SOLID principles

Avoid a substantial mess with well-made bricks

- Goal: create a mid-level software structures
  - how to arrange functions and data structures into classes
  - how the classes should be interconnected
- SOLID
  - SRP - Single Responsibility Principle
  - OCP - Open-Closed Principle
  - LSP - Liskov Substitution Principle
  - ISP - Interface Segregation Principle
  - DIP - Dependency Inversion Principle

SRP: The Single Responsibility Principle

One and only one reason to change

- A **module** should be responsible to one, and only one, **actor**.
  - Module: a source file, or a cohesive set of functions and data structures
  - Actor: a group (one or more) of people (e.g., user, stakeholder) who require the ***change***
- Good practices
  - Separate the code that different actors depend on
  - Separate the code that supports different actors
  - Facade pattern