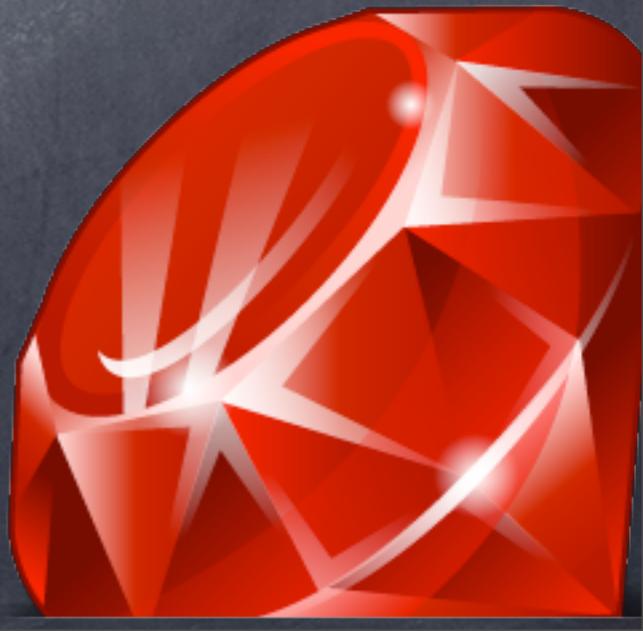




Ruby the Core Language

Winter 2014



Introductions

Hello
my name is..

- Renée Hendricksen
- renee@nird.us
- Background
- Hidden Talent

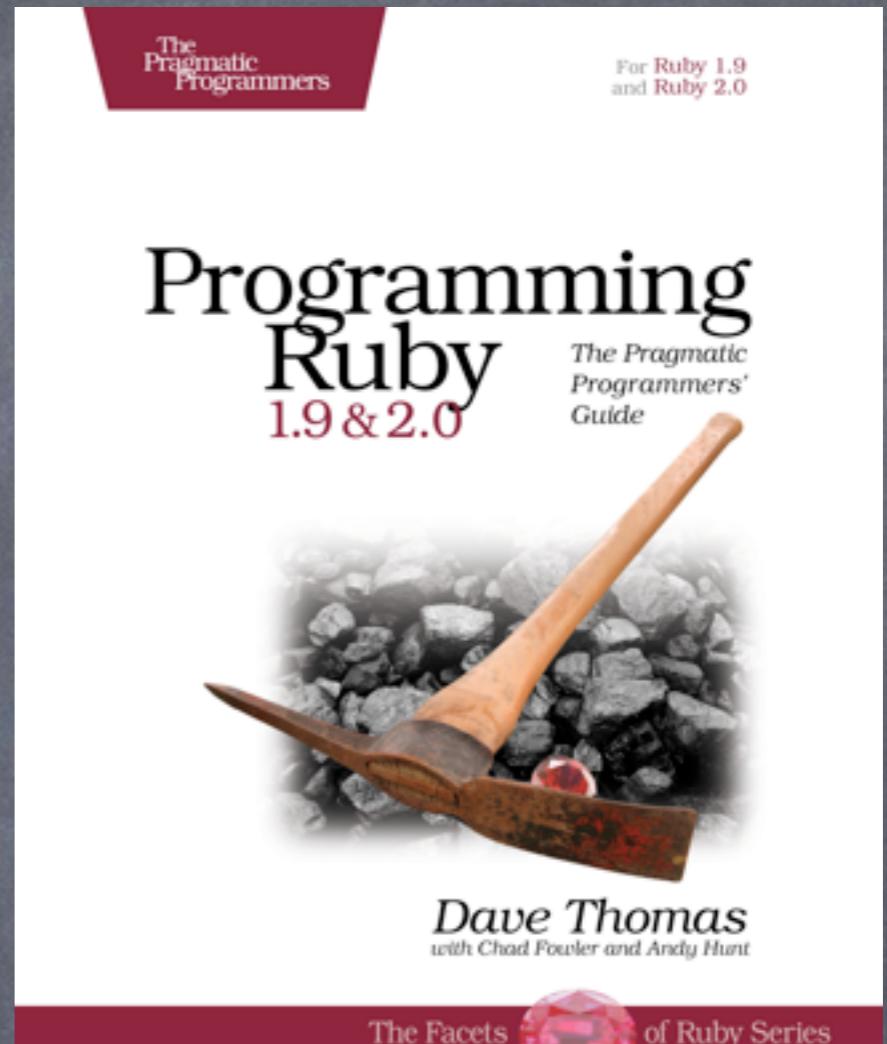
Class Structure

- ⦿ Lecture, Demos, In-Class Exercises
- ⦿ Experimentation & Exploration
- ⦿ Resources & Homework
- ⦿ Questions & Parking Lot



TextBook

- ⦿ Pragmatic Programmers: Programming Ruby 1.9 & 2.0 by Dave Thomas



Grades?!



- ⦿ Attendance (2 absences) - 25%
- ⦿ Homework (1-2 hours a week) - 25%
- ⦿ 2 Take-Home Tests - 25%
- ⦿ 1 Project - 25%

Office Hours

- Renée: Tuesday 6pm-8pm
- Chat, Phone, Skype, E-mail, iChat, NIRD offices



Ruby

- ⦿ Created by Yukihiko "Matz" Matsumoto
- ⦿ Ruby 1.0 released in 1996
- ⦿ Ruby is for People
- ⦿ MINSWAN



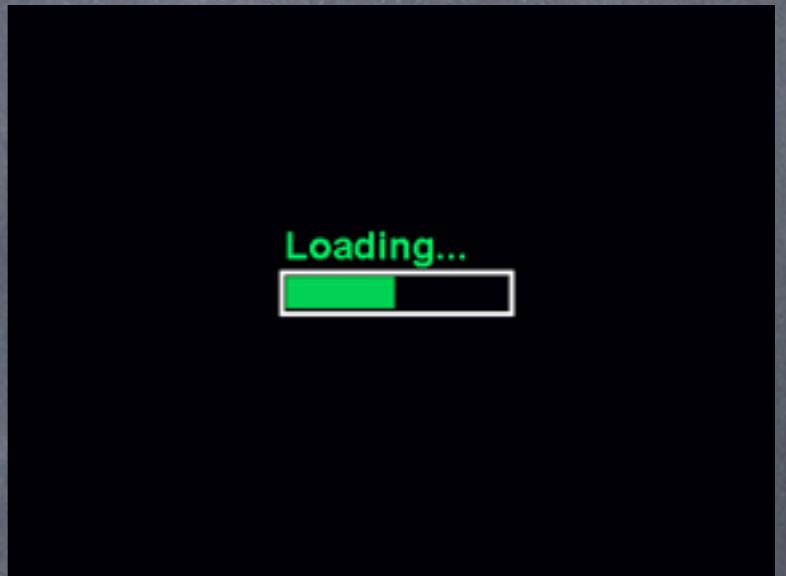
The Ruby World

- ⌚ Toolsets
- ⌚ Best Practices
- ⌚ Common Uses



Install Check

- ⌚ Command Prompt
- ⌚ Git
- ⌚ Ruby
- ⌚ Rspec
- ⌚ Editor (Syntax Highlighting)



Install Check

- ⦿ Command Prompt (CLI)
 - ⦿ Mac: Terminal, iTerm, etc...
 - ⦿ Unix: bash, zsh, csh, etc....
 - ⦿ Windows: Command Prompt w/ Ruby on Rails

Git

- ⌚ which git
 - ⌚ ex: /usr/local/bin/git
- ⌚ git --version
 - ⌚ ex: git version 1.7.10.2

Ruby

- ⦿ which ruby
 - ⦿ ex: /Users/renée/.rvm/rubies/ruby-1.9.3-p194/bin/ruby
- ⦿ ruby -v
 - ⦿ ex: ruby 1.9.3p194 (2012-04-20 revision 35410) [x86_64-darwin11.3.0]

Ruby Interpreter

- ⦿ irb
- ⦿ ex:
- ⦿ 1.9.3-p194 :001 > 1+2
- ⦿ => 3
- ⦿ 1.9.3-p194 :002 > exit

RSpec

- ⦿ `gem install rspec`
 - ⦿ `ex:` Fetching: rspec-core-2.11.1.gem (100%)
- ⦿ `gem list`
 - ⦿ `ex:`
 - ⦿ diff-lcs (1.1.3), rspec (2.11.0), rspec-core (2.11.1), rspec-expectations (2.11.3), rspec-mocks (2.11.3)
- ⦿ `rspec -v`
 - ⦿ `ex:`
 - ⦿ 2.11.1

Editor

- ⦿ Sublime, Komodo, RubyMine, Vim (!), Emacs (!), Redcar
- ⦿ Mac: TextMate

Git

- ⦿ Source Control System
- ⦿ Timeline, Track Changes
- ⦿ Branching and Merging
- ⦿ Code Safety



Git Commands

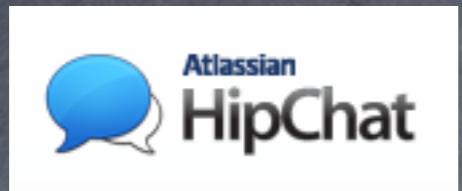
- ⌚ git clone / init
- ⌚ git status
- ⌚ git add / rm
- ⌚ git commit
- ⌚ git push
- ⌚ git log

GitHub



Setup a GitHub Account

- ☞ Sign-up: <https://github.com/signup/free>
- ☞ Set-up: <https://help.github.com/articles/set-up-git#platform-all>
- ☞ SSH Key: <https://help.github.com/articles/generating-ssh-keys#platform-all>



Chat

- ⌚ <https://uweruby.hipchat.com/>
- ⌚ In-Class Back-Channel
- ⌚ Questions, Discussion



Demo!

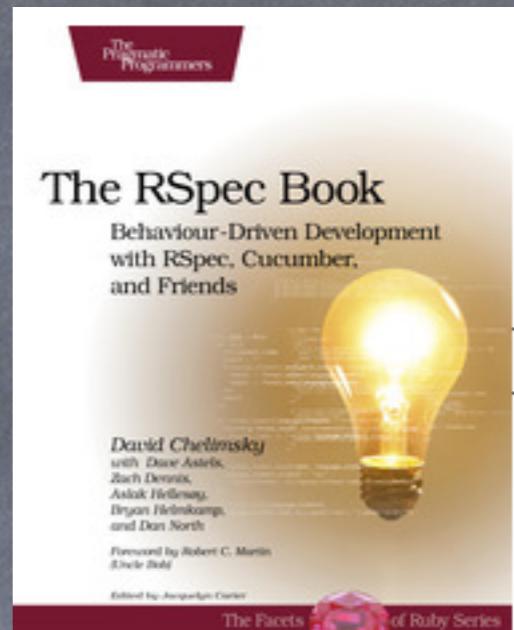
- ☛ Fork on GitHub
- ☛ Clone my copy
- ☛ Make changes
- ☛ Commit and Push changes
- ☛ Send a pull request

In-Class Exercise!

- ➊ Fork
- ➋ Clone
- ➌ Change
- ➍ Push
- ➎ Pull Request

RSpec Intro

- ⦿ Code that Tests code!
- ⦿ Test Driven Development
- ⦿ Red-Green-Refactor
- ⦿ Test First Teaching
- ⦿ Ruby Domain Specific Language (DSL) for testing



RSpec Specifics

- ⦿ Describe (What) / Context (When)
- ⦿ It (Does)
- ⦿ Should
- ⦿ Matchers
- ⦿ <http://rubydoc.info/gems/rspec-expectations/2.4.0/RSpec/Matchers>

Rspec Demo!

- ➊ make a new rspec file
- ➋ run rspec
- ➌ walk through rspec_spec.rb

In-Class Exercise

- ➊ Run `exercises/rspec_spec.rb`
- ➋ Fix the broken in-class test
- ➌ Add the 3 pending in-class tests (don't forget the `do/end` and `should!`)

Homework!

- ⦿ Read Chapter 3 Classes, Objects, and Variables
- ⦿ p.86-90 Strings (Strings section in Chapter 6 Standard Types)
- ⦿ Answer Questions, Make Spec Pass