

# [Mediator Design Pattern]

The **Mediator Pattern** is a behavioral design pattern that facilitates communication between different objects or components without them being directly coupled. Instead, a mediator object handles the interactions between these components, promoting loose coupling and simplifying the overall system structure.

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## Key Concepts:

### 1. Mediator Interface:

- Defines an interface for communication between objects.

### 2. Concrete Mediator:

- Implements the mediator interface and coordinates communication among components.

### 3. Colleague Components:

- Represent the individual components (or classes) that communicate through the mediator. They have a reference to the mediator but do not communicate directly with each other.

### 4. Client:

- Instantiates the mediator and the components and triggers communication through the mediator.