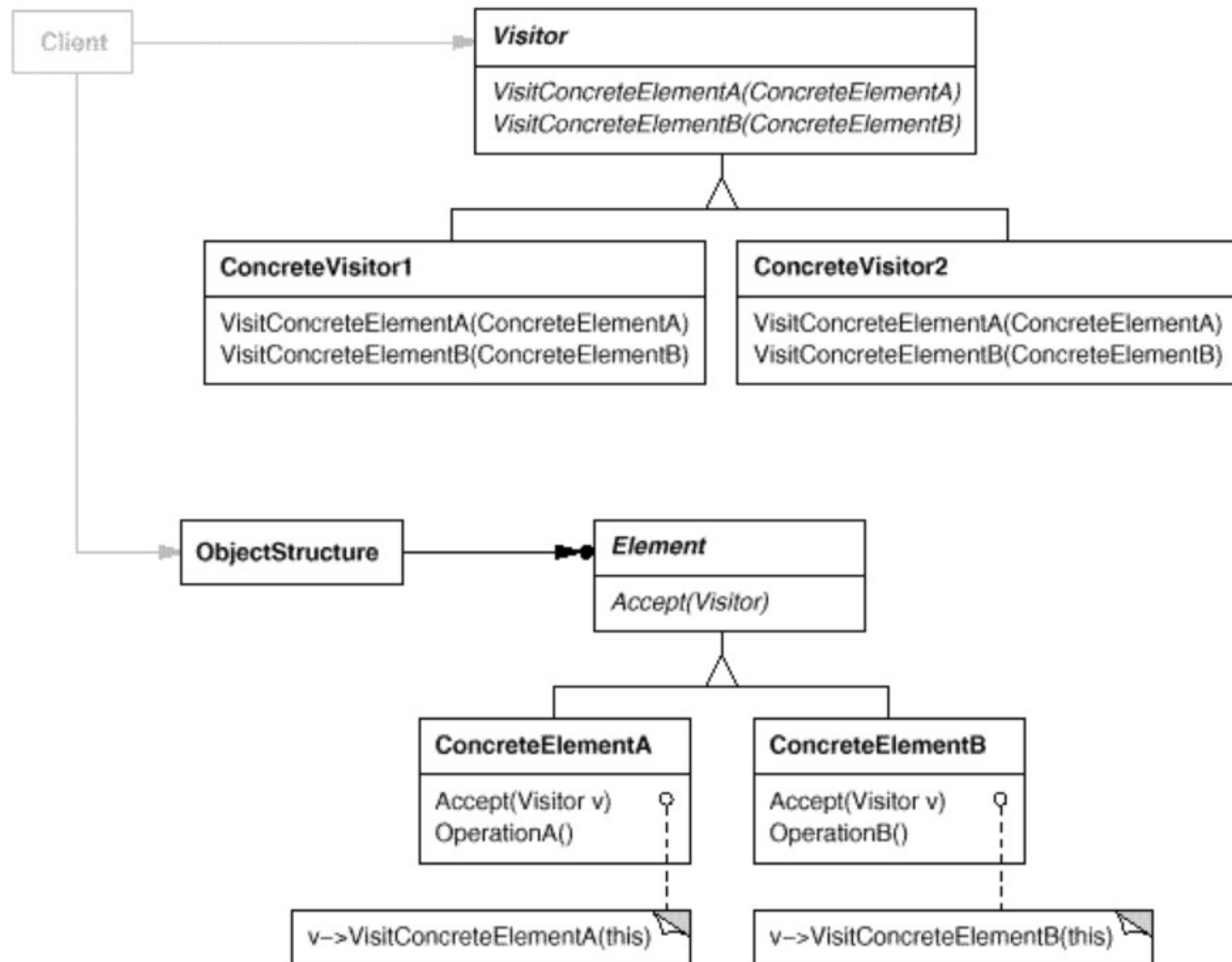
- many types of objects with differing interfaces, and **you want to perform operations on these objects that depend on their types.**
- **many distinct and unrelated operations** that you need to be performed on objects.
- **classes definitions** that might change, but you often want to **define new operations over the structure.**

Visitor Pattern Definition

“Represent an operation to be performed on the elements of an object structure.

Visitor lets you define a new operation without changing the classes of the elements on which it operates.” Gamma et al.

Structure of Visitor pattern



Related Patterns

- **Composite:** Visitors can be used to apply an operation over an object structure defined by the Composite pattern.
- **Interpreter:** Visitor may be applied to do the interpretation.

Summary

“Represent an operation to be performed on the elements of an object structure. Visitor lets you define a new operation without changing the classes of the elements on which it operates.””

Gamma et al.

- Mediator Pattern is considered to be a **behavioral pattern**.