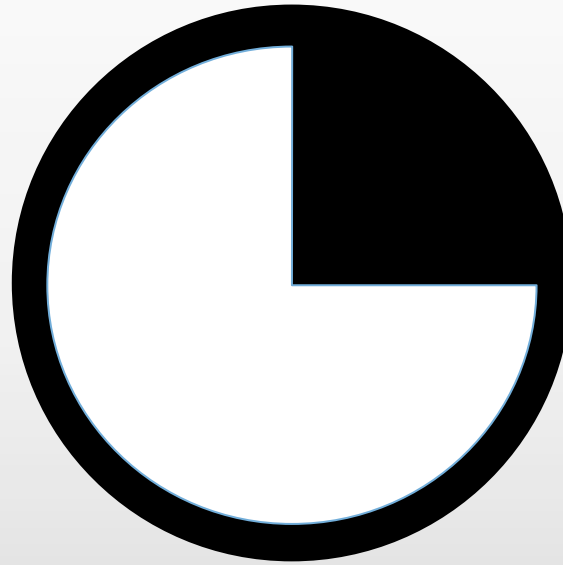




---

# TDD in Three

Test Driven Development Workshop



**3 hours**



**TDD**

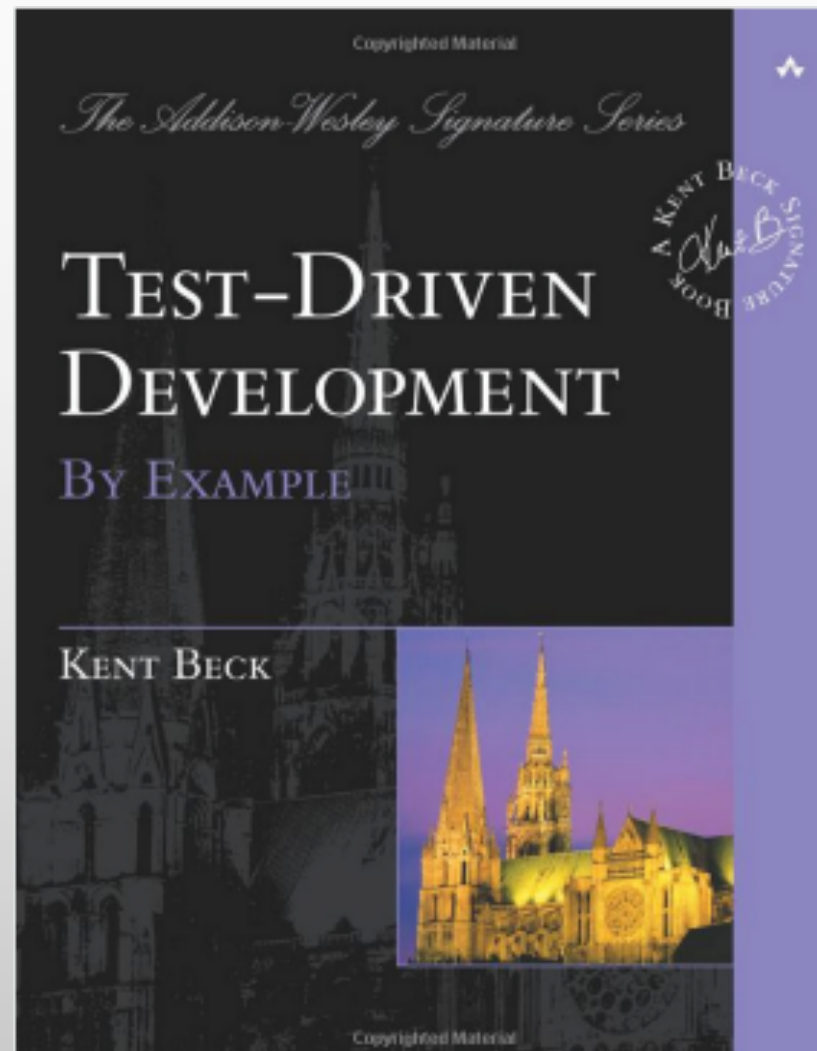
**ALL CODE IS GUILTY  
UNTIL PROVEN INNOCENT**

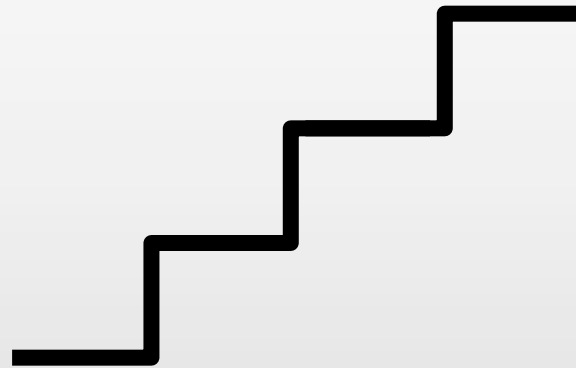
**CODESMACK**

1,000

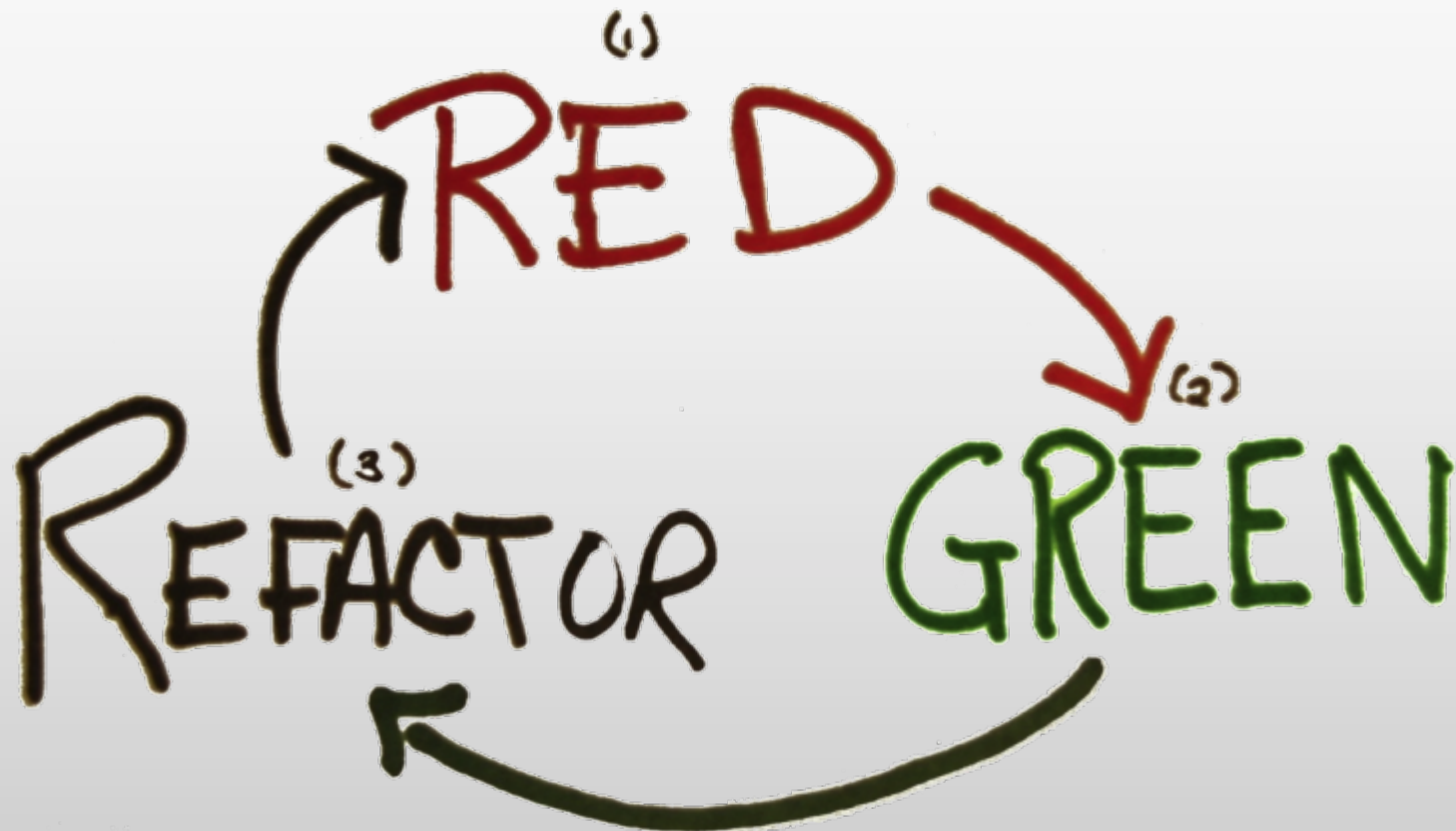
or

10

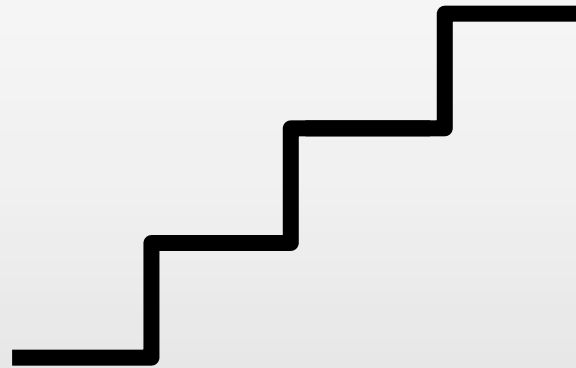




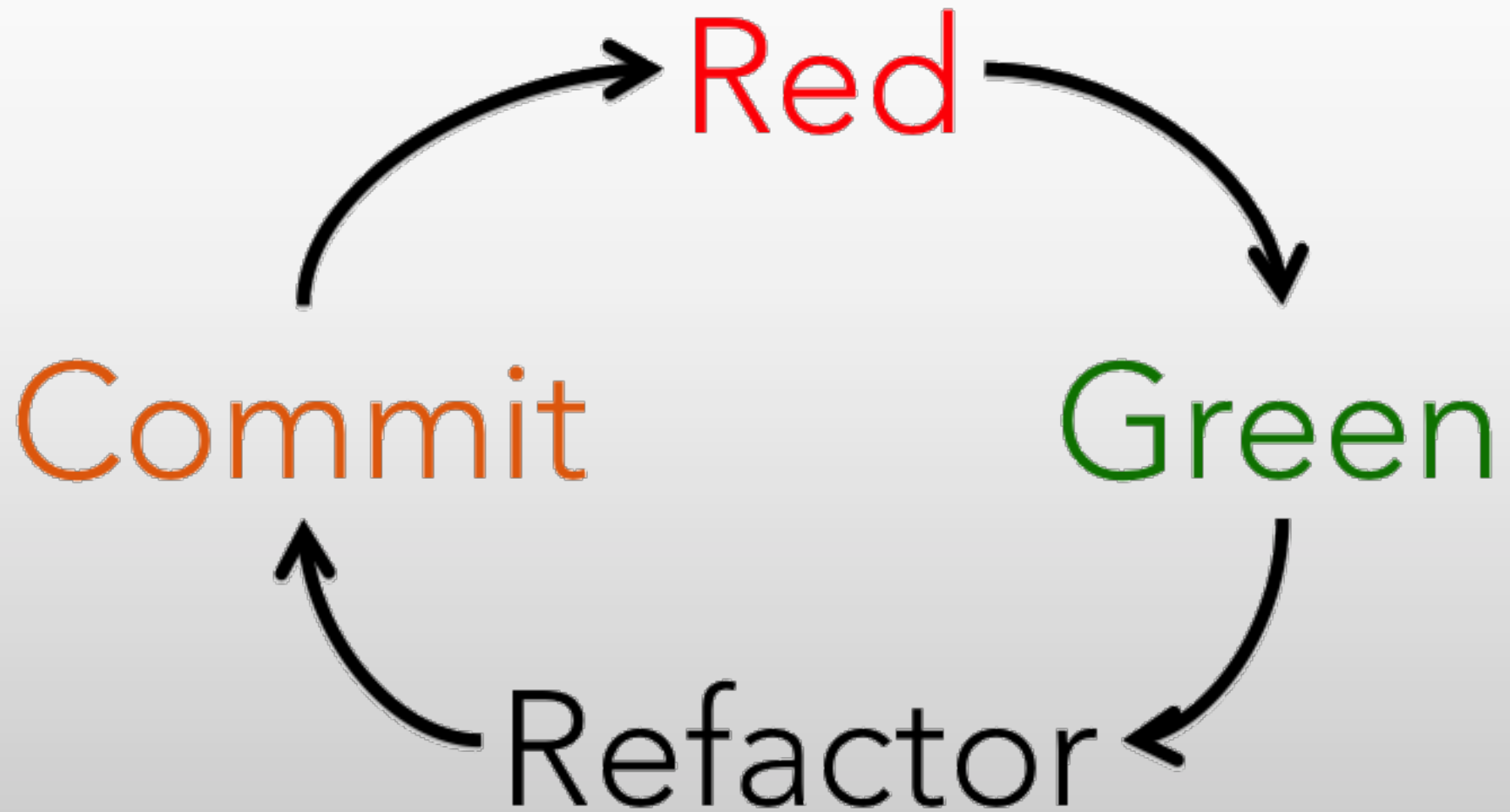
**3 steps**

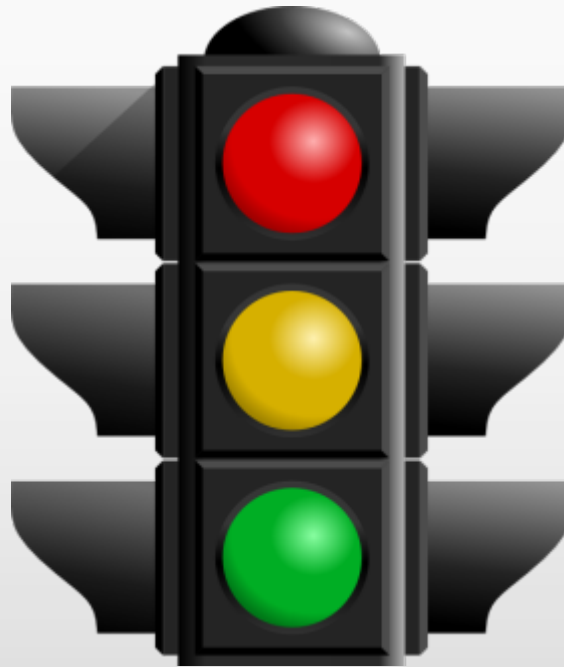






**4 steps**





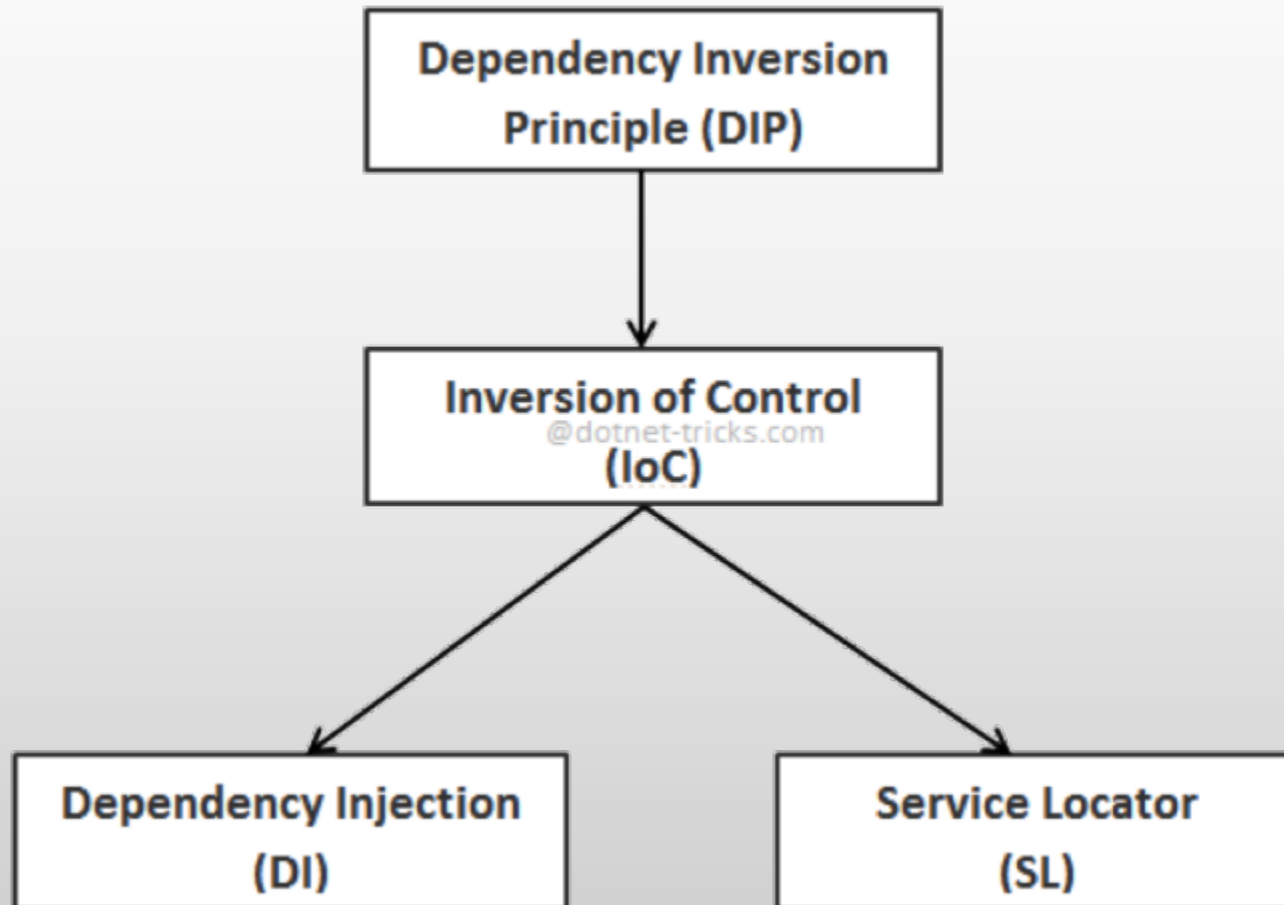
**3 rules**

### Uncle Bob's Three Rules of TDD

- Write **no** production code, except to pass a failing test.
- Write only **enough** of a test to demonstrate a failure.
- Write only **enough** production code to pass a test.



**3 things**





## REAL SYSTEM



**Green** = class in focus  
**Yellow** = dependencies  
**Grey** = other unrelated classes

## CLASS IN UNIT TEST



**Green** = class in focus  
**Yellow** = mocks for the unit test

**JU**<sub>nit</sub>

**mockit**

 **IntelliJIDEA**





# Mob Programming

## A Whole Team Approach



Illustration © 2012 - Andrea Zuill

**mobprogramming.org**

**Twitter: @WoodyZuill**

# String Calculator

Roy Osherove  
<http://osherove.com/tdd-kata-1/>



## New Code Exercise

### Setup

- Java SDK 6 or above
- IntelliJ IDEA Community Edition
- jUnit 4

### Test Drive Creating a Calculator

- Create a Calculator class with an Add method.
- The method can take 0, 1 or 2 numbers, and will return their sum.
- For example: "" or "1" or "1,2".\* For an empty string it will return Zero.
- Allow the Add method to handle an unknown amount of numbers.

# String Calculator

Roy Osherove  
<http://osherove.com/tdd-kata-1/>



## Legacy Code Exercise

### Setup

- IntelliJ IDEA Ultimate Edition
- CDI: Context and Dependency Injection plugin for IntelliJ IDEA Ultimate Edition

### Test Drive Encapsulating a String Calculator

- Create a String Calculator class with an Add method that takes in Strings.
- Utilize CDI to inject the String Calculator into the Calculator.
- Have the Calculator class delegate to the String Calculator class.

### Optional

- Create a Numeric Calculator class with an Add method.
- Utilize CDI to inject the Numeric Calculator into the Calculator.
- If the Add method is called with string parameters, delegate to the String Calculator; if the Add method is called with numeric parameters, delegate to the Numeric Calculator.

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