

CONTENTS

Introduction	xv
 Chapter 1: Introduction to Ruby on Rails	 3
A history of Ruby	5
Object-oriented programming	6
Riding the Rails	7
Components of Rails	8
Model, View, Controller	11
Rails' database support	12
Who uses Rails?	12
Is Rails safe?	14
Summary	14
 Chapter 2: Installing Rails	 17
Installing Rails on Mac OS X	18
Installing Xcode	19
Semiautomatic Rails install	21
Manual install	22
Setting the file path correctly	22
Setting up Ruby on Mac OS X	23
Installing the Rails framework on Mac OSX...finally!	24
Installing FastCGI	24
Installing Lighttpd	25
Installing MySQL on Mac OSX	26
Locomotive	27
Extra tools for Mac OSX	28

CONTENTS

Installing Rails on Windows	28
Installing Ruby on Windows	28
Installing MySQL on Windows	30
InstantRails—Rails for Windows	35
Extra tools for Windows	35
Ready? Let's do it!	36
Chapter 3: Ruby for Rails Developers	39
Basic Ruby syntax	40
Ruby variables	41
Classes and objects	42
Inheritance	46
Polymorphism	47
Calling objects	48
Arrays and hashes	48
Decision structures	49
while	50
Iterators	50
Exception handling	51
Summary	51
Chapter 4: Getting Started with Rails	53
Creating a Rails project	56
Configuring the web server	57
Viewing the application	58
Creating the database	59
Windows	60
Mac OS X	60
Using the command line	61
Telling Rails about the databases	62
Creating the model	63
Rails migrations	64
Creating the controller	67
Creating the views	69
Creating the first objects	71
Updating existing ads	74
Removing an ad	76
Adding some style	77
Summary	81
Chapter 5: More Advanced Rails	83
Validating data	84
Implementing validations in railslit	85
Other common validations	88
Adding categories with migrations	88

Creating associations between models	90
Working with the new relationship	92
Controlling the categories	93
Modifying URLs using routing	95
Defining your own routes	96
Defining route en masse	97
Named routes	97
Basic debugging	99
Rails console	99
Reading existing data	101
breakpointer	101
Debugging views	103
Summary	104
Chapter 6: Formatting Data	107
NumberHelper	108
Other helpers	110
DateHelper	110
Defining date formats	113
Using natural language	114
Summary	115
Chapter 7: Introduction to Ajax	117
A history of web interaction	118
What is Ajax?	120
Where is Ajax used?	121
How does Rails do Ajax?	121
When to use Ajax?	123
What's the catch?	123
Summary	124
Chapter 8: Bringing Forms to Life with Ajax	127
Ajaxing your application	128
Creating the categories controller	128
Adding a touch of Ajax	132
Partials	134
Adding dynamic JavaScript functionality using RJS	135
What about validation?	136
Deleting items with Ajax	137
Searching classifieds with Ajax	139
Creating the search box	140
Sending e-mail with Action Mailer	142
Configuring Action Mailer	142
Let's send some e-mail	143
A bit of CSS style	146
Summary	147

Chapter 9: Uploading Files and Sending Attachments 149

Uploading images to your database	150
Reading files from the database	153
Securing your data field	154
Updating the remaining views	155
Sending e-mail with attachments	156
Adding some style	158
Summary	159

Chapter 10: User Authentication and Session Management . . . 161

Before you begin	162
Mac OS X	162
Windows XP	163
Creating the user model	164
Adding data model validations and associations	165
Adding a new controller	166
Creating a signup form	167
Securing the users	169
Creating a login form	170
Adding the login code to the backend	172
How to store session data	173
Working with the sessions	175
Locking railslist down	175
Securing the categories controller	178
Assigning classifieds to users	179
Removing the email field	180
Logging out	180
Summary	181

Chapter 11: Customizing Rails Views 183

Organizing listings	184
Using helper methods in views	186
Adding Web 2.0 style	187
Creating a tag cloud from the categories	189
Adding microformats	194
Adding microformats to Railslist	198
Summary	201

Chapter 12: Using Rails Plug-ins and Engines 203

Building applications with scaffolding	204
Creating a new application with scaffolding	204
Testing the scaffolds	206
Analyzing the code	207
Scaffolded model	210
Adding functionality with plug-ins	212
Using plug-ins	212
Using acts_as_taggable	214

Using engines in the application	217
Migrating the database	218
Configuring login_engine	219
A note on components	220
Summary	221
Chapter 13: Deploying with Capistrano	223
What is deployment?	224
Tool requirements	226
Installing Subversion for Mac OS X	226
Installing Subversion for Windows	227
Before you begin	228
Creating the MySQL database	228
Setting up the server	230
Committing the project to Subversion	233
Installing Capistrano	234
Connecting to the server on a Mac	235
Connecting to the server on Windows	236
Deploying the application	236
Summary	237
Appendix A: Caching Your Content	239
Setting up the caching strategy	241
Implementing caching in the application	242
Using fragment caching explicitly	242
Expiring caches	243
Summary	244
Appendix B: Testing Rails	247
What is test-driven development?	248
Test directory	249
Fixtures folder	249
Functional folder	250
Integration folder	250
Mock folder	250
Test folder	250
Unit folder	250
Creating a test database	250
On Windows	251
On Mac	251
Preparing the test database	251
Unit-testing the models	251
Running the first test	252
Other unit test assertions	255
Functional testing of the controller	256
Running all the tests at once	258
Summary	259
Index.	261