

# TEST UNIT

# **Ruby Cheatsheet**

- l. require "test/unit"
- 2. class MyTest < Test::Unit::TestCase</pre>
- 3. Prepend your instance methods with test\_
- 4. Use required assertions (see below)
- 5. For convenience optionally overwrite the setup and teardown methods, which initialize/destroy your test data

#### assert(boolean)

Asserts that boolean is not false or nil.

#### assert\_equal(expected, actual)

Passes if <code>expected == actual</code>. Note that the ordering of arguments is important, since a helpful error message is generated when this one fails that tells you the values of expected and actual. To test for the exact opposite use <code>assert\_not\_equal</code>.

#### assert\_same(expected, actual)

Passes if actual.equal? expected - i.e. they are the same instance. To test for the exact opposite use assert\_not\_same.

#### assert\_nil(object)

Passes if object is nil. To test for the exact opposite use assert\_not\_nil.

#### assert\_raise(\*exceptions, &block)

Passes if the block raises one of the given exceptions. To test for the exact opposite use assert\_nothing\_raised.

#### assert\_in\_delta(expected\_float, actual\_float, delta)

Passes if expected float and actual float are equal within delta tolerance

#### assert\_respond\_to(object, method)

Passes if object.respond to? method.

### assert\_instance\_of(klass, object)

Passes if object.instance of? klass.

#### assert\_kind\_of(klass, object)

Passes if object.kind\_of? klass.

#### assert match(pattern, string)

Passes if string =~ pattern. To test for the exact opposite use assert no match.

#### assert\_operator(object1, operator, object2)

Compares the object1 with object2 using operator. Passes if object1.send(operator, object2) == true.

#### assert send(send array)

Passes if the method send returns a true value. send\_array is composed of: 1. the receiver, 2. a method, 3. arguments to the method. Example: assert\_send ["string", :include, "str"]

#### assert\_throws(expected\_symbol, &block)

Passes if the block throws  $expected\_symbol$ . To test for the exact opposite use  $assert\_nothing\_thrown$ .

assert\_block(message="assert\_block failed.", &block)

Passes if the block yields true. All other assertions are based on this one.

# Detailed messages

Every assert method can have an additional last argument named message which you can pass to give a more detailed failure message. This is omitted here for an easier overview.

## TestHelper

You can do it like Rails and define a module in test\_helper.rb which you require in each test file. This helper will require all the files that need to be tested in one central place.

# Take it easy

Keep each test method short and concise. Try to not use more than one assertion at once.
This keeps your tests focused, and when something fails you immediately see why.

# Custom assertions

If you find yourself doing similar assertions again and again, better write your own assert-method that uses the basic ones listed here. Place the custom assertions in the TestHelper and be sure to give a meaningful failure message.