



# Tell, don't ask!

Its all about responsibility

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#### Who am i?

- Lives in Stockholm with my wife Anna
- Senior developer at Active Solution
- Previous
  - network, server- and storagespecialist
  - datacenter and security manager
- 20 years of developing with multiple languages and different platforms
- "Open sorcerer"



#### S.O.L.I.D



- Single Responsibility Principle (SRP)
  - A class should have one, and only one reason to change
- Open-Closed Principle (OCP)
  - Open for extension, closed for modification
- Liskovs Substitution Principle (LSP)
  - Derived classes must be substitutable for their base classes
- Interface Segregation Principle (ISP)
  - Make fine grained interfaces that are client specific
- Dependency Inversion Principle (DIP)
  - Depend on abstractions, not on concretions

## Single Responsibility Principle

"A class should have one, and only one reason to change"

What does "reason to change" mean?



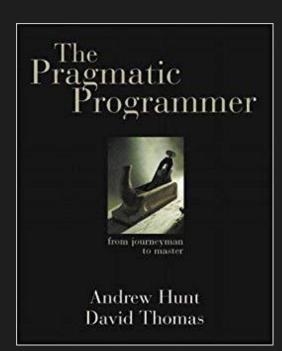
Robert C. Martin (Uncle Bob)

### "Tell don't ask"

• "The pragmatic programmer" by Andy Hunt and Dave Thomas

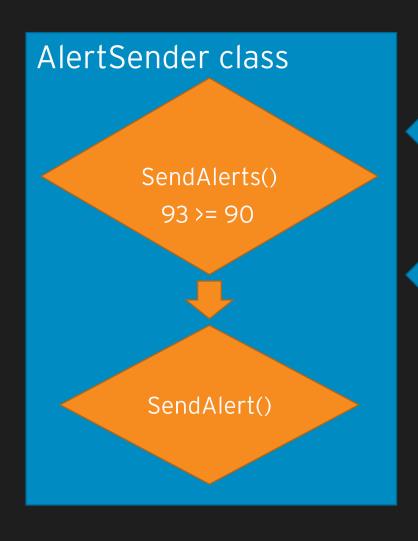
Command objects to do things

 Do not query objects and then tell them to do things based on the query results





### Violation of TDA



Query UsedMemory

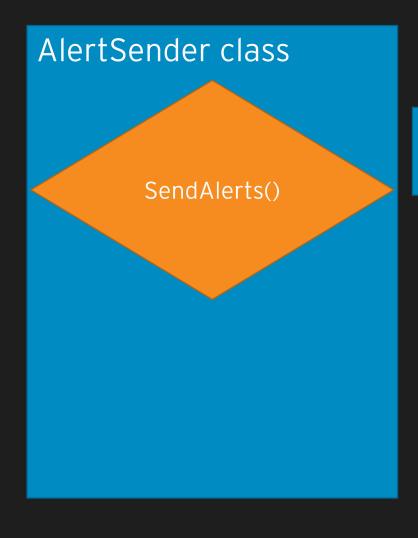
**Query Threshold** 



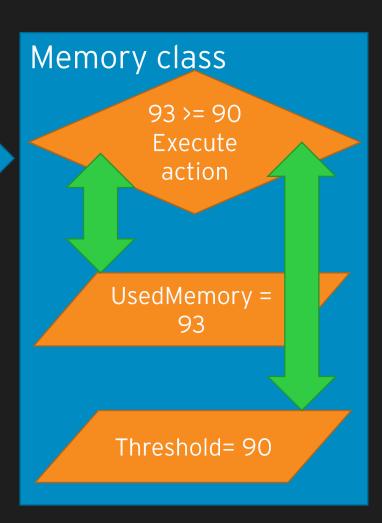
UsedMemory = 93

Threshold= 90

## Proper TDA



Command (Action<br/>
(Action<br/>
alertAction)



## Avoid testing pitfalls

#### Alertsender class may:

- Open a database connection
- Query for data
- Calculate memory usage
- Transform into DTO

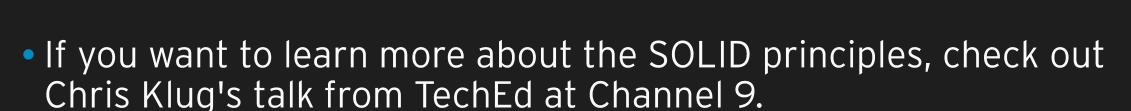




## Principle trade-offs and cohesion

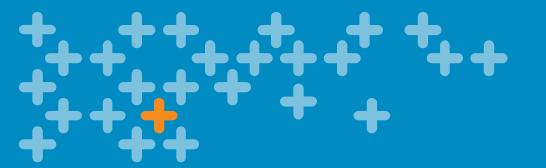
- TDA often implements DRY (Don't repeat yourself)
- LOD (Law Of Demeter)
  - Loose coupling
  - Limited knowledge about other units
- Don't be a "GetterEradicor"

## Hungry for more?



 The Clean Code Blog - By Robert C. Martin https://blog.cleancoder.com/

 Book - "The Pragmatic Programmer" 20th Anniversary Edition https://pragprog.com/





# Thank you!

Go create beautiful, responsible code

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