

DREAM DRIVEN DEVELOPMENT

Denver.rb 3/14/17

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1. About Me
2. Theory
3. Example
4. Practice
5. Theory

MY BACKGROUND

Enviro Science → Sociology → Software Development
APIs, db design, other back-endy stuff
runner, reader, writer, thinker, musician

T_{EST}DD, B_{EHAVIOR}DD, D_{REAM}DD

test last

test first

test driven

behavior driven

dream driven

THE SITUATION

You want to build some kind of software.

THE PROBLEM

You try to think like a computer...

...but you are not a computer.

constrained by the codes

A SOLUTION

Tell the computer your dream in the form of a test

and let the errors drive your development.

◀ CAFE



▶ lib

◀ spec

☞ cafe_spec.rb

☞ Gemfile

☞ Gemfile.lock

☞ README.md

```
1  require 'cafe'
2
3  RSpec.describe Cafe do
4    describe "#make_coffee" do
5      it "makes 16 cups of coffee" do
6        cafe = Cafe.new
7        cups_before = cafe.available_cups_of_coffee
8
9        cafe.make_coffee
10
11        cups_after = cafe.available_cups_of_coffee
12        expect(cups_after - cups_before).to eq 16
13      end
14    end
15  end
16
```

```
/Users/tmikeschutte/talks/ddd/coffee/spec/cafe_spec.rb:1:in `require':
```

```
cannot load such file -- cafe (LoadError)
```

```
touch lib/cafe.rb
```

```
/Users/tmikeschutte/talks/ddd/coffee/spec/cafe_spec.rb:3:in `':
```

```
uninitialized constant Cafe (NameError)
```



```
1  require 'cafe'
2
3  RSpec.describe Cafe do
4    describe "#make_coffee" do
5      it "makes 16 cups of coffee" do
6        cafe = Cafe.new
7        cups_before = cafe.available_cups_of_coffee
8
9        cafe.make_coffee
10
11        cups_after = cafe.available_cups_of_coffee
12        expect(cups_after - cups_before).to eq 16
13      end
14    end
15  end
16
```

cafe_spec.rb

cafe.rb



```
1 class Cafe
```

```
2 end
```

```
3
```

Cafe

#make_coffee

makes 16 cups of coffee (FAILED - 1)

Failures:

1) Cafe#make_coffee makes 16 cups of coffee

Failure/Error: cups_before = cafe.available_cups_of_coffee

NoMethodError:

undefined method `available_cups_of_coffee' for #<Cafe:0x007fccfa5dbd48>
./spec/cafe_spec.rb:7:in `block (3 levels) in <top (required)>'

Finished in 0.00078 seconds (files took 0.12323 seconds to load)

1 example, 1 failure

Failed examples:

rspec ./spec/cafe_spec.rb:5 # Cafe#make_coffee makes 16 cups of coffee

```
1  require 'cafe'
2
3  RSpec.describe Cafe do
4    describe "#make_coffee" do
5      it "makes 16 cups of coffee" do
6        cafe = Cafe.new
7        cups_before = cafe.available_cups_of_coffee
8
9        cafe.make_coffee
10
11        cups_after = cafe.available_cups_of_coffee
12        expect(cups_after - cups_before).to eq 16
13      end
14    end
15  end
16
```

```
1  class Cafe
2    attr_reader :available_cups_of_coffee
3
4    def initialize
5      @available_cups_of_coffee = 0
6    end
7  end
8
```

Cafe

#make_coffee

makes 16 cups of coffee (FAILED - 1)

Failures:

1) Cafe#make_coffee makes 16 cups of coffee

Failure/Error: cafe.make_coffee

NoMethodError:

undefined method `make_coffee' for #<Cafe:0x007fc134944060>

./spec/cafe_spec.rb:9:in `block (3 levels) in <top (required)>'

Finished in 0.00097 seconds (files took 0.12051 seconds to load)

1 example, 1 failure

Failed examples:

rspec ./spec/cafe_spec.rb:5 # Cafe#make_coffee makes 16 cups of coffee

```
1  require 'cafe'
2
3  RSpec.describe Cafe do
4    describe "#make_coffee" do
5      it "makes 16 cups of coffee" do
6        cafe = Cafe.new
7        cups_before = cafe.available_cups_of_coffee
8
9        cafe.make_coffee
10
11        cups_after = cafe.available_cups_of_coffee
12        expect(cups_after - cups_before).to eq 16
13      end
14    end
15  end
16
```


Cafe

#make_coffee

makes 16 cups of coffee (FAILED - 1)

Failures:

1) Cafe#make_coffee makes 16 cups of coffee

Failure/Error: expect(cups_after - cups_before).to eq 16

expected: 16

got: 0

(compared using ==)

./spec/cafe_spec.rb:12:in `block (3 levels) in <top (required)>'

Finished in 0.01827 seconds (files took 0.09011 seconds to load)

1 example, 1 failure

Failed examples:

rspec ./spec/cafe_spec.rb:5 # Cafe#make_coffee makes 16 cups of coffee

```
1  require 'cafe'
2
3  RSpec.describe Cafe do
4    describe "#make_coffee" do
5      it "makes 16 cups of coffee" do
6        cafe = Cafe.new
7        cups_before = cafe.available_cups_of_coffee
8
9        cafe.make_coffee
10
11        cups_after = cafe.available_cups_of_coffee
12        expect(cups_after - cups_before).to eq 16
13      end
14    end
15  end
16
```


Cafe

#make_coffee

makes 16 cups of coffee

Finished in 0.00146 seconds (files took 0.11501 seconds to load)

1 example, 0 failures


```
1  require 'cafe'
2
3  RSpec.describe Cafe do
4    describe "#make_coffee" do
5      it "makes 16 cups of coffee" do
6        cafe = Cafe.new
7        cups_before = cafe.available_cups_of_coffee
8
9        cafe.make_coffee
10
11        cups_after = cafe.available_cups_of_coffee
12        expect(cups_after - cups_before).to eq 16
13      end
14    end
15  end
16
```

TIME TO MOB DREAM

Test-*designed* software

Storytelling ↔ Programming

1. Tell the computer the dream

2. Computer holds us accountable to the dream

Communication and collaboration

Writing and thinking in English implicitly keeps the user in mind

THANK YOU!

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@tmikeschu

RESOURCES

RSpec Core
Getting Started with RSpec
RSpec and BDD
Cafe Repo