

Ruby

Week 6



Mid-Term

- Due Next Week!
- Don't wait until the last minute!!
- Send me your SSH Key

Project

- Make a Gem!
 - Source on Github
 - Gem Released on RubyGems.org
 - Full Documentation and Tests
 - OSS License of your choice
 - Tested on Travis CI
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Topics

- Whatever you want! (It has to do something!)
- Suggestions:
 - Calculations (unit conversions, physics helper, etc...)
 - Games (game of life, battleship, tic-tac-toe, sudoku solver etc..)
 - DSL, Programming helper, etc...

Project

- Due the Last Day of Class
- Demo the gem in-class



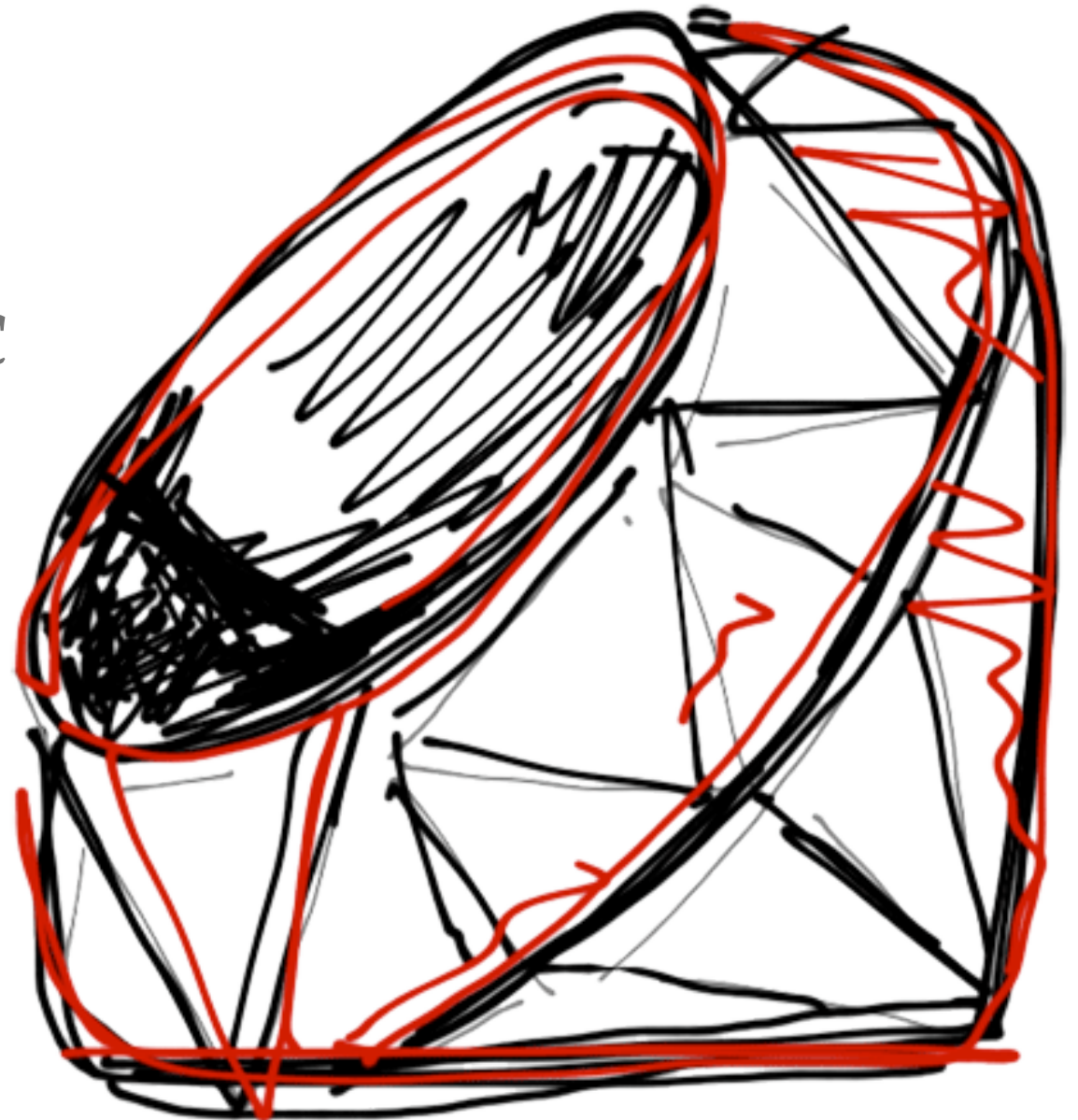
Ruby Gems



- Packaged Ruby Code
- Available for Everyone!
- DRY

Gem Structure

- test_gem.gemspec
- lib
- test_gem.rb



GemSp

```
Gem::Specification.new do |s|  
  s.name           = 'test_gem'  
  s.version        = '0.0.0'  
  s.date           = '2012-11-13'  
  s.summary        = "Making a Test Ger  
  s.description    = "A gem to explain  
  s.authors        = ["Renée De Voursne  
  s.email          = 'renee@nird.us'  
  s.homepage       = 'http://rubygems.org/gems/test\_gem'  
  s.files          = ["lib/test_gem.rb"]  
end
```



Building Your Gem

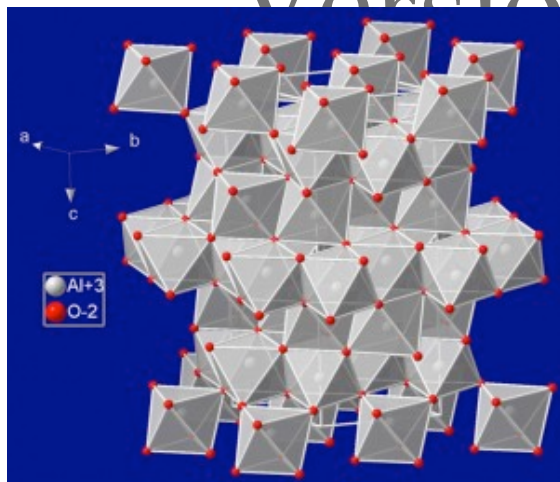
```
$ gem build test_gem.gemspec
```

Successfully built RubyGem

Name: test_gem

Version: 0.0.0

test_gem-0.0.0.gem



Installing Your Gem

```
$ gem install test_gem-0.0.0.gem
```

```
Successfully installed test_gem-0.0.0
```

```
1 gem installed
```

```
Installing ri documentation for test_gem-  
0.0.0...
```

```
Installing RDoc documentation for  
test_gem-0.0.0...
```

RubyGems.org

- Setup an Account:
 - <https://rubygems.org/users/new>
- Setup Credentials:
 - API Access:
 - <https://rubygems.org/profile/edit>

Releasing Your Gem

```
$ gem push test_gem-0.0.0.gem
```

```
Pushing gem to RubyGems.org...
```

```
Successfully registered gem: test_gem (0.0.0)
```

Viewing Remote Gems

```
$ gem list -r test_gem
```

```
*** REMOTE GEMS ***
```

```
test_gem (0.0.0)
```

Installing a Gem

```
$ gem install test_gem
```

```
Fetching: test_gem-0.0.0.gem (100%)
```

```
Successfully installed test_gem-0.0.0
```

```
1 gem installed
```

```
Installing ri documentation for test_gem-  
0.0.0...
```

```
Installing RDoc documentation for  
test_gem-0.1.0...
```

Adding CLI

- Command Line Interface
- Structure
 - bin
 - test_gem
- SheBang (Sharp Bang, Shell Bang): `#!/usr/bin/env ruby`
- Spec: `s.executables << 'test_gem'`

Arguments

- Constant Array:
 - ARGV

Testing!

- spec
 - test_gem_spec.rb
- RakeFile
- .rspec

Rakefile

- Testing Task:

```
require 'rspec/core/rake_task'
```

```
RSpec::Core::RakeTask.new('spec')
```

```
task :default => :spec
```

.rspec

- --color
- --format documentation

Gem FrameWorks

- Jeweler
- Gem Release
- Hoe
- Rake
- Bundler

Continuous Integration

- Git Hook
- Manages Different Environments
- Testing Cycle

Travis CI

- Free CI for Open Source
- Easy
- Fast
- Fun!



Github Hook

- Admin
- Service Hooks
- Travis
 - Copy and Paste Token

.travis.yml

language: ruby

rvm:

- 1.8.7

- 1.9.2

- 1.9.3

- jruby-18mode

- jruby-19mode

ruby head

ReadMe Graphic

- Build Status:

```
{}
```

```
[http://travis-ci.org/reneedv/elucidate]
```

HomeWork

- Release a test gem to RubyGems.org
- E-mail me your project idea