

## Basics

- Abstraction, Encapsulation, Polymorphism, Inheritance

## Patterns

### Strategy

- Defines a family of algorithms, encapsulate each one, and makes them interchangeable.
- Let's the algorithm vary independently from clients that use it.

### Observer

- Defines a one-to-many dependency between objects, so...
- When one object changes state, all its dependents are notified and updated automatically.

### Singleton

- Ensure a class has only one instance and provide global point of access to it.

## Principles

- Encapsulate what varies.
- Favor composition over inheritance.
- Program to interfaces, not implementations.
- Strive for loosely coupled designs between objects that interact.
- Classes should be open for extension but closed for modification.
- Depend on abstractions. Do not depend on concrete classes.