

Ruby Unit Tests

CSCI400

29 August 2017

Color Key

- Clickable URL link
- Write down an answer to this for class participation
- Just a comment – don't confuse with yellow

Process

- 1 Create your class with failing methods
- 2 Create a test class. Must:
 - `require 'minitest/autorun'`
 - Extend `MiniTest::Test`
- 3 Create one or more test methods
 - Start name with `test` (e.g. `test_conversion`)
- 4 If separate file, must `require` the class being tested
 - `require_relative "Converter"`
 - `require "./Converter"`
- 5 Run test program from the terminal
 - All methods beginning with `test` will be executed

Create a Class – Failing Test

```
class Converter
  def feetToMeters(feet)
    return 1
  end
end
```

Unit Test

```
require 'minitest/autorun'

class ConverterTest < MiniTest::Test
  @@EPSILON = 0.0001

  def test_feetToMeters
    converter = Converter.new
    assert_in_delta(3.048,
      converter.feetToMeters(10), @@EPSILON)
    assert_in_delta(0.3048,
      converter.feetToMeters(1), @@EPSILON)
    assert_in_delta(0.4572,
      converter.feetToMeters(1.5), @@EPSILON)
  end
end
```

Can use `assert_equal` for int

Create a Class – Passing Test

```
class Converter
  @@FEET_TO_METERS = 0.3048
  def feetToMeters(feet)
    return feet * @@FEET_TO_METERS
  end
end
```

Prior Versions of Ruby

- Prior to Ruby 2
 - `require 'test/unit'`
 - `class <ClassName> < Test::Unit::TestCase`

In case you ever run into old examples