

gem that

by James Adam



ogem thal!

by James Adam!

**(a constructive rant, and
then gem-this)**

(and writing gem commands)

(by James Adam)

building gems - a primer

my_gem.gemspec

```
Gem::Specification.new do |s|
  s.name = "my_gem"
  s.version = "1"

  s.authors = ["James Adam"]
  s.date = "2009-12-10"
  s.description = "What it does"
  s.email = "james@lazyatom.com"
  s.files = ["Rakefile", "lib/thing.rb"]
  s.homepage = "http://lazyatom.com"
  s.require_paths = ["lib"]

  # etc
end
```

```
$ gem build my_gem.gemspec
Successfully built RubyGem
Name: my_gem
Version: 1
File: my_gem-1.gem
$ ls *.gem
my_gem-1.gem
$
```

my motivation

hoe

the 'godfather' of gem creation


```
$ sow hoe_project
cp -r /Users/james/.rvm/gems/ree/1.8.6%rubymanor_gem_that_talk/gems/hoe-2.3.3/
template /Users
james/.hoe_template
chmod 644 /Users/james/.hoe_template/bin/file_name.erb /Users/james/.hoe_template/
History.txt.erb /Users/james/.hoe_template/lib/file_name.rb.erb /Users/
james/.hoe_template/Manifest.txt.erb /Users/james/.hoe_template/Rakefile.erb /Users/
james/.hoe_template/README.txt.erb /Users/james/.hoe_template/test/
test_file_name.rb.erb /Users/james/.hoe_template/.autotest.erb
chmod 755 /Users/james/.hoe_template/bin/file_name.erb
cp -r /Users/james/.hoe_template hoe_project
erb: .autotest.erb
erb: History.txt.erb
erb: Manifest.txt.erb
erb: README.txt.erb
erb: Rakefile.erb
erb: bin/file_name.erb
erb: lib/file_name.rb.erb
erb: test/test_file_name.rb.erb
mv .autotest.erb .autotest
mv History.txt.erb History.txt
mv Manifest.txt.erb Manifest.txt
mv README.txt.erb README.txt
mv Rakefile.erb Rakefile
mv bin/file_name.erb bin/hoe_project
mv lib/file_name.rb.erb lib/hoe_project.rb
mv test/test_file_name.rb.erb test/test_hoe_project.rb
(... cont ...)
```

```
$ sow hoe_project  
(.... cont ....)
```

... done, now go fix all occurrences of 'FIX':

```
hoe_project/Rakefile:7: # developer('FIX', 'FIX@example.com')  
hoe_project/README.txt:3:* FIX (url)  
hoe_project/README.txt:7:FIX (describe your package)  
hoe_project/README.txt:11:* FIX (list of features or problems)  
hoe_project/README.txt:15: FIX (code sample of usage)  
hoe_project/README.txt:19:* FIX (list of requirements)  
hoe_project/README.txt:23:* FIX (sudo gem install, anything else)  
hoe_project/README.txt:29:Copyright (c) 2009 FIX
```

```
$
```

hoe Rakefile

```
# -*- ruby -*-  
require 'rubygems'  
require 'hoe'  
  
Hoe.spec 'hoe_project' do  
  # developer('FIX', 'FIX@example.com')  
  
  # self.rubyforge_name = 'hoe_projectx'  
  # if different than 'hoe_project'  
end  
  
# vim: syntax=ruby
```

hoe Rakefile

```
Hoe .spec 'hoe_project' do
```

```
# ???
```

```
end
```

hoe
is a
fscking
virus



hoe
was a
fscking
virus



newgem

- Dr Nic



by Dr James Adam!

newgem

- generating structure, like the rails command
- extensible with other 'generators'
- pretty bat-shit mental.



```
$ newgem newgem_project
  create
  create lib/newgem_project
  create script
  create History.txt
  create Rakefile
  create README.rdoc
  create PostInstall.txt
  create lib/newgem_project.rb
dependency install_test_unit
  create test
  create test/test_helper.rb
  create test/test_newgem_project.rb
dependency install_rubigen_scripts
  exists script
  create script/generate
  create script/destroy
  create script/console
  create Manifest.txt
  readme readme
```

Important

=====

- * Open Rakefile
- * Update missing details (gem description, dependent gems, etc.)

\$



```
$ rake -T
rake announce      # publish # Announce your release.
rake audit         # test   # Run ZenTest against the package.
rake check_extra_deps # deps  # Install missing dependencies.
rake check_manifest # debug  # Verify the manifest.
rake clean        #       # Clean up all the extras.
rake clobber_docs # publish # Remove rdoc products
rake clobber_package # package # Remove package products
rake config_hoe   # debug  # Create a fresh ~/.hoerc file.
rake debug_email  # publish # Generate email announcement file.
rake debug_gem    # debug  # Show information about the gem.
rake default      # test   # Run the default task(s).
rake deps:email   # deps   # Print a contact list for gems dependent on this gem
rake deps:fetch   # deps   # Fetch all the dependent gems of this gem into tarballs
rake deps:list    # deps   # List all the dependent gems of this gem
rake docs        # publish # Build the RDOC HTML Files
rake gem         # package # Build the gem file newgem_project-0.0.1.gem
rake gemspec     # newgem # Generate a newgem_project.gemspec file
rake generate_key # signing # Generate a key for signing your gems.
rake install_gem  # package # Install the package as a gem.
rake install_gem_no_doc # newgem # Install the package as a gem, without generating documentation(ri/rdoc)
rake manifest     # manifest # Recreate Manifest.txt to include ALL files to be deployed
rake multi       # test   # Run the test suite using multiruby.
rake package     # package # Build all the packages
rake post_blog   # publish # Post announcement to blog.
rake post_news   # publish # Post announcement to rubyforge.
rake publish_docs # publish # Publish RDoc to RubyForge.
rake redocs      # publish # Force a rebuild of the RDOC files
rake release     # package # Package and upload the release.
rake release_sanity # package # Sanity checks for release
rake release_to_rubyforge # package # Release to rubyforge.
rake repackage   # package # Force a rebuild of the package files
rake ridocs     # publish # Generate ri locally for testing.
rake test       # test   # Run the test suite.
rake test_deps  # test   # Show which test files fail when run alone.
$
```



```
$ newgem -i cucumber -i website newgem_ultra_project -i shoulda
  create
  create lib/newgem_ultra_project
  create script
  create History.txt
  create Rakefile
  create README.rdoc
  create PostInstall.txt
  create lib/newgem_ultra_project.rb
dependency install_test_unit
  create test
  create test/test_helper.rb
  create test/test_newgem_ultra_project.rb
dependency install_cucumber
  create features/step_definitions
  create features/support
  create features/development.feature
  create features/step_definitions/common_steps.rb
  create features/support/env.rb
  create features/support/common.rb
  create features/support/matchers.rb
dependency install_website
  create website/javascripts
  create website/stylesheets
  create config
exists script
  create website/index.txt
  create website/index.html
  create config/website.yml.sample
  create script/txt2html
dependency plain_theme
exists website/javascripts
exists website/stylesheets
  create website/template.html.erb
  create website/stylesheets/screen.css
  create website/javascripts/rounded_corners_lite.inc.js
dependency install_shoulda
exists test
  create tasks
  force test/test_newgem_ultra_project.rb
  force test/test_helper.rb
  create tasks/shoulda.rake
dependency install_rubigen_scripts
exists script
  create script/generate
  create script/destroy
  create script/console
  create Manifest.txt
  readme readme
```

Important

=====

* Open Rakefile

* Update missing details (gem description, dependent gems, etc.)

\$

```
$ rake -T sanity
```

```
rake release_sanity # ...
```

WHaTEVeR

U SaY

Dr NiC!

How to submit patches

Read the [8 steps for fixing other people's code](#) and for section [8b: Submit patch to Google Groups](#), use the Google Group above.

You can fetch the source from either:

- rubyforge: http://rubyforge.org/scm/?group_id=2340

```
git clone git://rubyforge.org/newgem.git
```

- github: <http://github.com/drnice/newgem/tree/master>

```
git clone git://github.com/drnice/newgem.git
```

Build and test instructions

```
cd newgem
rake test
rake install_gem
```

License


This code is free to use under the terms of the MIT license.

Contact

Comments are welcome. Send an email to [Dr Nic Williams](#).

[Dr Nic](#), 29th December 2008

Theme extended from [Paul Battley](#)



Dr Nic, 29th December 2008

Theme extended from Paul Battley

echoe

= (hoe) - (it being a dependency)

echoe Rakefile

```
require 'echoe'  
Echoe.new('gem_name')
```

echoe Rakefile

```
Echoe.new("vanilla.rb") do |p|  
  p.author = "James Adam"  
  p.summary = "A talk about this would've  
              been awesome"  
  p.url = "http://interblah.net"  
  p.runtime_dependencies = ["soup >=1.9.9"]  
  # etc... ?  
end
```

echoe Rakefile

```
begin
  require 'echoe'
  Echoe.new('my_gem')
rescue LoadError
  # probably nothing
end
# the rest of your Rakefile
```

gemhub

(somewhat of a mystery to me)

```
$ gemhub gemhub_project
```

```
  create
```

```
  create  lib
```

```
  create  spec
```

```
  create  lib/gemhub_project.rb
```

```
  create  spec/gemhub_project_spec.rb
```

```
  create  README.textile
```

```
  create  Rakefile
```

```
$
```



jeweler

the choice of a new generation

```
$ jeweler jeweler_project
```

```
create .gitignore
```

```
create Rakefile
```

```
create LICENSE
```

```
create README.rdoc
```

```
create .document
```

```
create lib
```

```
create lib/jeweler_project.rb
```

```
create test
```

```
create test/helper.rb
```

```
create test/test_jeweler_project.rb
```

```
Jeweler has prepared your gem in jeweler_project
```

```
$
```

jeweler Rakefile

```
begin
  require 'jeweler'
  Jeweler::Tasks.new do |gem|
    gem.name = "jeweler_project"
    gem.summary = %Q{summary of your gem}
    gem.email = "james@lazyatom.com"
    gem.homepage = "http://github.com/..."
    gem.authors = ["James Adam"]
    # etc ...
  end
  Jeweler::GemcutterTasks.new
rescue LoadError
  puts "Jeweler not available...."
end
```



```
$ rake -T
```

```
rake check_dependencies
```

```
rake check_dependencies:development
```

```
rake check_dependencies:runtime
```

```
rake gemcutter:release
```

```
rake gemspec:debug
```

```
...
```

```
rake git:release
```

```
rake github:release
```

```
rake install
```

```
...
```

```
rake release
```

```
...
```

```
rake version:bump:major
```

```
rake version:bump:minor
```

```
rake version:bump:patch
```

```
rake version:write
```

```
$
```

jeweler

- zeitgeisty
- tailored for github, apparently
- still provides tasks for bumping versions, publishing
- still provides a generator

too opinionated

- don't need a tool to manage versions, websites, release notes, etc
- don't need a generator
- why so opaque?

what I want

- turn existing code into a gem

- *the fuck* get out of my way

```
$ sow my_code
```

```
Project my_code seems to exist
```

```
$
```

```
$ jeweler my_code
```

The directory my_code already exists. Maybe move it out of the way before continuing?

```
$
```

```
$ gemhub my_code
```

```
exists
```

```
create lib
```

```
create spec
```

```
create lib/my_code.rb
```

```
create spec/my_code_spec.rb
```

```
create README.textile
```

```
overwrite Rakefile? (enter "h" for help) [Ynaiqd] h
```

Y - yes, overwrite

n - no, do not overwrite

a - all, overwrite this and all others

i - ignore, skip any conflicts

q - quit, abort

d - diff, show the differences between the old and the new

h - help, show this help

```
overwrite Rakefile? (enter "h" for help) [Ynaiqd]
```

GEM THIS

gem this

- produces a simple Rakefile
- builds your gem
- maybe does your docs
- release to rubyforge

gem this

- produces a simple Rakefile
- builds your gem
- maybe does your docs
- ~~release to rubyforge~~

```
/tmp $ mkdir new_thing
```

```
/tmp $ cd new_thing
```

```
new_thing $ gem-this
```

```
Writing new Rakefile
```

```
$
```

gem this Rakefile

```
# This builds the actual gem. For details of what  
all these options mean, and other ones you can  
add, check the documentation here:
```

```
#
```

```
# http://rubygems.org/read/chapter/20
```

```
#
```

```
spec = Gem::Specification.new do |s|
```

```
  # Change these as appropriate
```

```
  s.name           = "existing_project"
```

```
  s.version        = "0.1.0"
```

```
  s.summary        = "What this thing does"
```

```
  s.author         = "James Adam"
```

```
  # etc...
```

gem this Rakefile

```
# This task actually builds the gem.  
Rake::GemPackageTask.new(spec) do |pkg|  
  pkg.gem_spec = spec  
end
```

```
# Generate documentation  
Rake::RDocTask.new do |rd|  
  rd.rdoc_files.include("lib/**/*.*.rb")  
  rd.rdoc_dir = "rdoc"  
end
```



```
/tmp $ cd old_thing
```

```
old_thing $ gem-this
```

```
Appending to existing
```

```
Rakefile
```

```
old_thing $
```



```
$ gem-this
```

```
• • •
```

```
$ gem this
```

```
• • •
```

```
$ gem push
```

```
• • •
```

```
$ gem open
```

gem install open_gem

gem commands

the secret sauce

- subclass `Gem::Command` ...
- ... in a file called `rubygems_plugin.rb` ...
- ... and ensure it's in the `$LOAD_PATH`

my_gem/lib/rubygems_plugin.rb

```
require 'rubygems/command_manager'  
require 'rubygems/command'
```

```
class TestCommand < Gem::Command  
  def initialize  
  end  
  
  def summary  
  end  
  
  def execute  
  end  
end
```

my_gem/lib/rubygems_plugin.rb

```
require 'rubygems/command_manager'  
require 'rubygems/command'
```

```
class TestCommand < Gem::Command  
  def initialize  
  end  
  
  def summary  
  end  
  
  def execute  
  end  
end
```

my_gem/lib/rubygems_plugin.rb

```
class TestCommand < Gem::Command
  def initialize
    super 'name', 'short description', {:debug => false}
    add_option('-d', '--debug', 'guess!') do |d, options|
      options[:debug] = d
    end
  end

  # def summary
  # def execute
end
```

my_gem/lib/rubygems_plugin.rb

```
class TestCommand < Gem::Command
  def initialize
    super 'name', 'short description', { :debug => false }
    add_option('-d', '--debug', 'guess!') do |d, options|
      options[:debug] = d
    end
  end

  # def summary
  # def execute
end
```

my_gem/lib/rubygems_plugin.rb

```
class TestCommand < Gem::Command
  def initialize
    super 'name', 'short description', {:debug => false}
    add_option('-d', '--debug', 'guess!') do |d, options|
      options[:debug] = d
    end
  end

  # def summary
  # def execute
end
```

my_gem/lib/rubygems_plugin.rb

```
class TestCommand < Gem::Command
  # def initialize

  def summary
    "What this command does..."
  end

  # def execute
end
```

my_gem/lib/rubygems_plugin.rb

```
class TestCommand < Gem::Command
  # def initialize

  # def summary

  def execute
    puts "You ran me with
        #{options.inspect}"
  end
end
```


my_gem/lib/rubygems_plugin.rb

```
class TestCommand < Gem::Command
  # def initialize

  # def summary

  def execute
    puts "You ran me with
        #{options.inspect}"
  end
end
```

my_gem/lib/rubygems_plugin.rb

```
# the command class
```

```
# ...
```

```
Gem::CommandManager.instance.  
  register_command :test
```

gem_this/lib/rubygems_plugin.rb

```
%w(rubygems/command_manager rubygems/command
gem_this).each { |lib| require lib }

class ThisCommand < Gem::Command
  def initialize
    super 'this', GemThis::SUMMARY, :debug => false
    add_option('-d', '--debug', GemThis::DEBUG_MESSAGE) do |d, options|
      options[:debug] = d
    end
  end

  def summary; GemThis::SUMMARY; end

  def execute
    GemThis.new(File.basename(Dir.pwd), options[:debug]).create_rakefile
  end
end

Gem::CommandManager.instance.register_command :this
```

**FUCK
YOUR
CONVENTIONS**

james@lazyatom.com

github.com/lazyatom/gem-this

```
gem install gem-this
```

<http://gofreerange.com>