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# Mediator



# Mediator Intent

Define an object that encapsulates how a set of objects interact. Mediator promotes loose coupling by keeping objects from referring to each other explicitly, and it lets you vary their interaction independently.

Category?

(Behavioral)

# Mediator

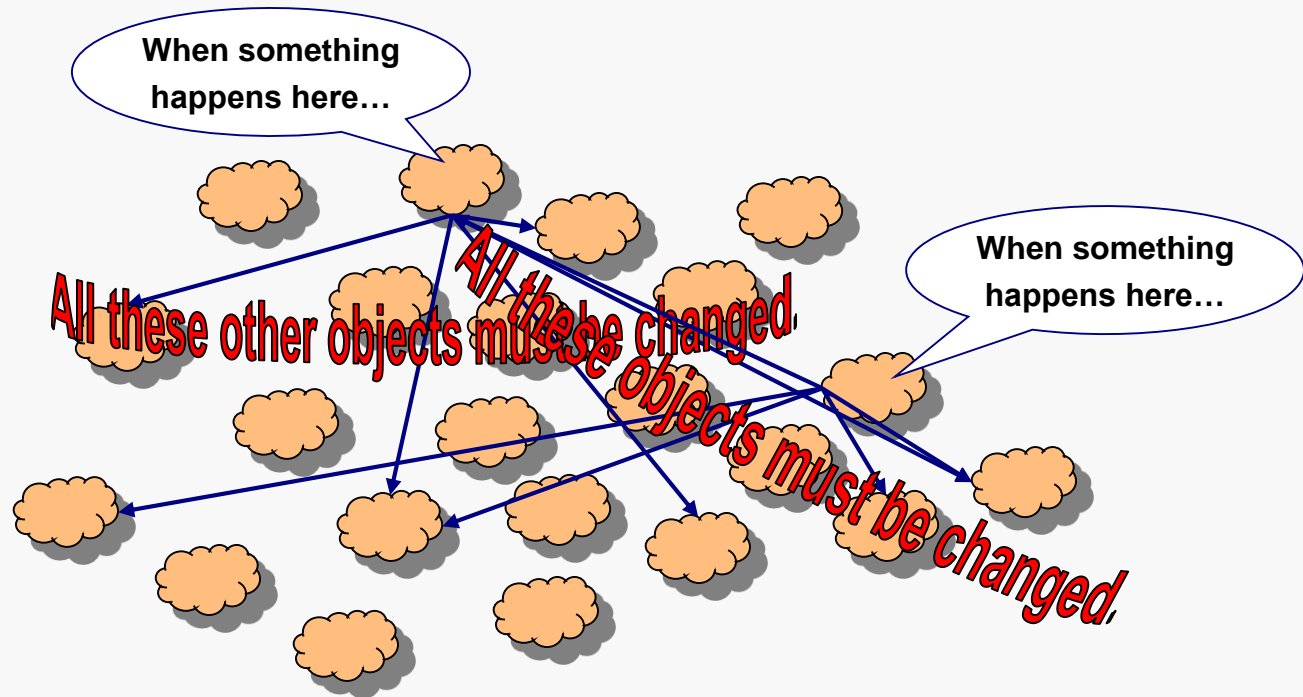
**Context:** complex system, supporting intercommunication between classes may become inherently tangled

**Approach:** forward messages to the appropriate object(s) via the mediator object.

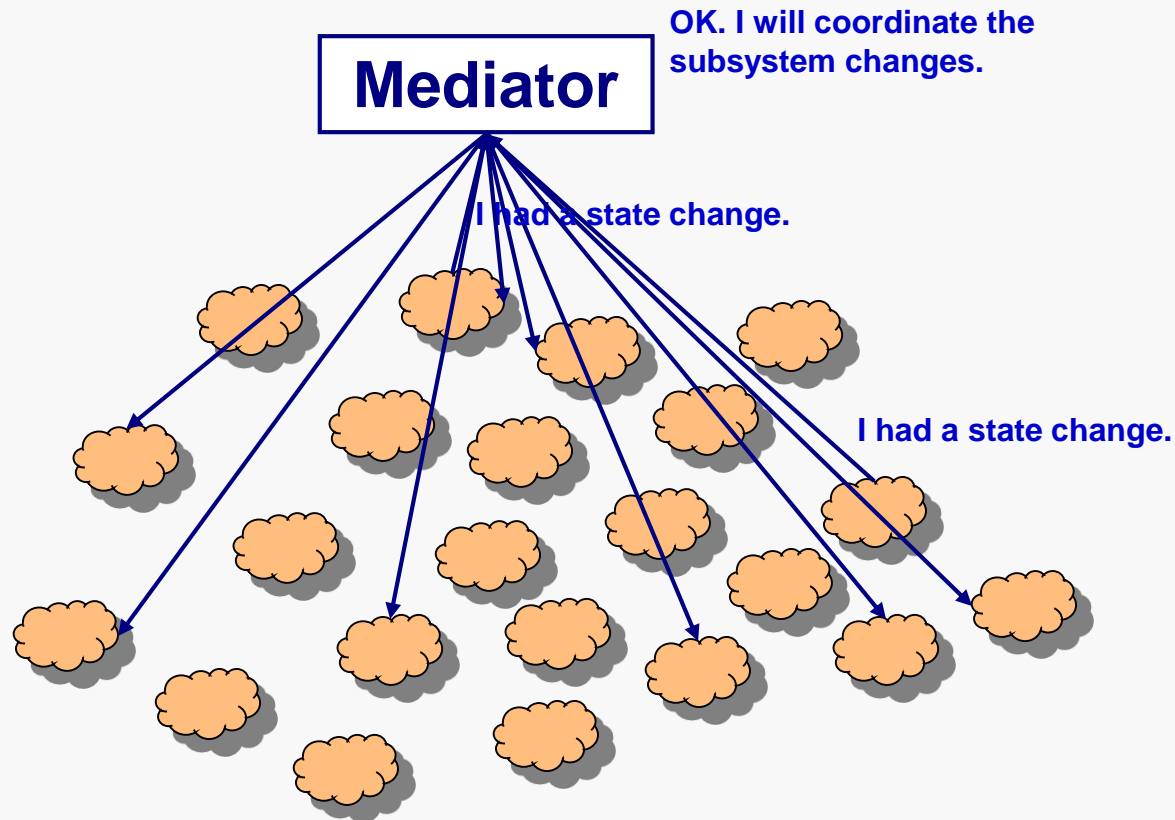
**Pros:** loose coupling between objects and encapsulation of the **business relationships** within the mediator

**Cons:** potentially leading to monolith maintenance burden, overhead and lack of reuse

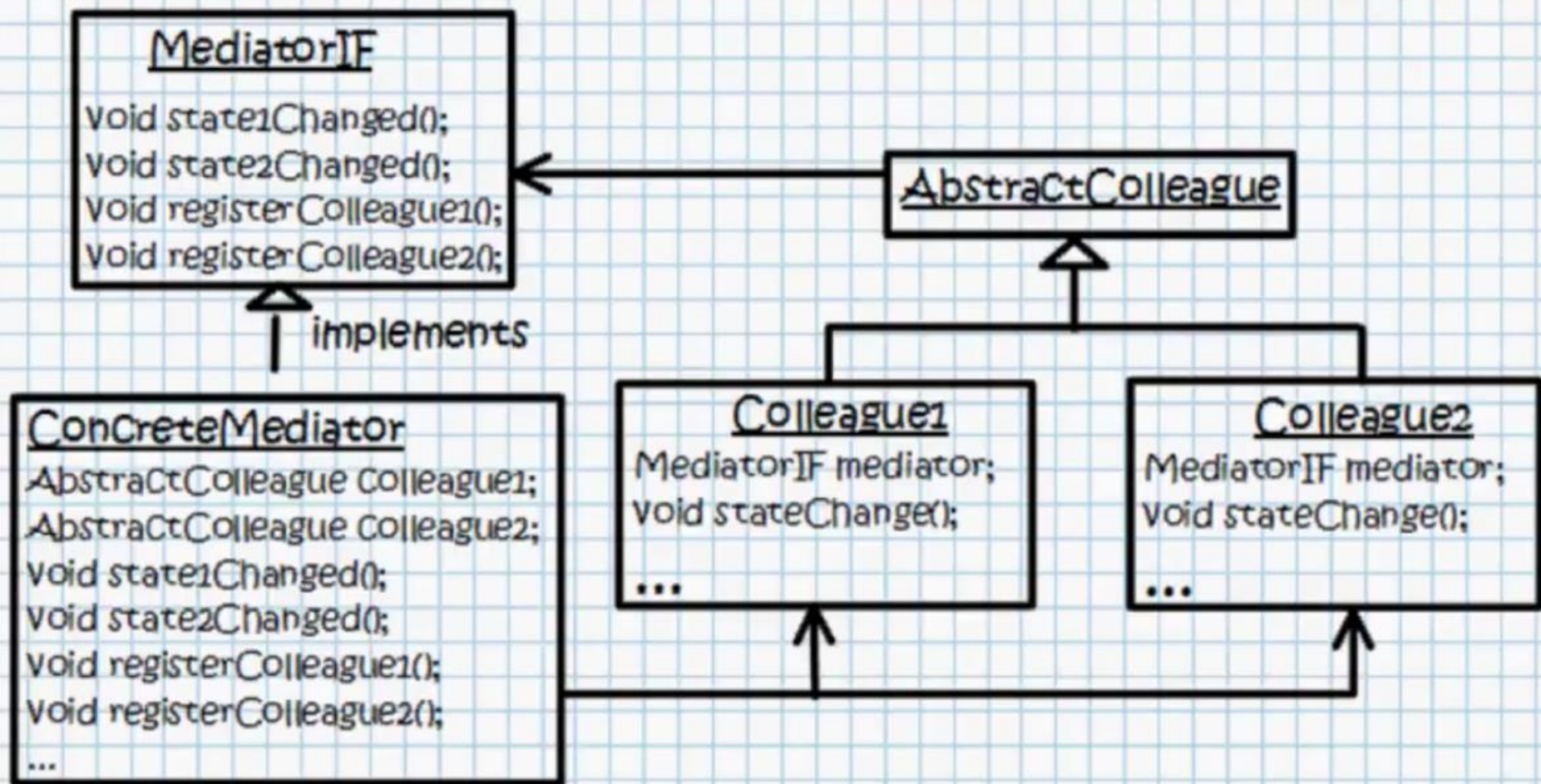
# When objects in a subsystem interact, they often become tightly bound.



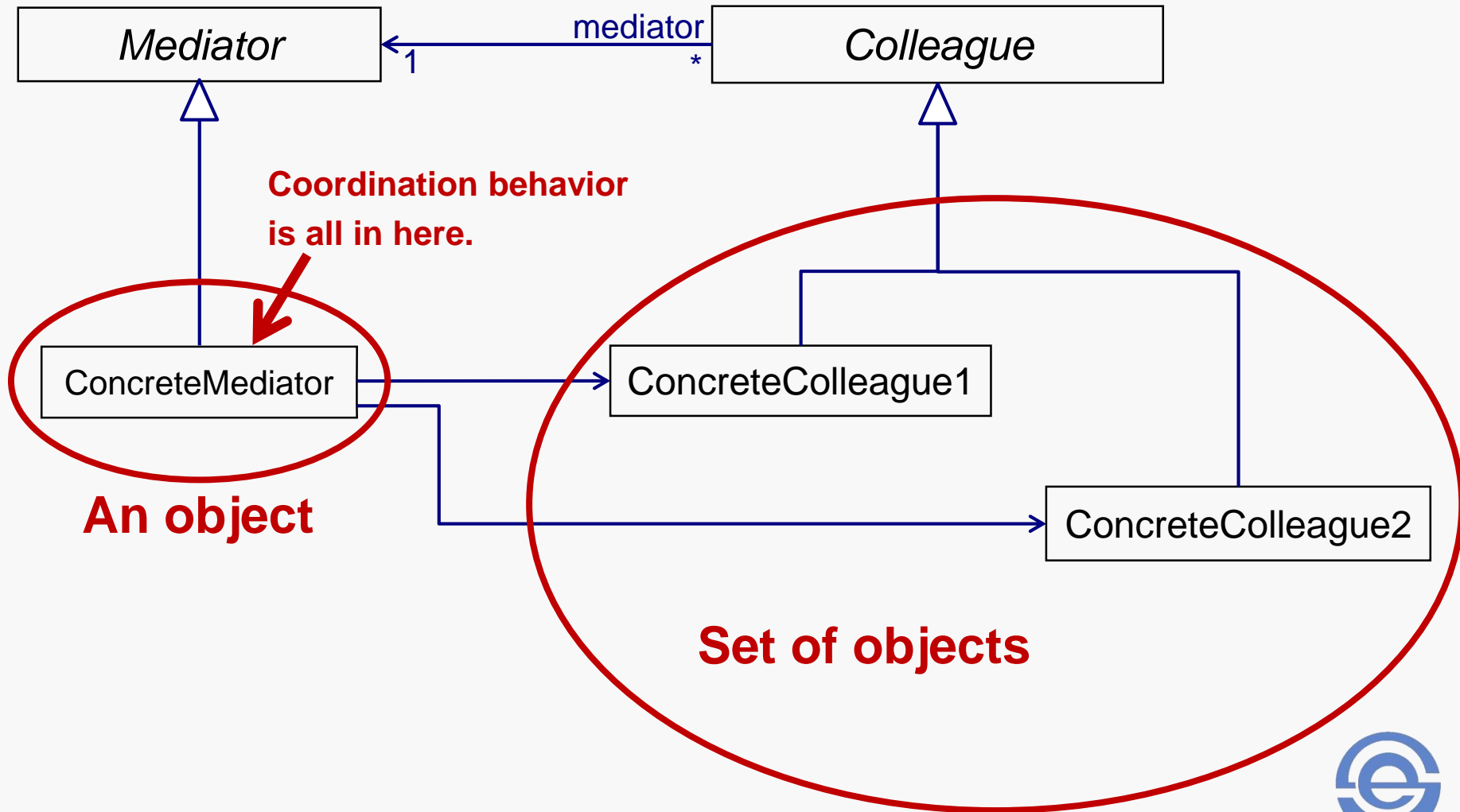
# Mediator lets you separate out the coordination behavior to one location.





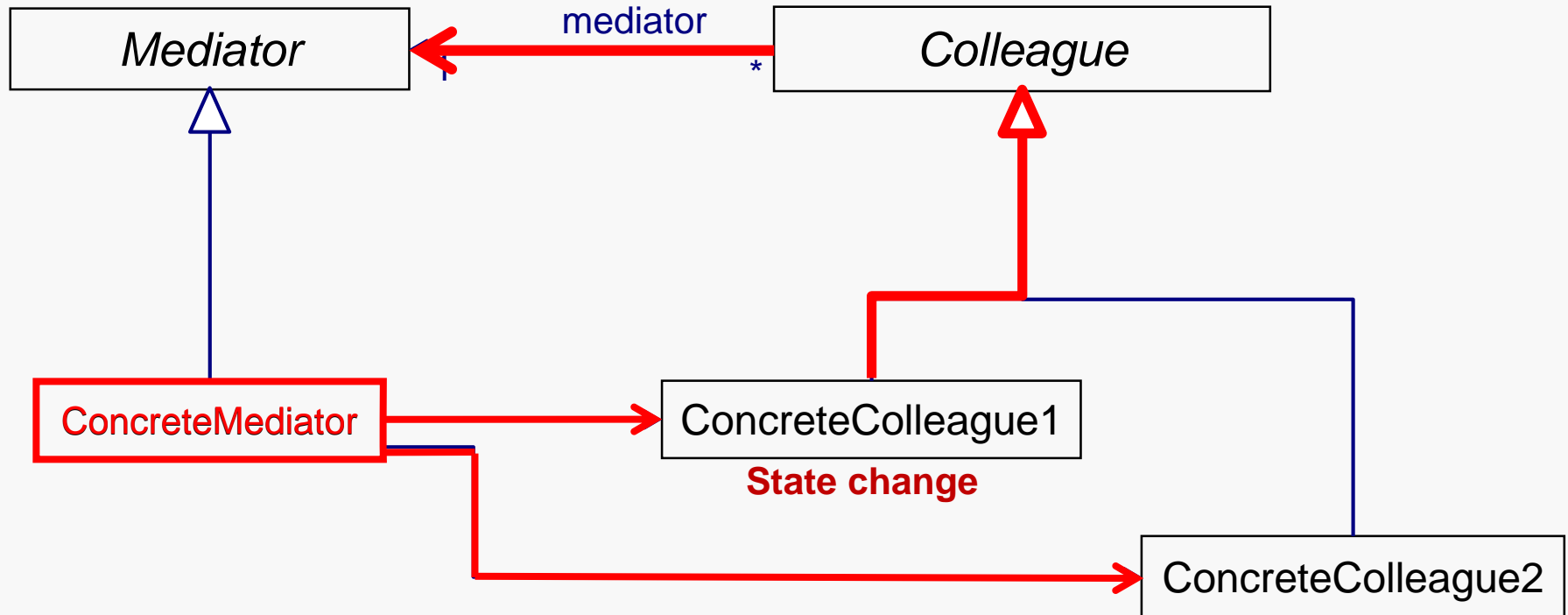


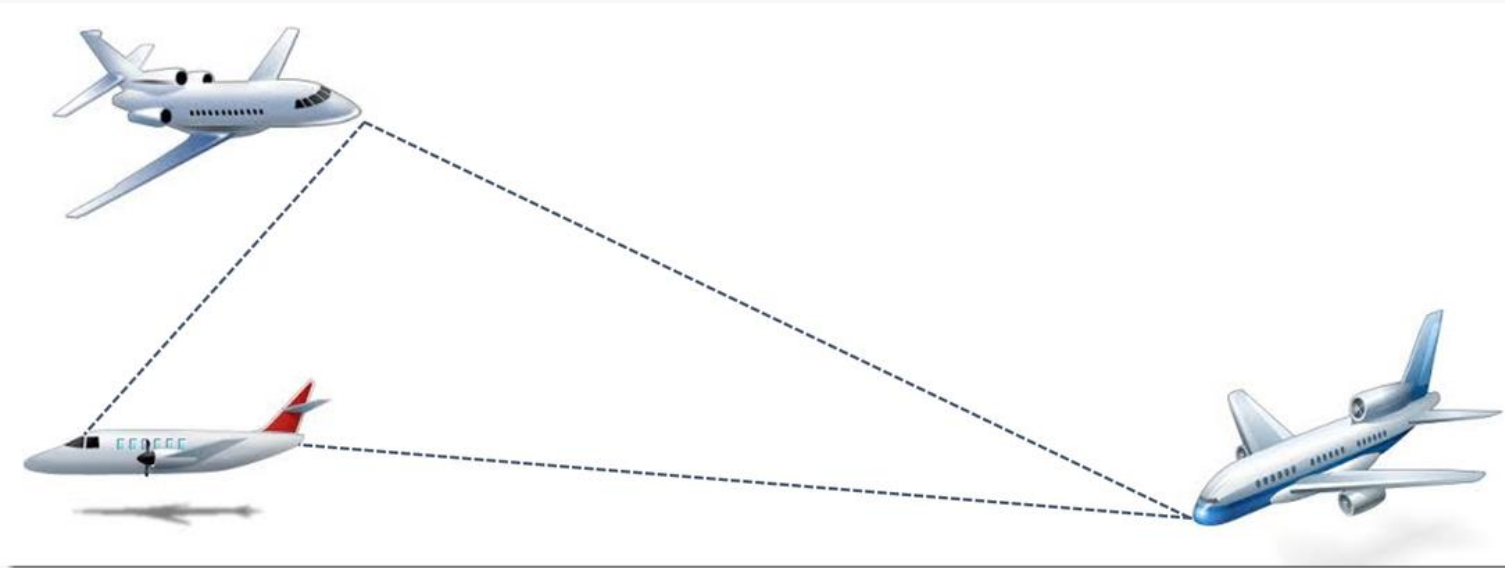
# The Mediator pattern has a very simple structure.

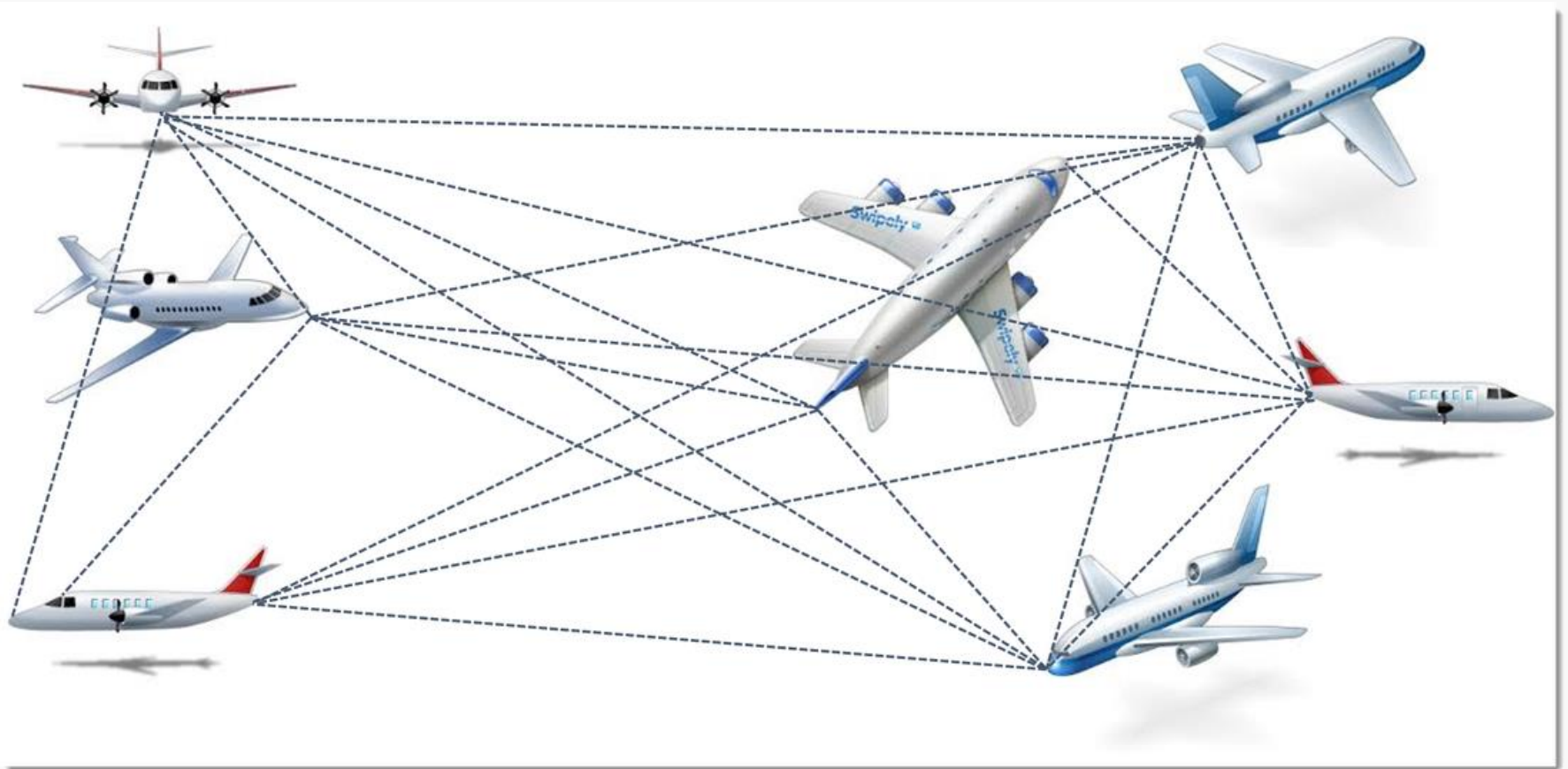


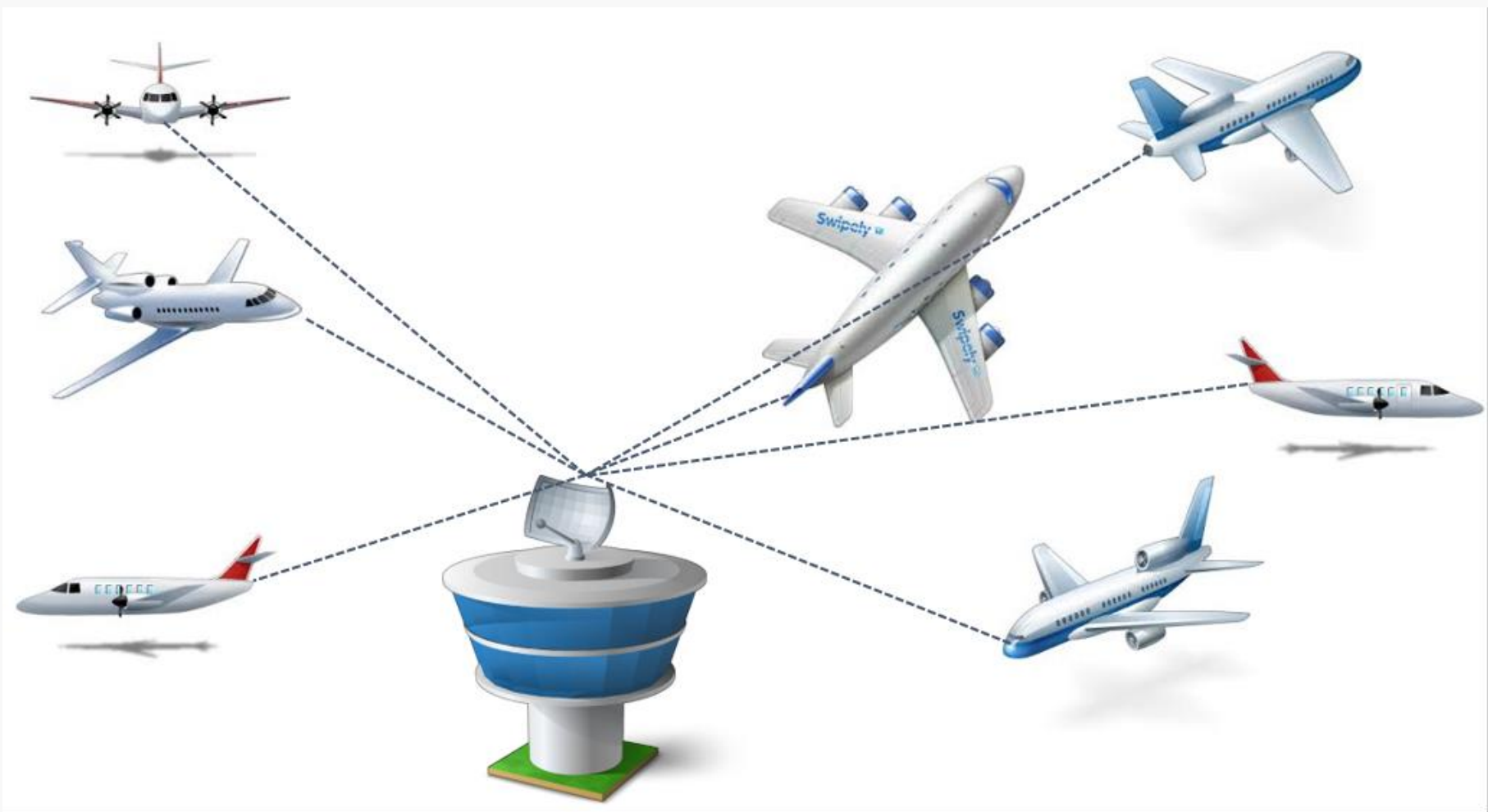


# The coordination activity all resides in the mediator relieving subsystem objects of this duty.









# Controlling a bank of elevators is an application that could benefit from use of the Mediator pattern.



- Set of objects
  - *Elevators, floor buttons*
  - *Floor lobby call signals*
- Coordinating behaviors
  - *Morning rush, lunch, evening*
  - *Weekday*
  - *Weekend*
  - *Emergency*

# You can mediate using the stock pattern with a little help from an observer.

