# 14SWD Handin2 – Group 50

**Command Pattern** 



### 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

#### Intent:

- Parameterization
- Saves requests in a queue
- Supports undoable operations



## Type of Pattern

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



### Command Pattern

#### **Contains:**

- Client
- Invoker
- Receiver
- Command
- ConcreteCommand

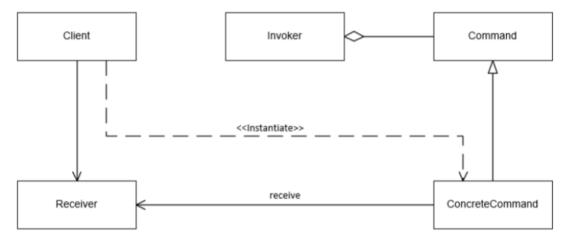


Figure 1: This figure is an overview that illustrates the associations between the classes.



### 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

