

Design Patterns

- More practice

Let's start with an exercise

























https://github.com/trikitrok/beverages_pricing_refactoring_kata

Revisiting refactoring guidelines

- Remove duplication.
- Apply Calisthenics rules.
- Extract private methods from deep conditionals.
- Extract smaller private methods from long methods, and encapsulate cryptic code in private methods.
- Return from methods as soon as possible.
- Encapsulate where we find missing encapsulation.
- Refactor to patterns

Patterns catalog

 Factory Method	 Abstract Factory	 Adapter	 Bridge	 Chain of Responsibility	 Command	 Iterator	 Mediator
 Builder	 Prototype	 Composite	 Decorator	 Memento	 Observer	 State	 Strategy
 Singleton		 Facade	 Flyweight	 Template Method	 Visitor		
		 Proxy					

<https://refactoring.guru/design-patterns/catalog>

To apply a pattern

Discover the
problem

To apply a pattern

Discover the
problem

Identify the
pattern

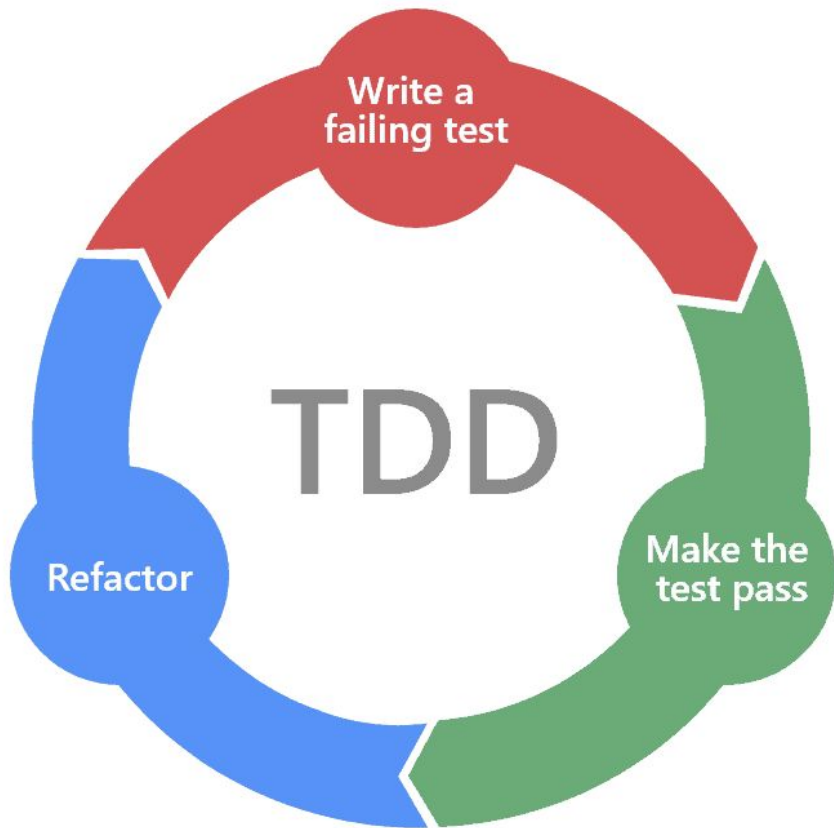
To apply a pattern

Discover the
problem

Identify the
pattern

Implement

Avoid leaking the name of the pattern in your code



Further exercising



<https://katalyst.codurance.com/password-validation>