

Design Principles

- Identify the aspects of your application that vary and separate them from what stays the same.

- Encapsulate what varies
- Program to an interface, not to an implementation
- Favor composition over inheritance

- For our example:

- Pull the duck *behavior* out of the duck *class*

Liskov Substitution Principle

Let $q(x)$ be a property provable about objects x of type T .
Then $q(y)$ should be provable for objects y of type S where
 S is a subtype of T .