### Extending Your Code Through Interfaces



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# Interfaces can make code open for extension



### Principles for Using Interfaces

Needed

Watertight

Simplify through encapsulation

Single responsibility





Many abstractions leak details from their implementation

Client code should not care about the implementation

Eg: Having to catch SQLException for a generic backend



### Simplifying Through Encapsulation



Any use of an interface could be replaced with a conditional



Gauge that it's really simpler



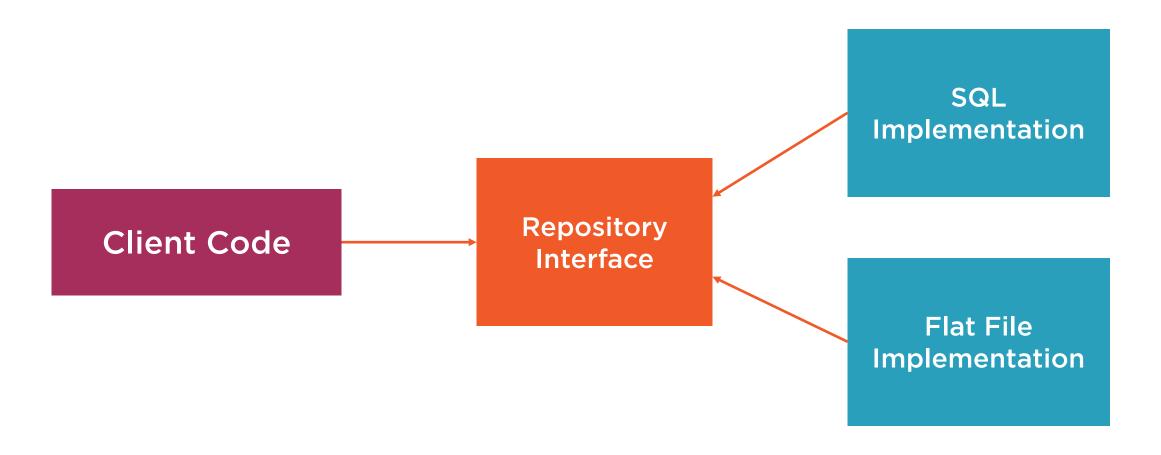
Interfaces should encapsulate concerns



# Single responsibility: only one reason to change



### The Repository Pattern





### Summary



### Designed a more complicated interface abstraction

#### Demonstrated design principles

- Leakiness
- Simplification
- Single responsibility

