

# INVERSION OF CONTROL CONTAINERS & DEPENDENCY INJECTION PATTERN

With “Injector”

# SUMMARY

- From SOLID to Inversion Of Control Containers
- Code Example Explanation
- Example that violates DI principle
- Example that respects DI principle
- Example that use IoC Containers
- Questions

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**D**ependency inversion principle

HIGH-LEVEL MODULES SHOULD NOT DEPEND ON LOW-LEVEL MODULES. BOTH SHOULD DEPEND ON ABSTRACTIONS (E.G. INTERFACES).

ABSTRACTIONS SHOULD NOT DEPEND ON DETAILS. DETAILS (CONCRETE IMPLEMENTATIONS) SHOULD DEPEND ON ABSTRACTIONS.

# FROM SOLID TO INVERSION OF CONTROL CONTAINERS

# CODE EXAMPLE DESIGN

# ARCHITECTURE

**Domain Layer:** Contains the state and the behaviour of the domain.

**Application Layer:** Coordinates application activities and creates and accesses domain objects.

**Infrastructure Layer:** Supports other layers, contains specific implementations of code for code that has to interact with components outside our system.

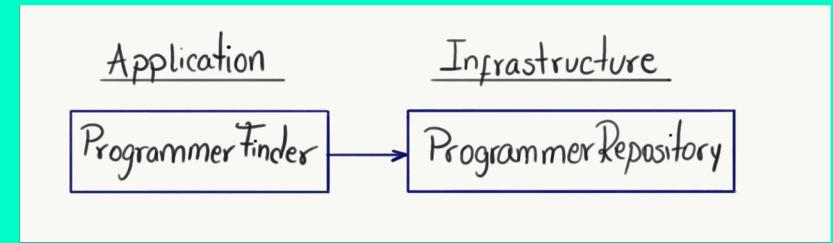
Lower  
level  
modules

Higher  
level  
modules

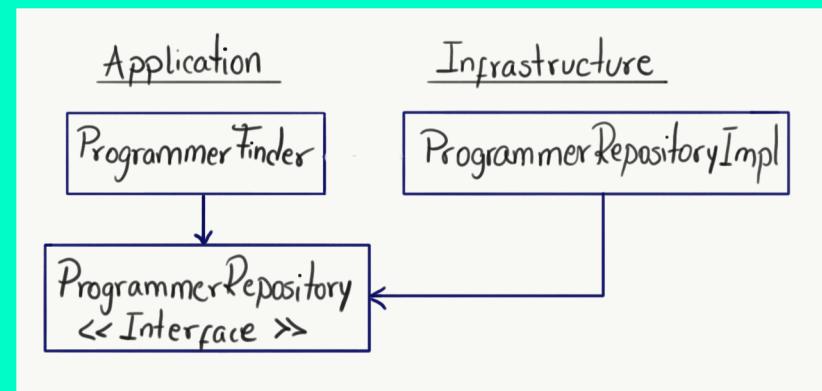
↑ Infrastructure  
Application  
Domain

**TALK IS CHEAP,  
SHOW ME THE CODE.**

# DEPENDENCY INVERSION VIOLATION



# DEPENDENCY INVERSION SOLUTION



**TALK IS CHEAP,  
SHOW ME THE CODE.**

# INJECTOR

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SHOW ME THE

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SHOW ME THE CODE.**

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**TAKE ME CHEAP,  
SHOW ME THE CODE**

**TIME IS CHEAP,  
SHOW ME THE CODE.**