

# I4SWD Handin2 – Group 50

Command Pattern



AARHUS UNIVERSITET

# Purpose of Command Pattern

## Pros:

- Macro instructions are easy
- Decreases dependency/coupling of the system
- Encapsulating commands/requests as objects

## Cons:

- Increased number of classes



# Type of Pattern

- Creational Design Pattern
- Structural Design Pattern
- **Behavioral Design Pattern** ←
- Communication between objects



# Command Pattern

Intent:

- Parameterization
- Saves requests in a queue

Contains:

- Client
- Invoker
- Receiver
- Command
- ConcreteCommand

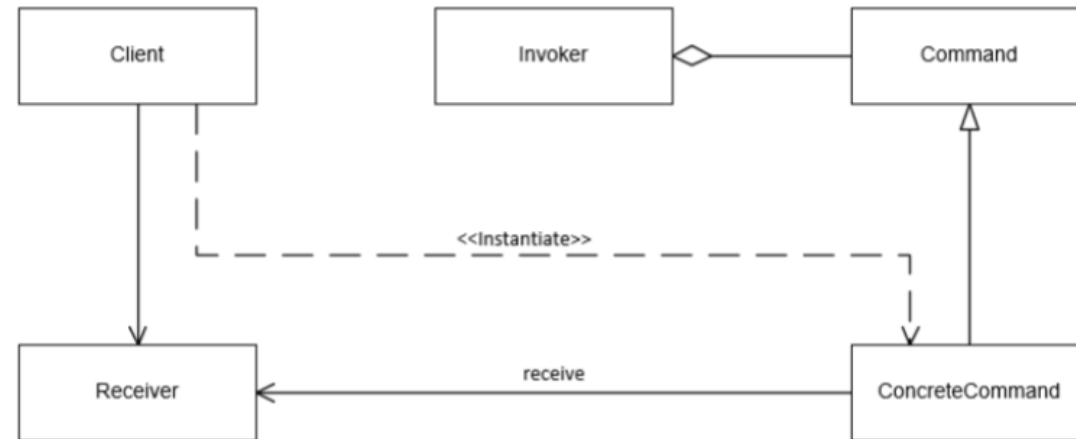


Figure 1: This figure is an overview that illustrates the associations between the classes.



# Related Patterns

Command Pattern	Strategy Pattern
Uses encapsulation	Uses encapsulation
Small level	Abstract level
Actions	Algorithms

Command Pattern	Memento Pattern
Can undo & redo	Can undo & redo
Single state	Multiple states at once



# S.O.L.I.D principles

- S: SRP – Single Responsibility Principle
- O: OCP – Open-Closed Principle
- L: LSP – Liskov Substitution Principle
- I: ISP – Interface Segregation Principle
- D: DIP – Dependency Inversion Principle

