

CS 525 - ASD

# Advanced Software Development

**MS.CS Program**  
Department of Computer Science  
Rene de Jong, MsC.



Maharishi University  
OF MANAGEMENT

# CS 525 - ASD

## Advanced Software Development

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# Lesson 8 Mediator pattern

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- L1: ASD Introduction
- L2: Strategy, Template method
- L3: Observer pattern
- L4: Composite pattern, iterator pattern
- L5: Command pattern
- L6: State pattern
- L7: Chain Of Responsibility pattern



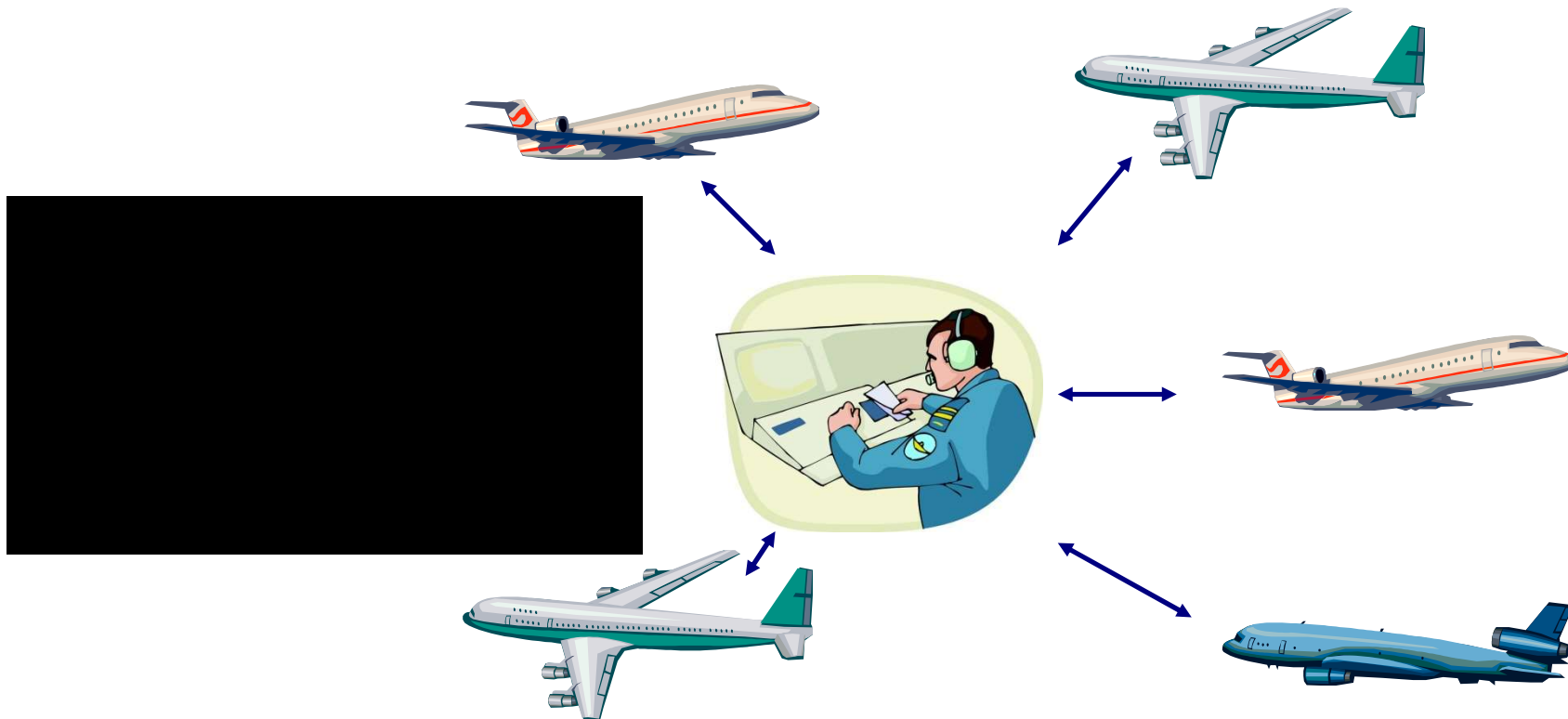
## Midterm

- L8: Proxy, Adapter, Mediator**
- L9: Factory, Builder, Decorator, Singleton
- L10: Framework design
- L11: Framework implementation
- L12: Framework example: Spring framework
- L13: Framework example: Spring framework

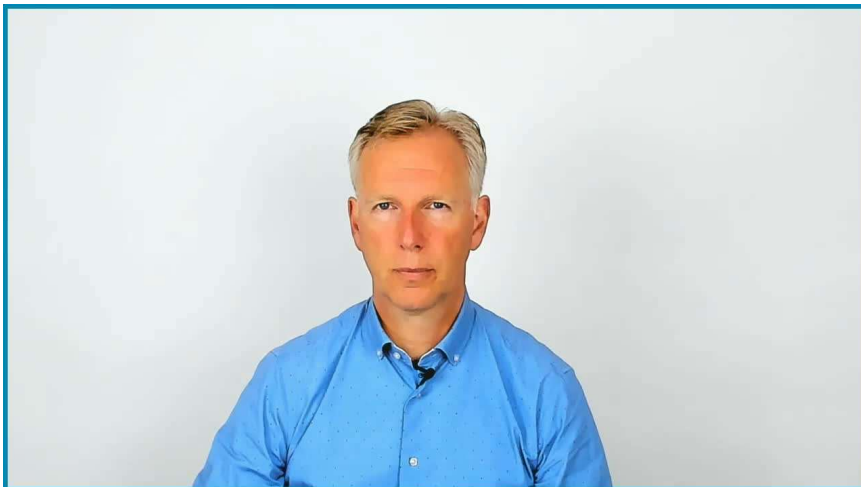
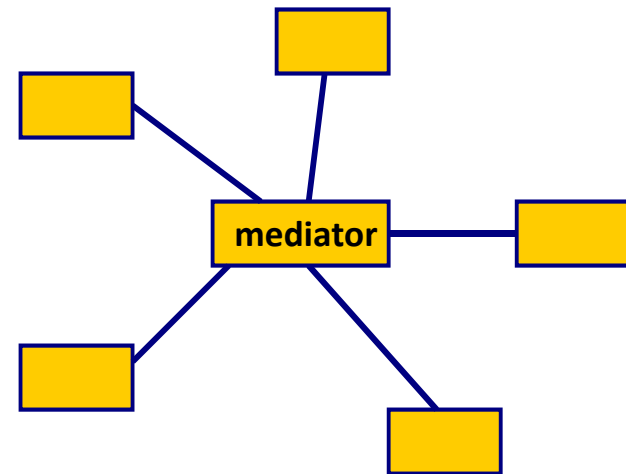
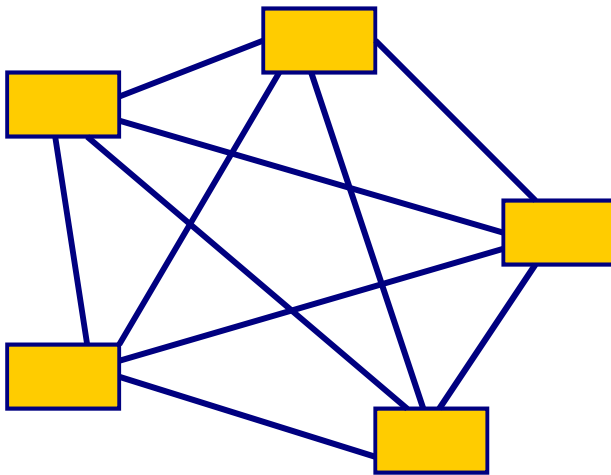
## Final

# Mediator pattern

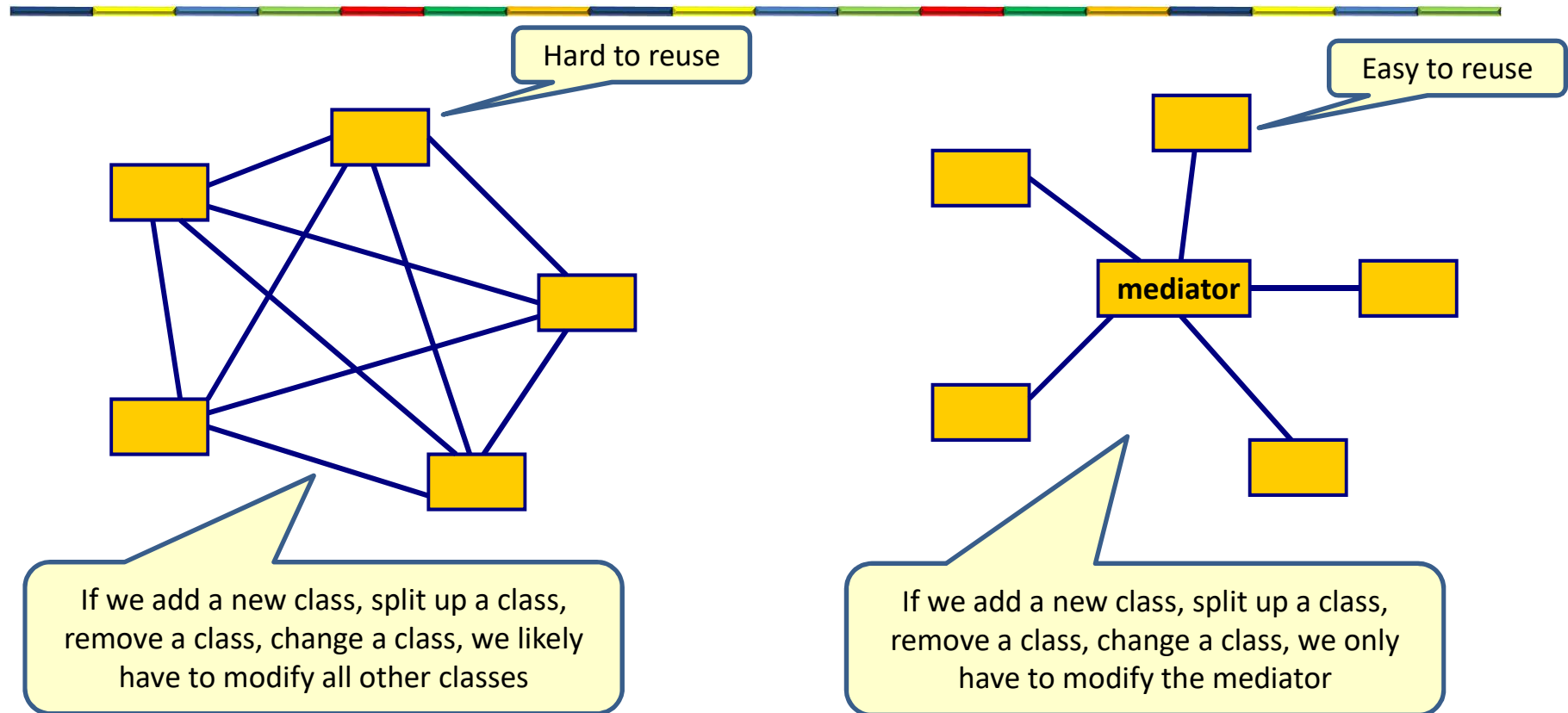
- Mediates between objects.
  - Encapsulates how different objects interact.



# Mediator

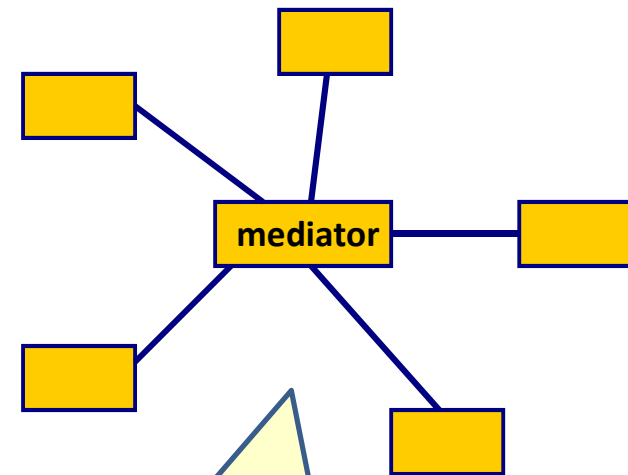


# Advantage Mediator: loose coupling



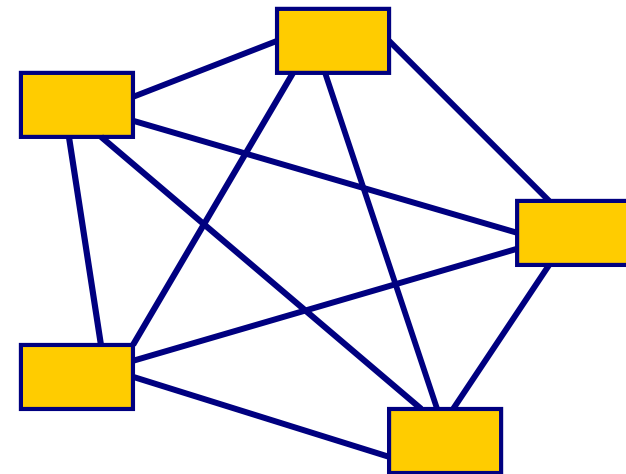
# Disadvantage Mediator

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The mediator can become very complex

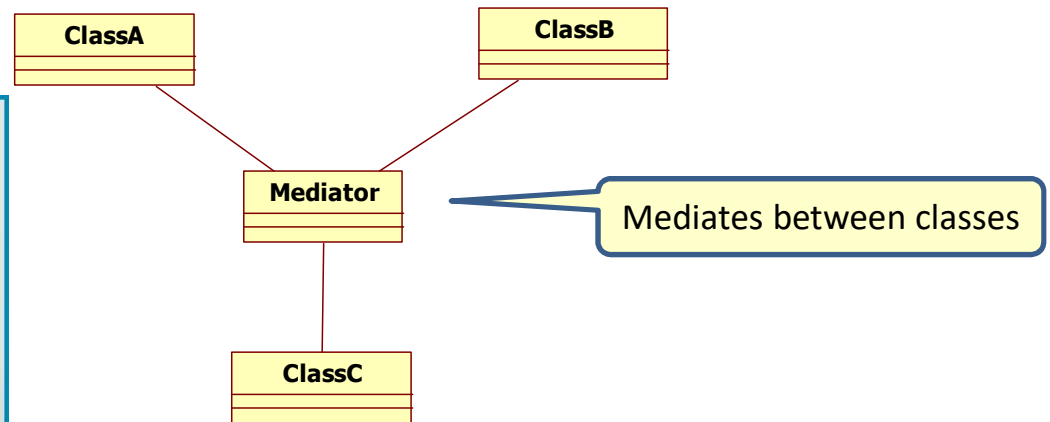
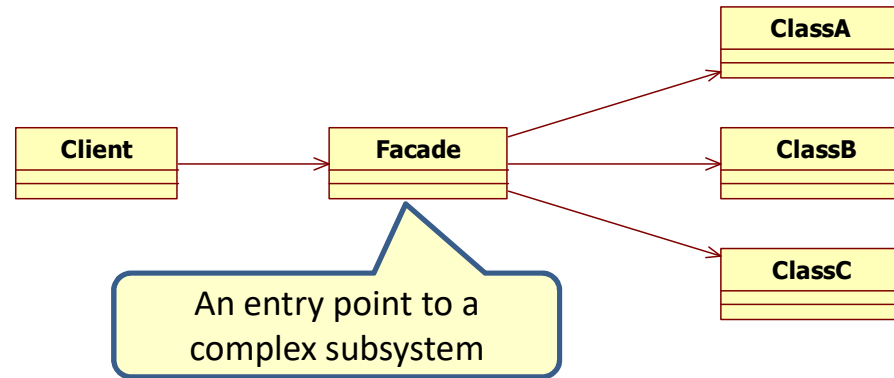
# How did we get to this?



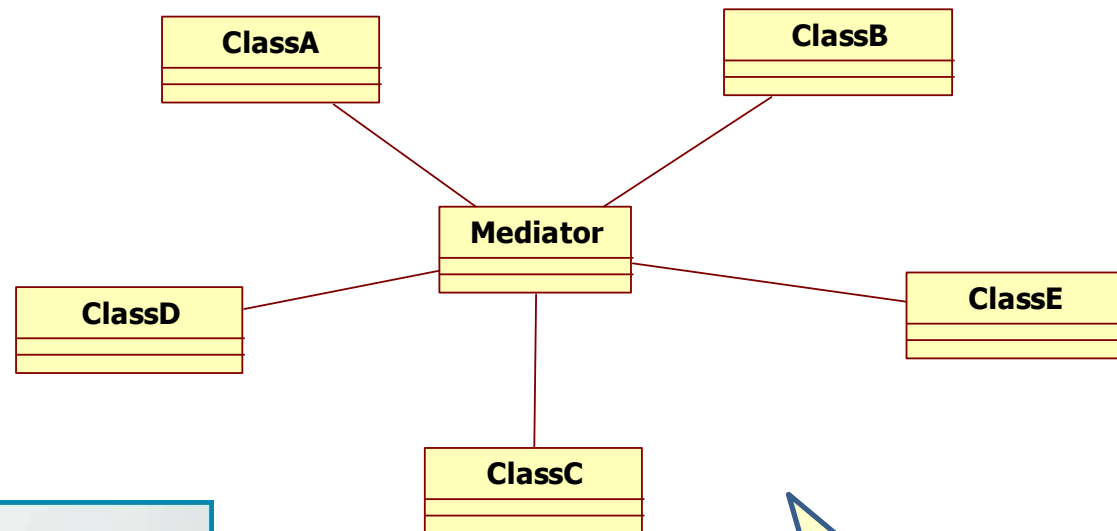
If you end up with a class diagram like this, something went wrong. This is not good OO design!



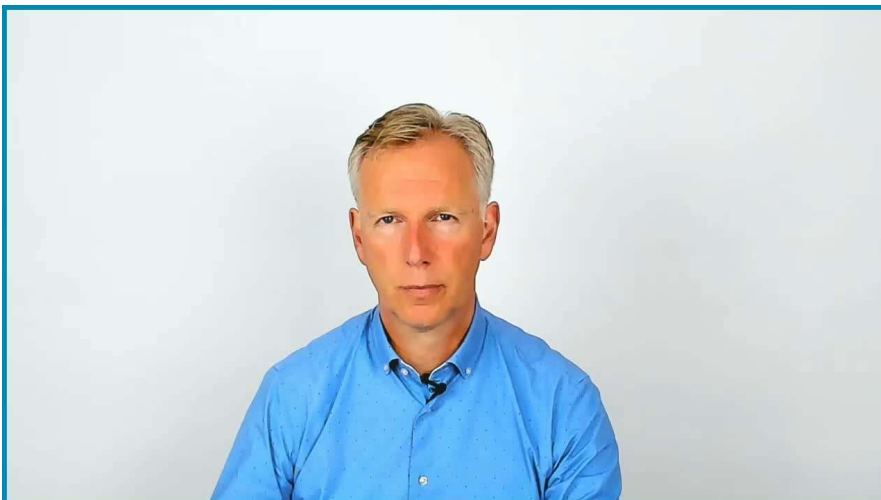
# Façade and Mediator



# Examples of the mediator

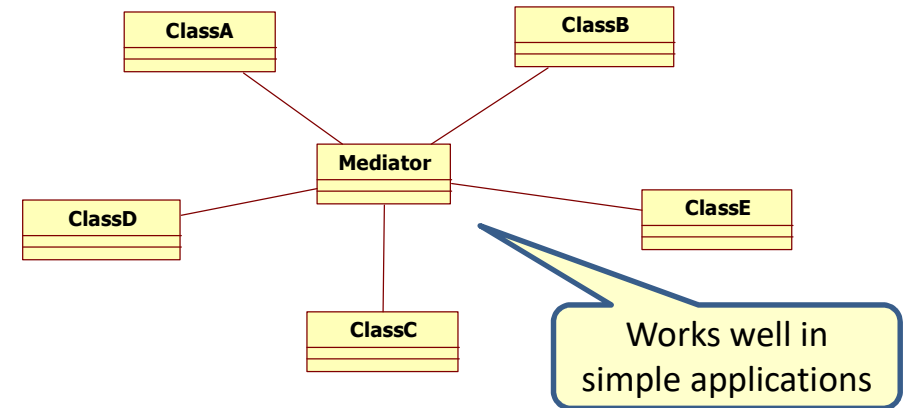


Do not use a mediator like this, unless ....

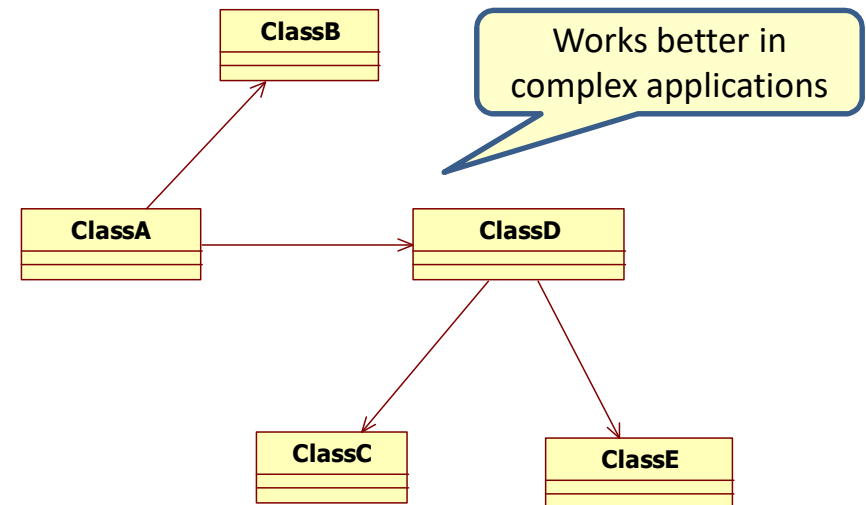


# Orchestration vs. choreography

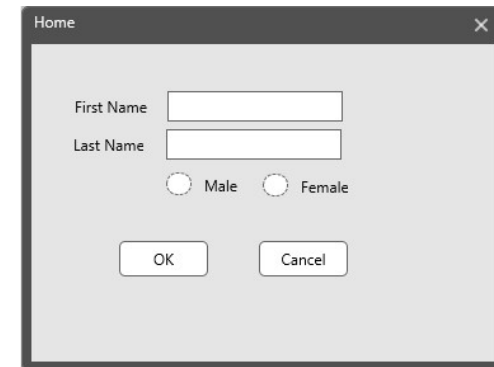
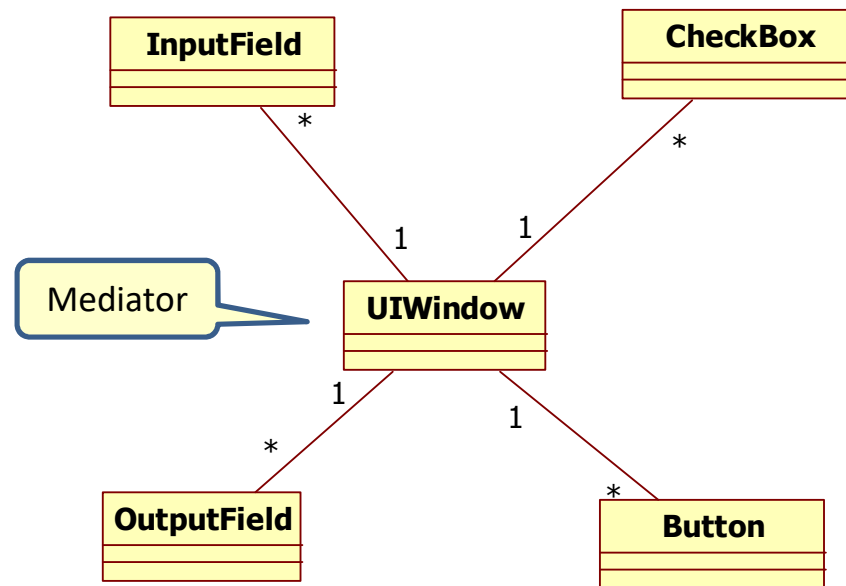
- Orchestration
  - One central brain



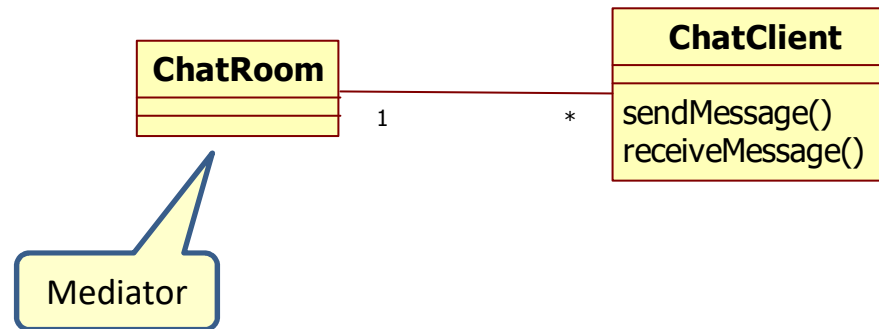
- Choreography
  - No central brain



# Examples of the mediator



# Examples of the mediator



# Main point

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- The Mediator object is responsible for controlling and coordinating the interactions of a group of objects.
- The Unified Field is the source of creation that coordinates all interactions in the relative world.

# Connecting the parts of knowledge with the wholeness of knowledge

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1. The mediator pattern is an orchestrator between objects.
  2. The proxy and the adapter are both a layer of indirection that solves a certain problem between the client and the target class
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3. **Transcendental consciousness** is the natural experience of pure consciousness, the home of all the laws of nature.
  4. **Wholeness moving within itself:** In Unity Consciousness, one realizes that all relative objects are expressions of the field of Pure Intelligence.

