CODE SMELL VOCABULARY AND SOLID PRINCIPLES

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CONTENT

• At the beginning everything is noise

• Why domain specific vocabulary matters

Code smells & their violations of the SOLID principle

Take Aways



DEFINING THE WAY WE WRITE CODE IS DIFFICULT

REQUIRES KNOWLEDGE

REQUIRES Experience MAY EVEN BE A
PERSONAL PREFERENCE

WITH SOME YEARS OF EXPERIENCE I CAME ACROSS CLEAN CODE FOR SURE

... AND ALSO GOT MY HANDS DIRTY WITH DESIGN PATTERNS

BUT STILL ...

WHEN I LOOKED AT CODE I STILL FELT I LACKED A CLEAR APPROACH ON HOW TO REFACTOR THINGS.

THE CODE WAS NOT OBVIOUS BUT NEITHER WAS THE SOLUTION ON HOW TO MAKE IT OBVIOUS.

CORE OF THIS PROBLEM?

THE INABILITY TO RECOGNIZE AND DESCRIBE WHAT WAS WRONG AND HOW TO FIX IT

WHY CODE SMELL VOCABULARY MATTERS

WHY CODE SMELL VOCABULARY MATTERS

PRECISION & CLARITY

DEMONSTRATES KNOWHOW

EFFECTIVE & EFFICIENT

PRECISION & CLARITY

FIND RELATED RESOURCES

SMELLS AND THEIR VIOLATIONS OF THE SOLID PRINCIPLES



SMELLS VS SOLID PRINCIPLES

	Long Method	Primitive Obsession	Data Clumps	Large Class	Long Parameter List	Altern. Classes w/ diff. interfaces	Refused Bequest	Temporary Field	Feature Envy	Switch Statements	Divergent Change	Parallel Inheritance	Shotgun Surgery	Data Class	Duplicated Code	Middle Man	Inappropriate Intimacy	Message Chains
Single Responsibility	X			X	X		X	X	X	X	X						X	X
Open / Closed		X	X						X	X	X	X	X		X	X	X	
Liskov Substitution							X											
Interface Segregation				X	X	X	X							X	X			
Dependency Inversion																		



TAKE AWAYS

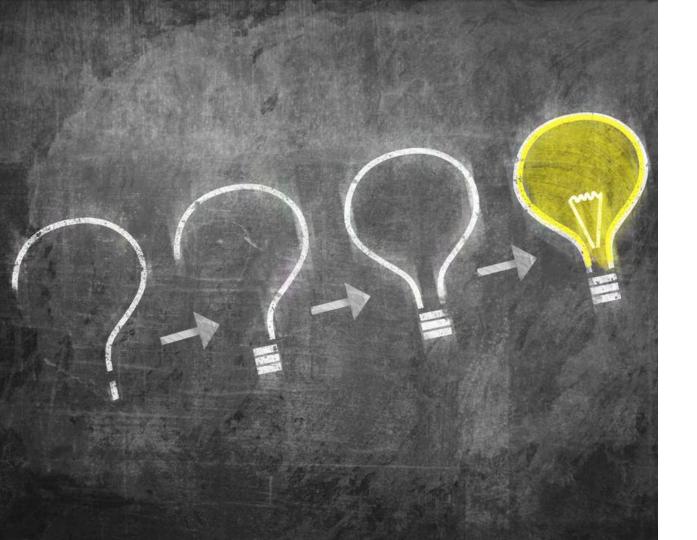
KNOWING WHERE THE SMELL COMES FROM

SINGLE RESPONSIBILITY AND OPEN/CLOSED PRINCIPLE ARE MOST VULNERABLE TO BE VIOLATED

LOOKING FOR
THE MOST
COMMON
SUSPECTS HELPS

VIOLATIONS OF THE LISKOV SUBSTITUTION AND DEPENDENCY INVERSION ARE RARE

= > UP FOR DISCUSSION?



QUESTIONS