

# TDD Programming with the Mob

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# Introduction

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Test Driven Development is the process of developing software by writing tests before production code. The solution emerges through increasingly detailed tests that the production code must comply with.

Mob programming is a software development approach where the whole team works on the same thing, one task at the time. One team, one keyboard, one screen.



# Test Driven Development

...and some helpful habits







# The three laws of TDD

1. No production code except to make a test pass
2. Write just enough of a test to make it fail
3. Write just enough production code to make the failing test pass



# The three steps of TDD

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1. Write a failing test
  2. Write just enough code to pass the test
  3. Refactor – improve the code without breaking the test
- (4. Think)

# Three ways to progress

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1. Fake implementation
2. Obvious implementation (Beware! May seem obvious but may not be!)
3. Triangulation



We test behaviour  
not implementation

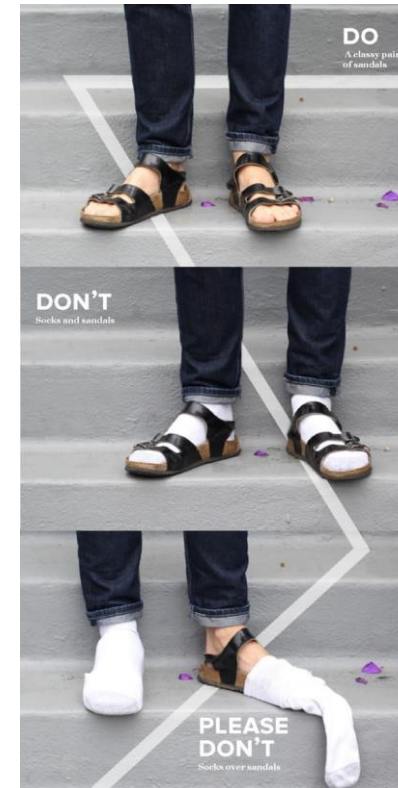
We test one dimension  
at a time



# Dos and don'ts

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- One test per behaviour
- One logical assertion per test
- Tests must be independent (and therefore run in any order)
- Do not mix state and collaboration
- Separate tests and production code
- Group tests according to production code
- Never refactor while in tests are red
- No production data or dependencies







# Good habits - RED

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- Generalization through triangulation
- Let domain behaviour inspire your test names
- Start with an assertion and let it guide the rest of your test, and your production code
- Test is not complete unless it fails for the right reason
- Arrange -> Act -> Assert

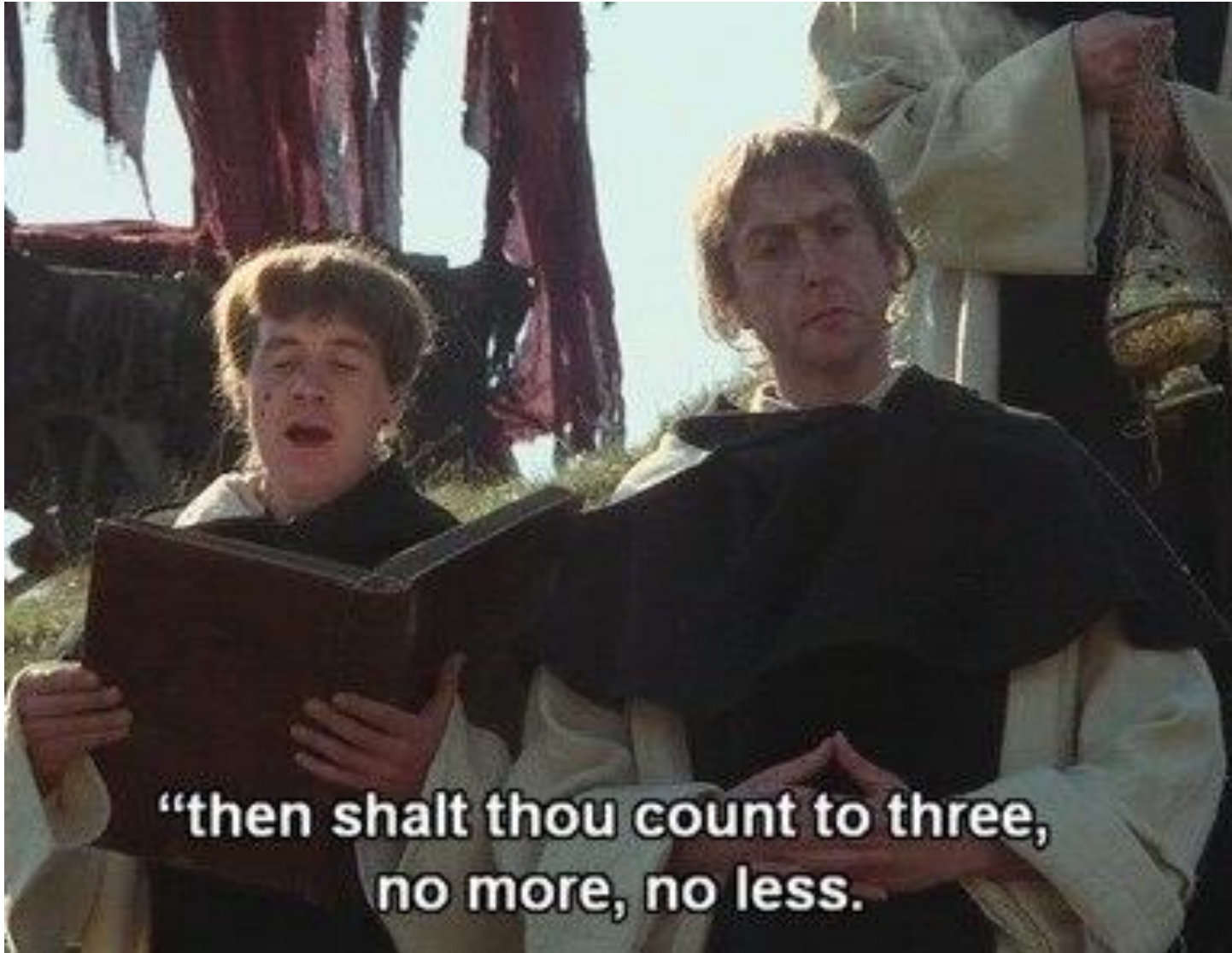




# Good habits - GREEN

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- Write the simplest possible code to pass the test
- Transformation Priority Premise
- Make it green as fast as possible
- Code can be improved once tests pass



# Good habits - REFACTOR

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- Refactor all the things!
- Love the tests as ~~yourself~~ thy production code
- The IDE is your friend!
- Three is the magic number that triggers deduplication



# FIRST

- Fast
- Isolated
- Repeatable
- Self validating
- Timely





# Thank you

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