

Contents

Preface	V
Motivation for this Book	V
Who Should Read this Book?.....	VI
Outline to the Book Structure	VII
Prerequisite Skills	VIII
Acknowledgements	VIII
About the Author	VIII
Contents	XI
1 Ruby	1
1.1 Introduction	1
1.2 Installing Ruby	1
1.3 Creating a Ruby Application	3
1.4 Identifiers and Comments.....	5
1.5 Strings	6
1.6 Arrays Hashes and Ranges	8
1.7 Variables Constants and Operators.....	11
1.8 Classes	16
1.9 Methods	18
1.10 Procs and Blocks	24
1.11 Control Structures and Iterators.....	28
1.12 Exception Handling	33
1.13 Modules	36
1.14 Comparing Ruby with PHP	36
1.15 Comparing Ruby with Java	37
1.16 Summary	39
2 Rails Framework	41
2.1 Introduction	41
2.2 Overview of Rails	41
2.3 Active Record	43
2.4 Action Controller	47

2.5 Action View.....	50
2.5.1 Sub-Templates.....	52
2.6 Ruby on Rails Commands.....	52
2.7 Installing Rails.....	53
2.8 Developing a Rails Application.....	54
2.9 Rails Routes.....	56
2.10 Stylesheets.....	57
2.11 Helpers.....	57
2.12 Layouts.....	58
2.13 Partials.....	60
2.14 Rails Framework Examples.....	61
2.15 Configuring Rails with the MySQL Database.....	67
2.16 Comparing Rails with PHP.....	69
2.17 Comparing Rails with Java.....	69
2.18 Summary.....	69
3 CRUD on Rails.....	71
3.1 Introduction.....	71
3.2 Scaffolding.....	71
3.3 CRUD with PHP.....	72
3.4 CRUD with Java.....	74
3.5 Creating a Rails Application.....	75
3.6 Creating a Database Table.....	76
3.7 Migrations.....	77
3.8 Creating catalogs Table with Migrations.....	82
3.9 Configuring with Oracle Database.....	84
3.10 Configuring with SQL Server 2005 Database.....	85
3.11 Developing a CRUD Application.....	86
3.11.1 Creating Dynamic Scaffolding.....	87
3.11.2 Creating Scaffolding with Scaffold Generator.....	88
3.12 Ajax Scaffolding.....	95
3.13 Validations.....	100
3.14 Summary.....	106
4 Ajax on Rails.....	107
4.1 Introduction.....	107
4.2 Overview of Ajax.....	107
4.3 Overview of XMLHttpRequest.....	108
4.4 Creating an XMLHttpRequest Object.....	110
4.5 Opening an HTTP Request.....	110
4.6 Sending an HTTP Request.....	111
4.7 Processing an HTTP Response.....	111

4.8 Ajax with PHP	113
4.9 Ajax with Java	113
4.10 Support for Ajax in Rails	114
4.10.1 link_to_remote	116
4.10.2 form_remote_tag	117
4.10.3 submit_to_remote	117
4.10.4 observe_field	118
4.10.5 observe_form	119
4.10.6 periodically_call_remote	119
4.10.7 update_element_function	119
4.10.8 update_page	120
4.11 Creating a Ruby on Rails Application	120
4.12 Creating a Database Table	121
4.13 Sending a Request	124
4.13.1 Sending a Request with form_remote_tag Method	125
4.13.2 Sending a Request with observe_field Method	127
4.14 Processing a Request	128
4.15 Processing the Response	135
4.16 Summary	142
5 Creating PDF and Excel Reports	143
5.1 Introduction	143
5.2 Creating a PDF with PHP	144
5.3 Creating a PDF with Java	144
5.4 Creating a PDF File with Ruby on Rails	145
5.5 Creating a Table in PDF	149
5.6 Creating a Spreadsheet with PHP	155
5.7 Creating a Spreadsheet with Java	156
5.8 Creating an Excel Spreadsheet with Ruby on Rails	157
5.9 Creating a Spreadsheet with Ruby Spreadsheet	167
5.10 Summary	172
6 XML On Rails	173
6.1 Introduction	173
6.2 Processing XML with PHP 5	173
6.3 Processing XML with Java	174
6.4 Installing XML Builder	175
6.5 Creating an XML Document with Ruby on Rails	176
6.6 Creating an XML Document from a Database	180
6.7 Parsing an XML Document with REXML	184
6.8 Summary	189

7 PHP On Rails	191
7.1 Introduction	191
7.2 Installing PHP	191
7.3 Installing PHPOnTrax	192
7.4 Creating a Trax Application	193
7.5 Creating a CRUD Application.....	197
7.6 Summary.....	207
8 LDAP On Rails	209
8.1 Introduction	209
8.2 Installing OpenLDAP	210
8.3 Installing Tivoli Directory Server.....	216
8.4 Installing Oracle Internet Directory.....	232
8.5 LDAP with PHP	247
8.6 LDAP with Java.....	248
8.7 Installing NET::LDAP.....	250
8.8 Creating a Rails Application.....	252
8.9 Creating a Directory Entry.....	253
8.10 Modifying a Directory Entry	260
8.11 Searching a Directory	263
8.12 Deleting a Directory Entry.....	267
8.13 Summary.....	273
9 Web Services On Rails	275
9.1 Introduction	275
9.2 Web Services with PHP.....	275
9.3 Web Services with Java.....	276
9.4 Creating a Web Service with Ruby on Rails	278
9.5 Web Service API Class.....	284
9.6 Dispatching.....	285
9.6.1 Direct Dispatching.....	285
9.6.2 Delegated Dispatching.....	286
9.6.3 Layered Dispatching.....	290
9.7 Protocol Clients	290
9.8 Summary.....	299
10 Ruby on Rails in Eclipse.....	301
10.1 Introduction	301
10.2 PHP in Eclipse	301
10.3 Installing RDT	302
10.4 Creating a Rails Project in RDT	303
10.5 Creating a Database Table with RDT	309

10.6	Creating a CRUD Application with RDT.....	313
10.7	Installing RadRails	316
10.8	Creating a Rails Application with RadRails.....	318
10.9	Creating a CRUD Application with RadRails	320
10.10	Summary.....	323
11	Rails Testing and Fixtures	325
11.1	Introduction	325
11.2	Unit Testing in PHP and Java	325
11.3	Rails Example Test.....	326
11.4	Assertion Types	331
11.5	Rails Testing.....	335
11.6	Fixtures	336
11.7	Unit Testing	337
11.8	Testing Controllers	342
11.9	Summary.....	349
12	Rails in Production	351
12.1	Introduction	351
12.2	Setting the Production Mode	351
12.3	Rails Best Practices and Performance	352
12.4	Deployment on Apache2 and FastCGI	354
12.5	Rails Web Hosting.....	360
12.6	Summary.....	387
	Sources of Information.....	389
	Index.....	391