# Domain Modeling Best Practices



Vladimir Khorikov

@vkhorikov www.enterprisecraftsmanship.com



# The YAGNI Principle

#### You aren't going to need it



Business requirements change constantly



Your code is not an asset, it's a liability



Build as specific solution to your problem as possible



Don't use a boilerplate set of domain classes



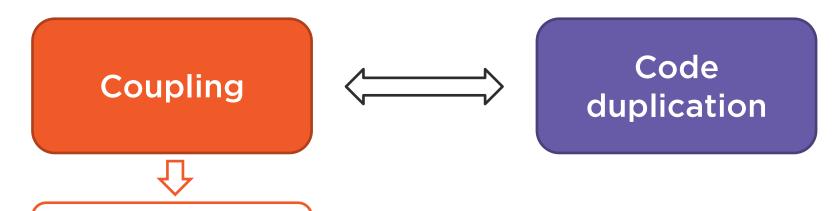
# Sharing Domain Logic Between Projects



The DRY principle is for a single bounded context only



Bounded contexts have different perspectives on same concepts



Much worse than code duplication



Sharing utility code is mostly OK



Bounded contexts should always evolve independently



# Domain Model Encapsulation

#### Encapsulation

Expose the minimum mutable API possible

Don't allow the model to reside in an invalid state





Separating domain logic from external influence

Isolation

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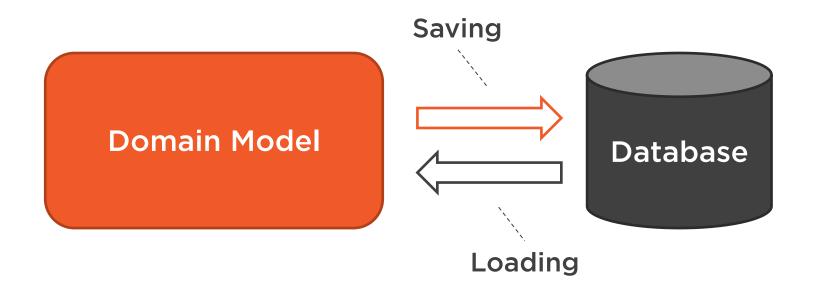
Separation of concerns

Encapsulation



**Protecting invariants** 



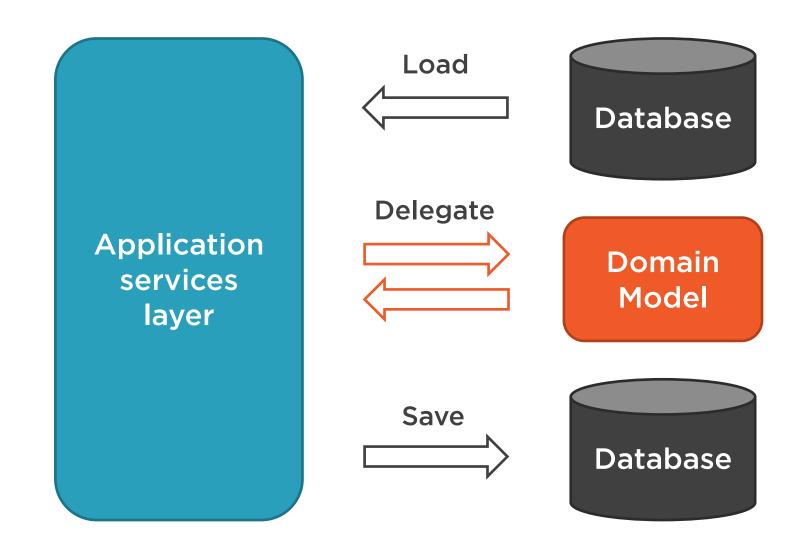












## Injecting Impure Dependencies into Domain Classes

```
API
public class Order
   public Price CalculatePrice(CurrencyConverter converter)
       /* ··· */
public class Order
   public Price CalculatePrice(ConversionRates rates)
      /* ··· */
```





# Why isolate the domain model?



Reducing complexity



Increasing testability



"Building a Pragmatic Unit Test Suite" course



# Module Summary



Best practices and common anti-patterns in Domain-driven design

**YAGNI** principle

Don't share domain logic between bounded contexts

Domain model encapsulation

**Domain model isolation** 



# Resource List

Source code	https://github.com/vkhorikov/AnemicDomainModel
	http://bit.ly/anemic-code
Domain-Driven Design in Practice	https://www.pluralsight.com/courses/domain-driven-design-in-practice
	http://bit.ly/ddd-ps
Domain model isolation	http://enterprisecraftsmanship.com/2016/09/01/domain-model-isolation/
	http://bit.ly/isol-1
How to know if your domain model is properly isolated?	http://enterprisecraftsmanship.com/2016/10/05/how-to-know-if-your-domain-model-is-properly-isolated/
	http://bit.ly/isol-2

# Course Summary



#### Anemic domain model: why it is an antipattern and how to refactor away from it

- Extracted explicit data contracts
- Used value objects as building blocks
- Pushed the domain logic from services down to domain entities and value objects
- Organized the application services layer

Domain modeling best practices and anti-patterns



#### Contacts



http://bit.ly/ddd-new



vladimir.khorikov@gmail.com



@vkhorikov



http://enterprisecraftsmanship.com/

