

# Software Design

# 4 Rules of Simple Design

- Passes the tests
- Reveals intention
- No duplication
- Fewest elements

Question:

Composition  
or  
Inheritance?

# Is your code SOLID?

- Single Responsibility Principle
- Open Closed Principle
- Liskov Substitution Principle
- Interface Segregation Principle
- Dependency Inversion Principle

# Is you code SOLID?

- Principles:
  - Single Responsibility
  - Open Closed
  - Liskov Substitution
  - Interface Segregation
  - Dependency Inversion

# YAGNI

You Ain't Gonna Need It!!

# Law of Demeter

- Principle of Least Knowledge
  - Each unit should have only limited knowledge about other units: only units "closely" related to the current unit.
  - Each unit should only talk to its friends; don't talk to strangers.
  - Only talk to your immediate friends.

# Can you GRASP it?

General Responsibility Assignment Software Patterns

- Controller
- Creator
- Indirection
- Information Expert
- High Cohesion
- Low Coupling
- Polymorphism
- Protected Variations
- Pure Fabrications