

Principles

Single Responsibility	A class should have only one reason to change
Open / Close principle	Software entities (classes, modules, functions, etc.) should be open for extension but closed for modification
Liskov Substitution Principle	Subtypes must be substitutable for their base types
Interface Segregation Principle	Clients should not be forced to depend on methods they do not use.
Dependency Inversion Principle	High-level modules should not depend on low-level modules. Both should depend on abstractions. Abstractions should not depend upon details. Details should depend upon abstractions
Command Query Separation	A method should either be a command or a query
Do not Repeat Yourself (DRY)	Every piece of knowledge must have a single, unambiguous, authoritative representation within a system

General

Boy Scout Rule	Leave the campground cleaner than you found it
Keep it Simple, Stupid (KISS)	Simpler is always better. Reduce complexity as much as possible
Positive Conditionals	Positive conditionals are easier to read than negative conditionals
Don't Be Arbitrary	



By **Galad**
cheatography.com/galad/

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Design

Prefer Polymorphism To If/Else or Switch/Case

Prefer composition over inheritance

Prefer Dedicated Value Objects to Primitive Types Instead of passing primitive types like strings and integers, use dedicated primitive types: e.g. *Uri* instead of *string*

Vertical Separation Variables and methods should be defined close to where they are used

Encapsulate Conditionals `if (this.ShouldBeDeleted(timer))` is preferable to `if (timer.HasExpired && !timer.IsRecurrent)`

(-) Method with Too Many Arguments Prefer fewer arguments. Maybe functionality can be outsourced to a dedicated class that holds the information in fields

(-) Method with Out/Ref Arguments Prevent usage. Return complex object holding all values, split into several methods

(-) Obscured Intent Too dense algorithms that lose all expressiveness

(-) Magic Numbers / Strings Replace Magic Numbers and Strings with named constants to give them a meaningful name when meaning cannot be derived from the value itself

(-) Dead code / dead comment Delete unused things. You can find them in your version control system



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