

**TODISMY  
SHAME**

		9		2		5	
5	3	8		6	4	9	
1	6	0		2	7	3	
3	4	6		1	4	6	
3	7	8		5	0	0	
9	1		3		8	5	
				4	7		

		9		2		5
5	3	8	6	4		9
1	6	2			3	
		3	2	7		
5	4	6			1	
	7		1	5	3	4
3		8	1	9		6
7		3		8	5	
9	1			4	7	

		9		2		5
5	3	8	6	4		9
1	6	2			3	
		3	2	7		
5	4	6			1	
	7		1	5	3	4
3		8	1	9		6
7		3		8	5	
9	1			4	7	

	3	5			6
			7	8	
		1		9	
9	2			7	8
	5			2	
3				5	
		5		1	
9	4			2	
		6	7		4

A background illustration of a yellow cartoon character with a large head, wearing a red shirt and blue pants, sitting at a desk and looking at a computer screen.

**I WASN'T GOOD AT IT RIGHT AWAY, SO I  
QUIT.**

	9		2		5	
5	3	8	6	4	9	
1	6	2			3	
	3	2	7			
5	4	6		1		
	7	1	5	3	4	
3		8	1	9	6	
7		3		8	5	
9	1			4	7	

	3	5			6	
		1		7	8	
9	2				7	8
5					2	
3					5	
		5				1
	9	4			2	
		6		7		4

# TOD IS MY SHAME

## A PREVIEW

@GARYFLEMING

# PART 0: A JOURNEY INTO SHAME



@GARYFLEMING

{"\_p CODECRAFT

@GARYFLEMING

{"\_p CODECRAFT

@GARYFLEMING

PUB / PAUL

@GARYFLEMING

'I'M A LITTLE ASHAMED. BUT I DON'T  
TDD AS MUCH AS I THINK I SHOULD.'

@GARYFLEMING

**'DO YOU TDD?'**

@GARYFLEMING

# SHAME

@GARYFLEMING

# WHAT IS SHAME?

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# WHAT IS SHAME?

- > SELF-AWARENESS
- > SELF-BLAME
- > STANDARDS
- > PERSONAL TRAIT
- > SELF-ESTEEM
- > ... AND MORE

# 'LISTENING TO SHAME' BY BRENÉ BROWN

@GARYFLEMING

'SHAME. FOR WOMEN. IS THIS WEB OF UNOBTAINABLE. CONFLICTING. COMPETING EXPECTATIONS ABOUT WHO WE'RE SUPPOSED TO BE. AND IT'S A STRAIGHT-JACKET.'

- BRENÉ BROWN

DON'T BE WEAK

@GARYFLEMING

# TODD AND SHAME

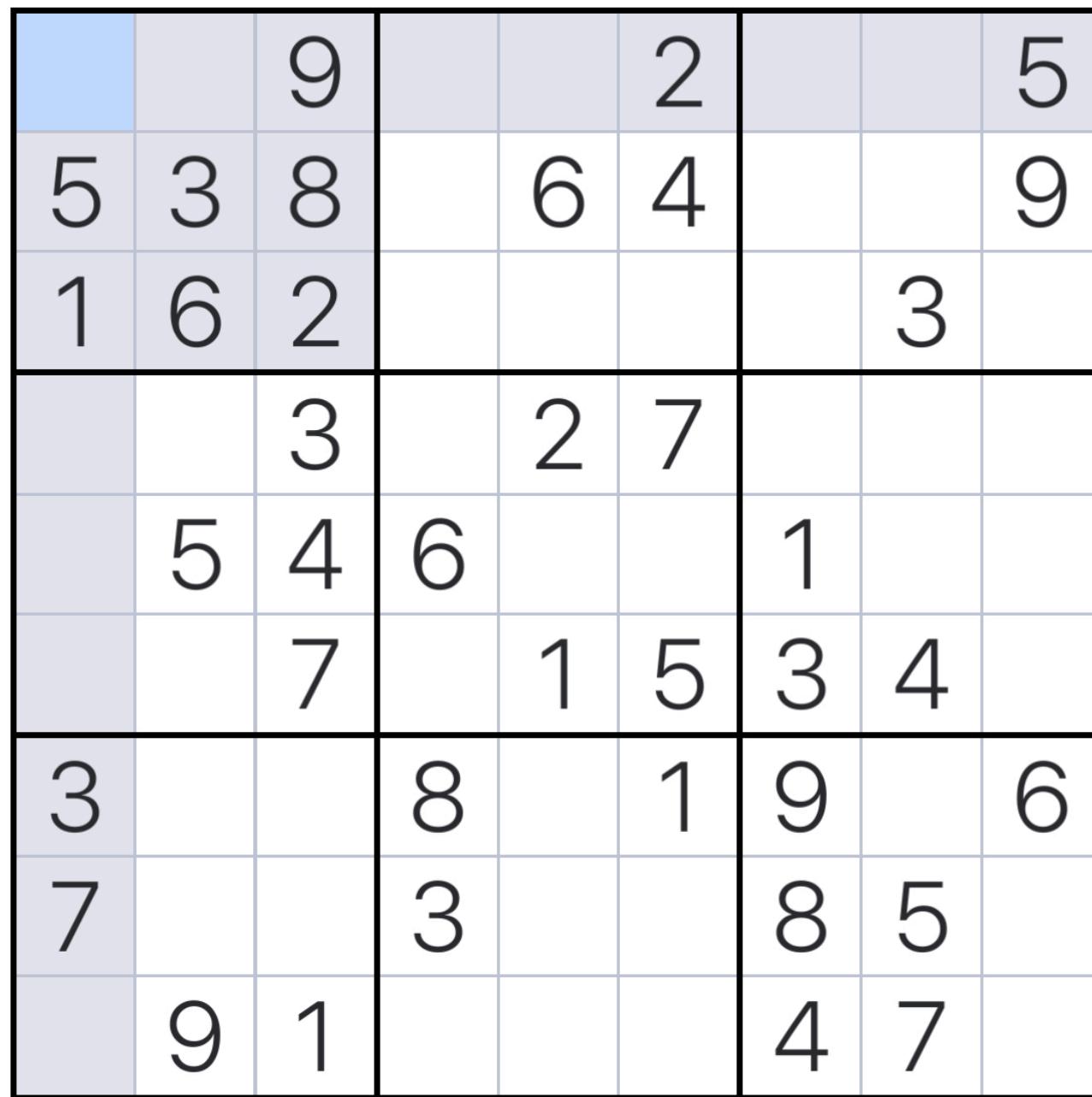
@GARYFLEMING

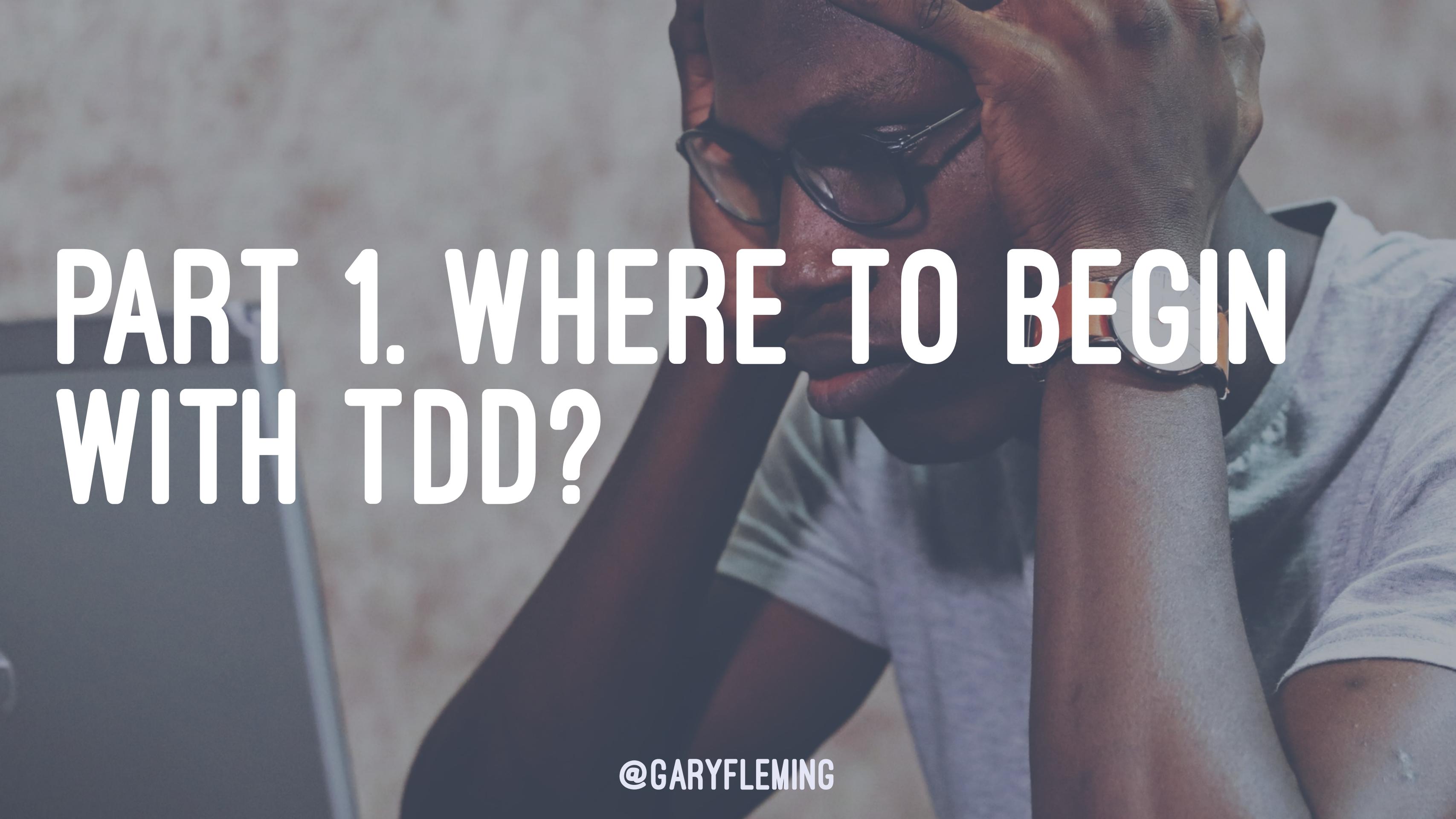
YOU'RE GOOD  
ENOUGH

@GARYFLEMING



# EASY





# PART 1. WHERE TO BEGIN WITH TDD?

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- > TESTING PRACTICE... NOT REALLY
- > DESIGN STRATEGY... MAYBE
- > DEVELOPMENT PRACTICE... PROBABLY



**AntonyMarcano**  
@AntonyMarcano

Replying to [@machielg](#) and [@allenholub](#)

I would say TDD is a software development practice...  
design, coding, testing are all elements of software  
development.

(Too often, "development" is used synonymously with  
"writing code" which does the definition of the word a  
disservice)

@GARYFLEMING

NO ONE TRUE  
TOD

@GARYFLEMING

# ANCHOR TERMS

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# UNIT TESTS

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# UNIT TESTS

- > NO DATABASE
- > NO NETWORK
- > NO FILESYSTEM
- > MUST BE PARALLELISABLE
- > CAN'T HAVE ANY WEIRD ENVIRONMENT SET-UP

# METZ SAYS

- > THOROUGH
- > STABLE
- > FAST
- > FEW

# TEST FIRST / TEST-DRIVEN DEVELOPMENT

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# THE BASICS: RED - GREEN - REFACTOR

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# COMMON GRIPES: MUST. SEE. TEST. FAIL



**Marco Rogers**  
@polotek

Listen y'all. I'm not a person to push strict adherence to TDD or any particular testing methodology. But one thing you **\*must\*** do is **\*watch your test fail\*** before getting it to pass. However you do tests is fine. This is the only hard rule IMO.

COMMON GRIPES: THE  
LOOP SHOULD BE MUCH  
SMALLER.

# COMMON GRIPES: PEOPLE THINK REFACTORING MEANS REWRITE

# COMMON GRIPES: PEOPLE FORGET TO REFACTOR

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COMMON GRIPES: RED -  
GREEN - REFACTOR ISN'T  
ENOUGH

# TWIST: SELECTION AND NAMING

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# TWIST: SELECTION AND NAMING



@GARYFLEMING



# MEDIUM

			4		7
	8			3	4
	7		9	8	5
4	9	6		8	2
7			4		
5	1	7	2	9	8
		3	8	1	2
	4			6	3

# MEDIUM

			4		7
	8			3	4
	7		9	8	5
4	9	6		8	2
7			4		
5	1	7	2	9	8
		3	8	1	2
	4			6	3

# PART 2: NOT NOW





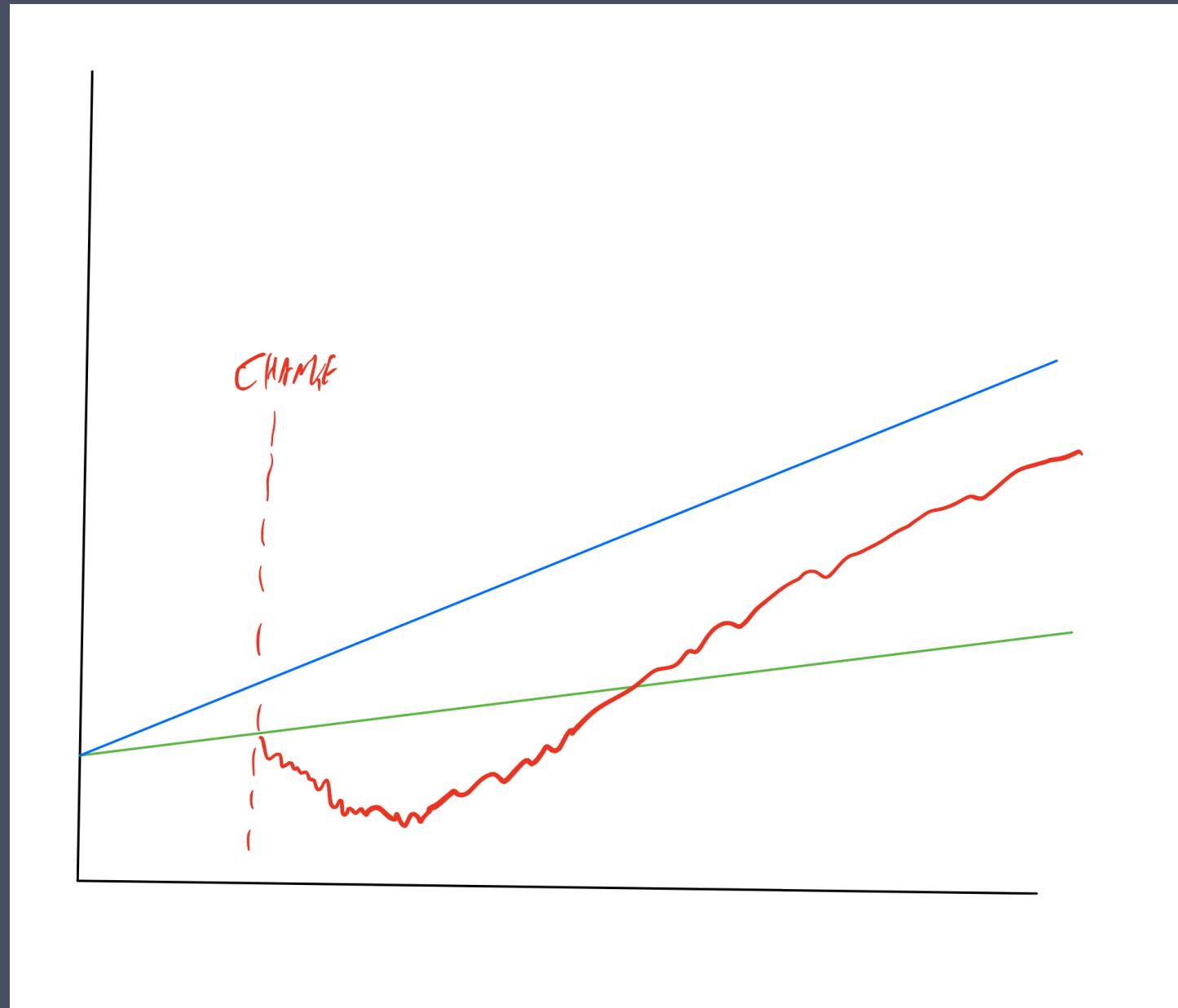
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BUT IT'S  
SLOOOOW...

# SATIR(ISH)



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DON'T DO IT.

@GARYFLEMING

# RON JEFFRIES DOESN'T TDD WHEN...

- > ...IT'S SIMPLE/THROWAWAY
- > ...THERE ISN'T A DECENT TOOL AT HAND
  - > ...THE OUTPUT IS VISUAL
- > ...HE CAN'T THINK HOW TO TEST SOMETHING

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  - > ...THE OUTPUT IS VISUAL
- > ...HE CAN'T THINK HOW TO TEST SOMETHING

# OTHER REASONS TO NOT...

- > ...YOU PREFER LARGER METHODS, WITH LESS FOCUS
- > ...YOU DON'T KNOW HOW TO KEEP THE TEST LOOP SMALL
- > ...YOU DON'T KNOW HOW YOUR SYSTEM SHOULD BEHAVE



# HARD

9			2		5
			3	9	1
	7	8			
4	7	1		5	
5		7	4		
	6	9		4	
3	4	7	2	9	
	2	4			
1		2			4

# PART 3: WHAT NOW?



# BECK'S FOUR ELEMENTS OF SIMPLE DESIGN

- > PASSES THE TESTS
- > REVEALS INTENTION
- > NO DUPLICATION
- > FEWEST ELEMENTS

# WHAT DOES THIS ACTUALLY DO?

- > PASSES THE TESTS
- > REVEALS INTENTION
- > NO DUPLICATION
- > FEWEST ELEMENTS

**REMOVE DUPLICATION AND IMPROVE  
NAMES IN SMALL CYCLES**

@GARYFLEMING

ABSTRACT  
OBJECT  
INSTANCE

PROCESS      CREATE  
BUILD      MANAGE  
REQUEST      Command

CONCRETE

# GOOD NAMES

- > ...AVOID UNNECESSARY AMBIGUITY
- > ...ARE JUST CONCISE ENOUGH TO CONVEY THE RELAVENT INFO AND NO MORE
- > ...USE THE SHARED DOMAIN LANGUAGE AS MUCH AS POSSIBLE.

# TIME CHECK

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# A NEAT TRICK



**Brian Marick** @marick · Jun 15, 2019

One of those "trapped in a local maximum" situations is that programmer test frameworks **\*start\*** by assuming the fundamental assertion is "these two things are equal".

1/7

2

10

15

↑ ↴



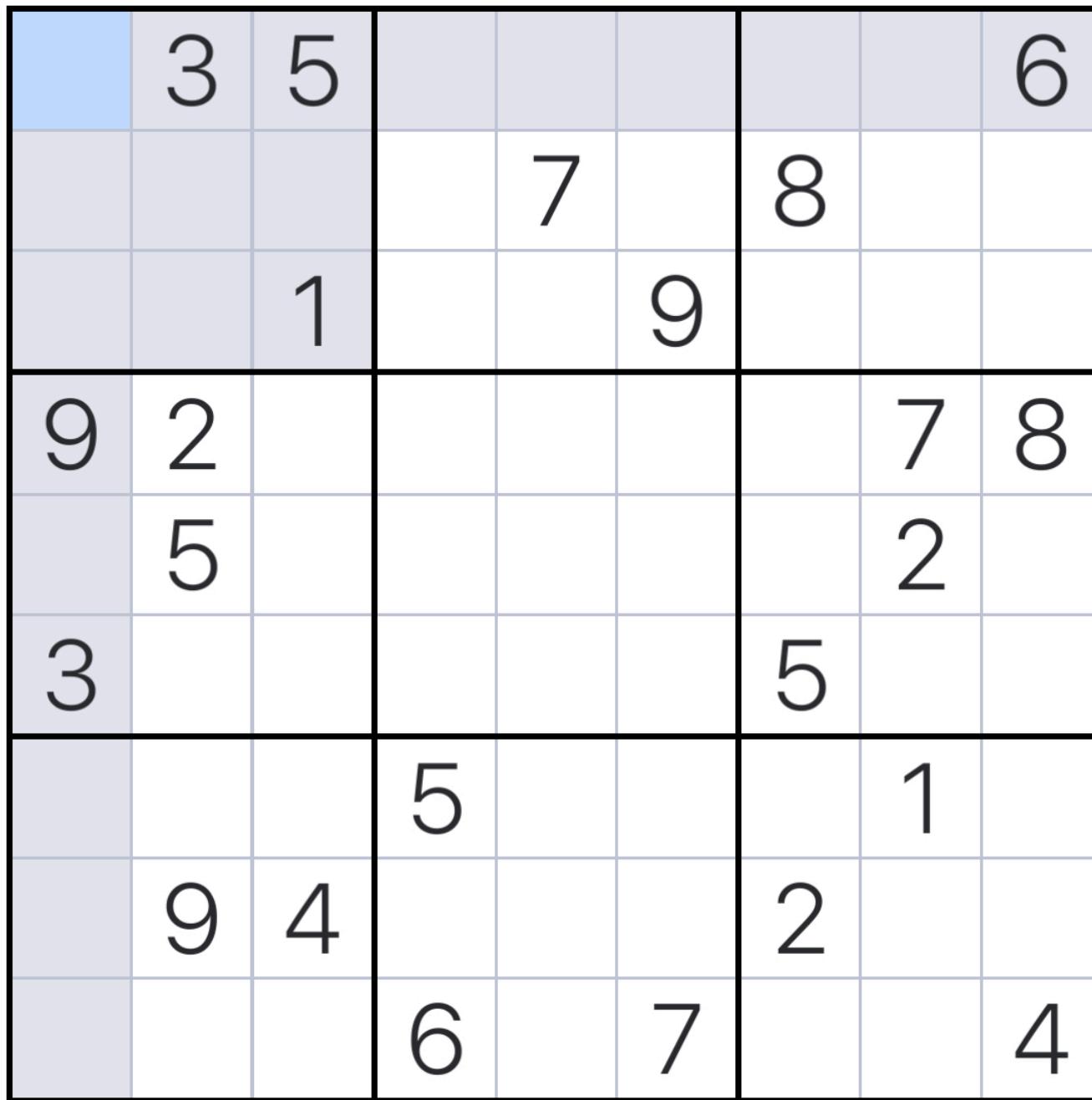
**Brian Marick** @marick · Jun 15, 2019

Instead, the fundamental assertion should be "apply this predicate to the actual value. If the result is false, the predicate knows how to report failures well." Equality testing is a special case.

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# EXPERT



# **EXPERT**

- > LEARNING**
- > STUDYING**
- > SEEKING NEW TOOLS**
- > TIME**
- > DELIBERATE PRACTICE**

THANK YOU  
@GARYFLEMING

@GARYFLEMING

