Stop Testing. Start Storytelling.

Mike Schutte Detroit Craftsman (Artisans? Roommates?) Guild May 15, 2018

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About Me

Detroit

Quikly (Rails, React, Node.js, Go)

environmental science -> sociology -> software development University of Denver -> Indiana University -> Turing -> Quikly

runner, musician, reader, writer

Goals

Goals Perspective



Jason Lengstorf @jlengstorf



"Speaking isn't about killing the butterflies in your stomach, it's about making those fuckers fly in formation."

This advice from @GantLaborde may be my new favorite quote on dealing with nervousness before going on stage.

```
describe("Stop Testing, Start Storytelling", () => {
  before(() => {
    tmikeschu.prepareForTalk()
    tmikeschu.getButterfliesInFormation()
    meetup.garnerInterest()
    audience.map(showUp)
  })
  after(() => {
    audience.map(goHome).map(thinkDifferently)
  })
  it("gives people perspective on and confidence in testing", () => {
    const actual = audience
      .map(stopTestingStartStorytelling)
      .flat_map(takeAways).uniq
    const expected = ["perspective", "confidence"]
    expect(actual).toEqual(expected)
  })
```

```
describe "testing paradigms" do
   it "covers different testing paradigms" do
        actual = stop_testing_start_storytelling.testing_paradigms
        expected = ["test last", "test first", "test driven", "behavior driven"]
        expect(actual).to eq(expected)
   end
end
```

Testing Paradigms

bonus word: *para-dig-MAT-ic (adj)*

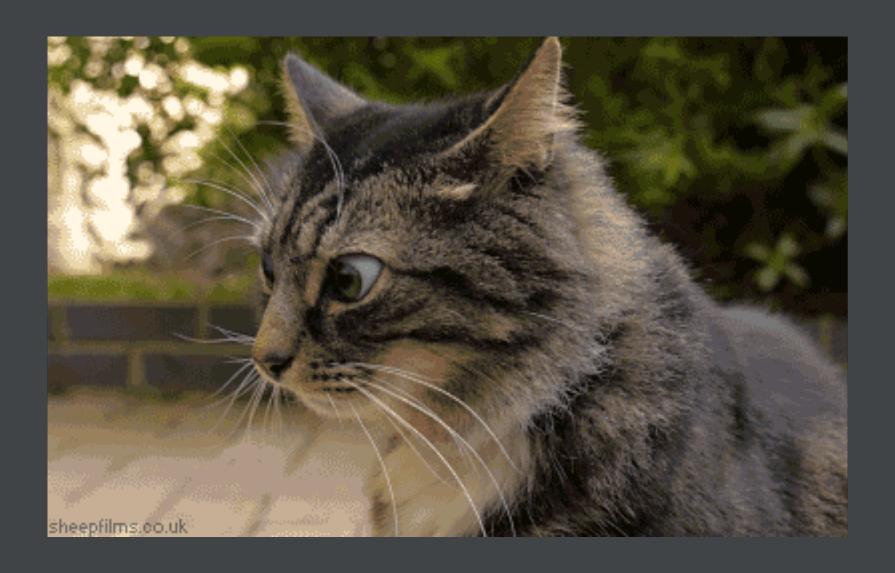
 a framework containing the basic assumptions, ways of thinking, and methodolog[ies] [for discovering new ideas] that are commonly accepted by members of a scientific community.¹

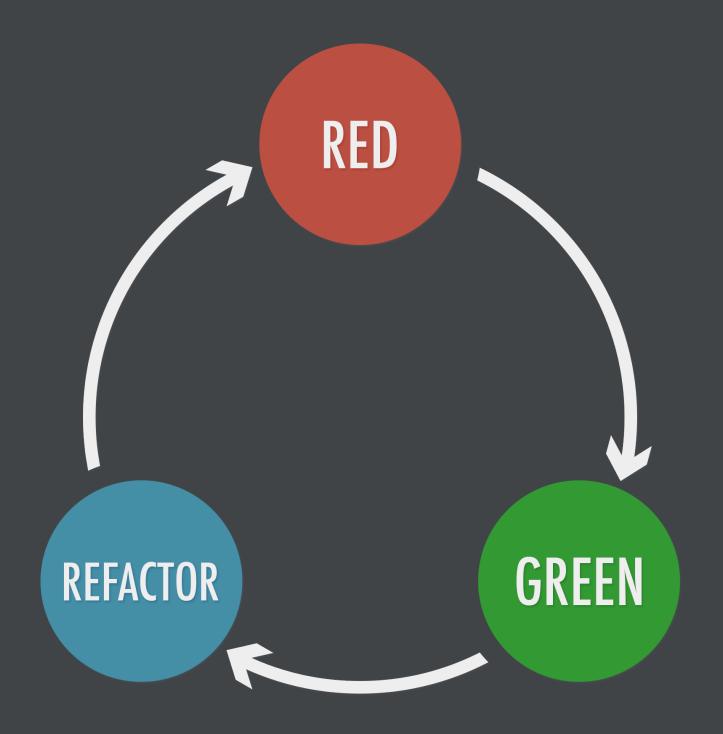
¹http://www.dictionary.com/browse/paradigm

Test last

- The thing that's supposed to happen is the the thing that happens.
- ~> It's blue because it's blue <a> §.

Test last





Test first

Writing a test to fit an implementation

Test driven Behavior driven

- Implementing code to fit a test
- 'Program to an interface, not an implementation'
 - GOF

```
describe "testing paradigms" do
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        expected = ["test last", "test first", "test driven", "behavior driven"]
        expect(actual).to eq(expected)
   end
end
```

Storytelling and Software

Software is **always** means to an end

- Function to Feature
- (HINT: the end is to help users.)

```
func TestStoryTellingAndSoftware(t *testing.T) {
 var (
             []string
    actual
    expected []string
  actual = stopTestingStartStorytelling.StorytellingAndSoftware()
  expected = []string{"communication", "context", "abstraction", "encapsulation"}
  if actual != expected {
    t.Error("Expected talk to cover communication, context, abstraction, and encapsulation, got: ", actual)
```

Storytelling and Software

- communication
- context
- abstraction
- encapsulation

Communication

Users communicate with software. Let's make good listeners.

Context

- :cause && :effect
- More context = more understanding
- More understanding = more predictive power
- More predictive power = more confident decision-making
- More confident decision-making = more happiness!

Context

When we tell stories about our software, we write better software.

Abstraction

- Touching a stove
- Breathing
- Muscle memory
- Literally every language

Encapsulation

We encapsulate our code, why not our thoughts?

Too many jobs makes you bad at all of them.

Encapsulation

Code constrains clarity and imagination.

Tests can be your compass home

Encapsulation

Meta alert!

- Programs solve problems
- Programming is a problem-solving process
- Maybe the principles that make better programs can also result in better programming?

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```

Still learning the DSL?

```
/*
description: developers
            should be mindful of context
assert:
actual:
           perspective while implementing
            developer
expected:
  actual should be the same as expected
            perspective while testing
actual:
expected:
            user
  actual should be the same as expected
*/
```

User <-----> Programmer

Implementing

User <-----X> Programmer

Storytelling/testing

User <X------ Programmer

```
/*
description: developers
            should be mindful of context
assert:
actual:
            perspective while implementing
expected: developer
actual should be the same as expected
actual:
            perspective while testing
expected:
            user
actual should be the same as expected
*/
```

Croudsource Demo!



- 3 Nouns
- 1 Verb
- 1 Datatype

Wrap-up

- Testing is a paradigmatic process, not a product.
- Communication: build good listeners
- Context: enable confident decision making
- Abstraction: you're good at it, it let's you do cool stuff.
- Encapsulation: apply the same discipline to your process as you do to your code.
- Storytelling keeps you closer to users

Action Plan



Develop a pendulum workflow between storyteller and developer.

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Thank Woul