

Ruby on Rails Workshop

ABOUT RUBY ON RAILS

Ruby on Rails (or more simply, *Rails*) is the web development framework that questioned prior assumptions and opened up a new way to create web applications that emphasized productivity and quality. Developing in Rails means:

- a lot less code
- a lot less configuration
- bringing up basic functionality quickly
- building out new functionality incrementally
- integrated testing

There are three principles behind Rails:

- **“Don’t repeat yourself!”** (abbreviated *DRY*): every element of the web application has its specific place and doesn’t have to be repeated multiple times across files.
- **Convention over configuration:** by using practical conventions, most configuration data can be eliminated (however the conventions can be overridden with configuration when necessary).
- **Quick turn-around time:** by providing an integrated web server and an interpreted language, the results of code modifications can be seen immediately, thereby minimizing the code-debug cycle (with no additional compile step).

THE RUBY IN *RUBY ON RAILS*

Rails is based on the “Model-View-Controller” (MVC) architecture, which divides the web application into coherent, functional units. Both the Models and Controllers are written entirely in Ruby. The Views are written in a combination of Ruby and mark-up (generally HTML). So Rails development is Ruby development.

Chad Fowler, the well-regarded author of *Rails Recipes* and co-author of *Programming Ruby: The Pragmatic Programmers’ Guide*, said:

The path to Rails enlightenment is completely based on learning and mastering Ruby. ... Because when you master Ruby, all these Rails tricks are just transparent. [February 2007, emphasis added]

For those who do not already have a good understanding of Ruby we recommend that participants first take the **“Ready for Rails” Ruby Workshop**, so participants have a solid Ruby foundation to support and enhance their understanding of and ability to leverage Rails.

WORKSHOP DURATION

Three days

PREREQUISITES

Participants should have a basic understanding of the Ruby programming language and be comfortable with one high-level programming language. Participants should also have a basic understanding of HTML and databases.

WORKSHOP GOAL

To give each participant a solid Rails foundation, so s/he can develop sophisticated, dynamic web applications.

WORKSHOP PRINCIPLES

This workshop is organized around three fundamental principles:

- New knowledge is built on prior knowledge.
- Learning is primarily achieved through **doing rather than listening**, so we integrate well-designed, realistic, focused exercises with presentation and discussion.
- A relaxed atmosphere enhances learning.

WORKSHOP TOPICS

- Introduction and History (*very brief*)
- Model-View-Controller Architecture
- Components of a Rails project
- The “Golden Path”
- Project Directory Layout
- Naming Conventions
- The Model: ActiveRecord
- Object-Relational Mapping (ORM)
- Table Associations (*has_one, has_many, has_many_through, belongs_to*)
- Model Validations
- Model Migrations
- The Rails Console
- The Controller: ActionController
- Cookies
- Session Management
- Filters
- Routes
- The View: ActionView
- Layouts
- Partials
- Convenience Methods supplied by ActiveSupport
- Helpers
- AJAX using RJS Templates
- Caching
- Rails Plug-Ins
- Freezing, Thawing, and Edge Rails
- Deployment
- Capistrano
- Rake
- Web Application Security
- Rails Best Practices and Rules of Thumb

MATERIALS PROVIDED

Each participant receives:

- A comprehensive course book containing all workshop slides (over 500)
- A CD containing workshop examples, exercise solutions, and other tools and reference materials as allowed by license
- A certificate of completion

PUBLIC AND ON-SITE CLASSES

We offer both public workshops, in which anyone can enroll, and on-site workshops, so you can maximize convenience and minimize travel costs for your employees.

ON-SITE CUSTOMIZATION

On-site classes provide the opportunity to customize the workshop to **your specific needs**. Please feel free to discuss customization of your on-site workshop both in terms of content and scheduling. For example, we can develop special material for your workshop, and we would be happy to schedule the workshop for partial days or across non-consecutive days.

MORE INFORMATION

For more information please visit us on the web:

www.LearnRuby.com

If you have questions or would like to discuss scheduling or workshop customization, please contact us:

info@LearnRuby.com

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We look forward to providing you with a rewarding educational experience!