

RubyGems

Mothering your Packages

Friday, February 10, 12

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A package manager for
distributing Ruby programs.

EdgeCase
software

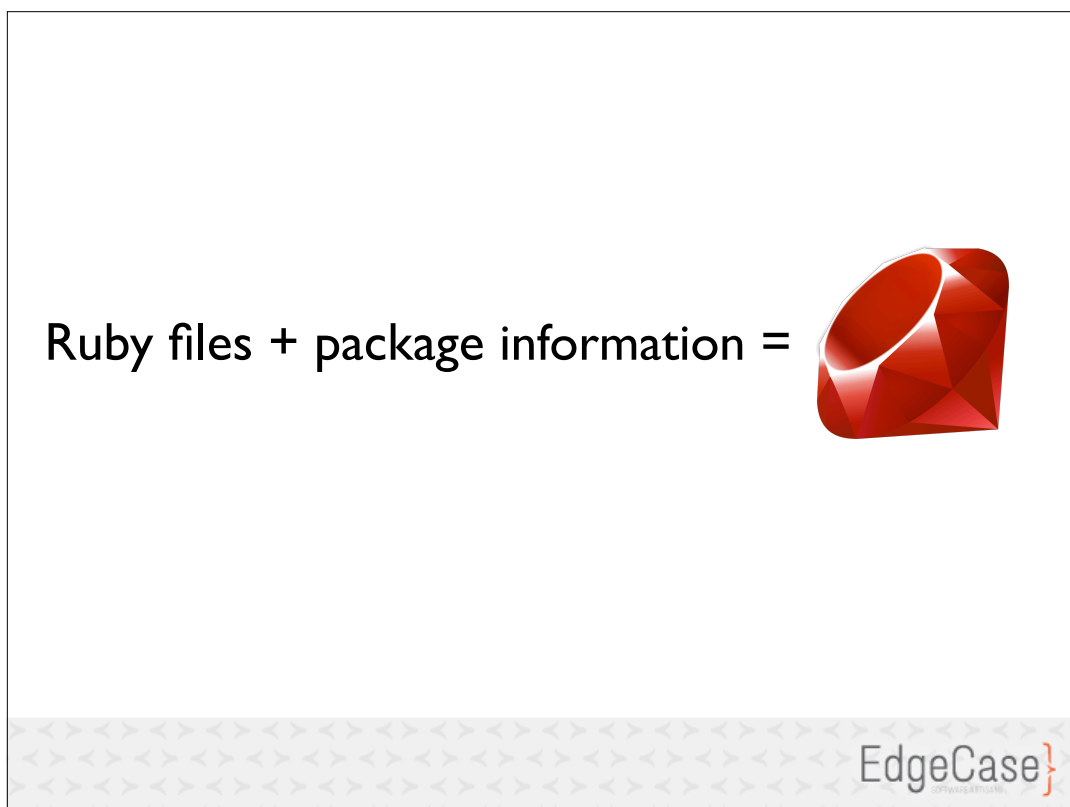
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Ruby files + package information =



Code &
Tests



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Ruby files + package information =



Gemspec

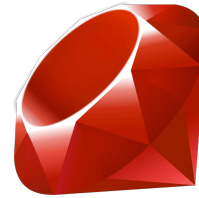


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Ruby files + package information =



} name = "mygem"
version = "0.6.6"
platform = Gem::Platform::Ruby

EdgeCase }

> gem

EdgeCase }

> gem sources

```
/ ~ gem sources  
*** CURRENT SOURCES ***  
http://gemcutter.org/  
http://rubygems.org/
```

> gem install

```
/ ~ gem install nyan-cat-formatter  
Successfully installed nyan-cat-formatter-0.0.6  
1 gem installed
```

NYAN CAT!

```
gems/nyan-cat-formatter-0.0.6 ~ rspec --format NyanCatFormatter
17/17: -----,-----,
17/17: -----|    /\_/\
0/17: -----^|__(-.-)
0/17: -----" " " "

Nyan Cat flew 1.8 seconds
17 examples, 0 failures
gems/nyan-cat-formatter-0.0.6 ~
```

> gem list

```
/ ~ gem list

*** LOCAL GEMS ***

actionmailer (3.1.3, 3.1.1)
actionpack (3.1.3, 3.1.1)
activemodel (3.1.3, 3.1.1)
activerecord (3.1.3, 3.1.1)
activeresource (3.1.3, 3.1.1)
activesupport (3.1.3, 3.1.1)
addressable (2.2.6)
(... and on and on ...)
```

> gem list | grep 'nyan'

Please, for the love of nyan cat, be smarter than this.

> gem search

```
/ ~ gem search nyan  
*** LOCAL GEMS ***  
nyan-cat-formatter (0.0.6)
```

> gem search --remote

```
/ ~ gem search nyan --remote  
  
*** REMOTE GEMS ***  
  
bunyan (0.5.1 ruby)  
nyan (0.0.4 ruby)  
nyan-cat-formatter (0.0.6 ruby)  
nyancat (0.0.3 ruby)
```

> gem uninstall

```
/ ~ gem uninstall nyan-cat-formatter  
Successfully uninstalled nyan-cat-formatter-0.0.6
```

(Goodbye, nyan cat.)

... but how does the RubyGems library work?

Anatomy of a Gem

```
/~ tree ./nyan-cat-formatter-0.0.6
├─ Gemfile
├─ LICENSE.md
├─ README.md
├─ Rakefile
├─ lib
│   ├── nyan_cat_formatter.rb
│   ├── rspec1.rb
│   └── rspec2.rb
├─ nyan-cat-formatter.gemspec
└─ spec
    ├── nyan_cat_formatter_spec.rb
    └── spec_helper.rb
```

2 directories, 10 files

/lib directory

```
~/ tree ./nyan-cat-formatter-0.0.6
├─ Gemfile
├─ LICENSE.md
├─ README.md
├─ Rakefile
├─ lib
│   ├── nyan_cat_formatter.rb
│   ├── rspec1.rb
│   └── rspec2.rb
├─ nyan-cat-formatter.gemspec
├─ spec
│   ├── nyan_cat_formatter_spec
│   └── spec_helper.rb
```

2 directories, 10 files

```
NyanCatFormatter = Class.new(parent_class) do
  ESC      = "\e["
  NND      = "#{ESC}0m"
  PASS     = '='
  PASS_ARY = ['- ', '_ ']
  FAIL     = '**'
  ERROR    = '!'
  PENDING  = '+'

  include rspec_module

  attr_reader :current, :example_results, :color_index, :pending_count,
              :failure_count, :example_count

  # Increments the example count and displays the current progress
  #
  # @returns nothing
  def tick(mark = PASS)
    @example_results << mark
    @current = (@current > @example_count) ? @example_count : @current + 1
    dump_progress
  end
end
```

/spec directory

```
~/ tree ./nyan-cat-formatter-0.0.6
├─ Gemfile
├─ LICENSE.md
├─ README.md
├─ Rakefile
├─ lib
│   ├── nyan_cat_formatter.rb
│   ├── rspec1.rb
│   └── rspec2.rb
├─ nyan-cat-formatter.gemspec
├─ spec
│   ├── nyan_cat_formatter_spec
│   └── spec_helper.rb
```

2 directories, 10 files

```
require 'spec_helper'
require 'stringio'

describe NyanCatFormatter do
  before do
    rspec_bin = $0.split('/').last
    @output = StringIO.new
    if rspec_bin == 'rspec'
      @formatter = NyanCatFormatter.new(@output)
      @example = RSpec::Core::ExampleGroup.describe.example
    else
      formatter_options = OpenStruct.new(:colour => true, :dry_run => false, :
nil)
      @formatter = NyanCatFormatter.new(formatter_options, @output)
      @example = Spec::Example::ExampleProxy.new("should pass")
      @formatter.instance_variable_set(:@example_group, OpenStruct.new(:descrip
"group"))
    end
    @formatter.start(2)
    sleep(0.1) # Just to slow it down a little :-)
  end

  describe 'passed, pending and failed' do
```

rakefile

```

~/tree ./nyan-cat-formatter-0.0.6
├─ Gemfile
├─ LICENSE.md
├─ README.md
├─ Rakefile
├─ lib
│   ├── nyan_cat_formatter.rb
│   ├── rspec1.rb
│   └── rspec2.rb
├─ nyan-cat-formatter
│   ├── require "bundler/gem_tasks"
│   ├── task :default => :spec
│   └── require 'rspec/core/rake_task'
├─ spec
│   ├── RSpec::Core::RakeTask.new
│   ├── nyan_cat_formatter_spec.rb
│   └── spec_helper.rb
└─
```

Documentation

```
/~ tree ./nyan-cat-formatter-0.0.6
├─ Gemfile
├─ LICENSE.md
├─ README.md
├─ Rakefile
├─ lib
│   └─ nyan_cat_formatter
│       ├── rspec1.rb
│       └── rspec2.rb
├─ nyan-cat-formatter
├─ spec
│   └─ nyan_cat_formatter_spec
│       └─ spec_helper.rb
```

2 directories, 10 files

```
Nyan Cat RSpec Formatter [![Build Status](https://secure.travis-ci.org/mattsears/nyan-cat-formatter.png)](http://travis-ci.org/mattsears/nyan-cat-formatter)
=====

```code
-----,-----,
-----| ^ ^
-----| (^ .^)
-----"" ""
```

This is my take on the Nyan Cat RSpec Formatter. It simply creates a rainbow trail of test results. It also counts the number of examples as they execute and highlights failed and pending specs.
```

The rainbow changes colors as it runs. See it in action [here](http://vimeo.com/32424001).

Works with RSpec 1.3 and RSpec 2.

```
...
rspec --format NyanCatFormatter
...
```

Installing Nyan Cat

```
-----
...
```

Gemspec

```
/~ tree ./nyan-cat-formatter-0.0.6
```

```
├─ Gemfile
├─ LICENSE.md
├─ README.md
├─ Rakefile
├─ lib
│   └─ nyan_cat_formatter.rb
│   └─ rspec1.rb
│   └─ rspec2.rb
├─ nyan-cat-formatter.gemspec
├─ spec
│   └─ nyan_cat_formatter_spec
│   └─ spec_helper.rb
```

```
2 directories, 10 files
```

```
$.push File.expand_path("../lib", __FILE__)
```

```
Gem::Specification.new do |s|
  s.name        = "nyan-cat-formatter"
  s.version     = "0.0.6"
  s.authors    = ["Matt Sears"]
  s.email       = ["matt@mattsears.com"]
  s.homepage    = "http://mtts.rs/nyancat"
  s.summary     = %q{Nyan Cat inspired RSpec formatter! }
  s.description = %q{Nyan Cat inspired RSpec formatter! }
```

```
  s.rubyforge_project = "nyan-cat-formatter"
```

```
  s.files       = `git ls-files`.split("\n")
  s.test_files  = `git ls-files -- {test,spec,features}/*`.split("\n")
  s.executables = `git ls-files -- bin/*`.split("\n").map{ |f| File.basename(f) }
  s.require_paths = ["lib"]
```

```
  # specify any dependencies here; for example:
  s.add_development_dependency "rake"
  s.add_development_dependency "rspec"
end
```

EdgeCase

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RubyGems messes with your loadpath.

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Initial \$LoadPath

```
gems/nyan-cat-formatter-0.0.6 ~ irb

irb: $LOAD_PATH

====> ["/Users/aaronchristy/.rvm/rubies/ruby-1.9.3-p0/lib/ruby/
site_ruby/1.9.1", "/Users/aaronchristy/.rvm/rubies/ruby-1.9.3-p0/lib/
ruby/site_ruby/1.9.1/x86_64-darwin11.2.0", "/Users/aaronchristy/.rvm/
rubies/ruby-1.9.3-p0/lib/ruby/site_ruby", "/Users/aaronchristy/.rvm/
rubies/ruby-1.9.3-p0/lib/ruby/vendor_ruby/1.9.1", "/Users/
aaronchristy/.rvm/rubies/ruby-1.9.3-p0/lib/ruby/vendor_ruby/1.9.1/
x86_64-darwin11.2.0", "/Users/aaronchristy/.rvm/rubies/ruby-1.9.3-p0/
lib/ruby/vendor_ruby", "/Users/aaronchristy/.rvm/rubies/ruby-1.9.3-p0/
lib/ruby/1.9.1", "/Users/aaronchristy/.rvm/rubies/ruby-1.9.3-p0/lib/
ruby/1.9.1/x86_64-darwin11.2.0"]
```

\$LoadPath after Require

```
~ irb
irb: require 'nyan_cat_formatter'
====> true

irb: $LOAD_PATH
====> ["/Users/aaronchristy/.rvm/gems/ruby-1.9.2-p290/gems/nyan-
cat-formatter-0.0.6/lib", "/Users/aaronchristy/.rvm/gems/ruby-1.9.2-
p290/gems/rspec-core-2.8.0/lib", "/Users/aaronchristy/.rvm/rubies/
ruby-1.9.2-p290/lib/ruby/site_ruby/1.9.1", "/Users/aaronchristy/.rvm/
rubies/ruby-1.9.2-p290/lib/ruby/site_ruby/1.9.1/x86_64-darwin11.2.0",
"/Users/aaronchristy/.rvm/rubies/ruby-1.9.2-p290/lib/ruby/site_ruby",
"/Users/aaronchristy/.rvm/rubies/ruby-1.9.2-p290/lib/ruby/vendor_ruby/
1.9.1", "/Users/aaronchristy/.rvm/rubies/ruby-1.9.2-p290/lib/ruby/
vendor_ruby/1.9.1/x86_64-darwin11.2.0", "/Users/aaronchristy/.rvm/
rubies/ruby-1.9.2-p290/lib/ruby/vendor_ruby", "/Users/
aaronchristy/.rvm/rubies/ruby-1.9.2-p290/lib/ruby/1.9.1", "/Users/
aaronchristy/.rvm/rubies/ruby-1.9.2-p290/lib/ruby/1.9.1/x86_64-
darwin11.2.0"]
```

Ruby 1.9 Goodness

Credits

- Ruby Image:
<http://www.dyrathror.com/>
- Nyan Cat:
<https://github.com/mattsears/>