

Table of Contents

Introduction	1
What Does This Book Cover?	1
Who Is This Book For?	3
What You Need To Use This Book	3
Conventions	3
Customer Support	4
How to Download the Sample Code	4
Errata	4
Chapter 1: Building a PHP MySQL Web Site	7
What We're Trying to Do	8
Development of a Typical Application	8
Use of a Typical Hosting Environment	8
Use of Good Programming Practices	8
What We're Not Trying to Do	9
A PHP Tutorial	9
An HTML, CSS, or JavaScript Tutorial	9
A UNIX or Linux Administration Guide	9
The Problem	9
The Design	10
The User Interface	10
The Base Architecture	11
Content Publication	11
Syndication	11
Advertising	11
Online Polls	11
Discussion Forums	11
Site Newsletters	11
Online Shopping	12
The Solution	12
Site Elements	12
The User Interface	12

Table of Contents

User and Session Management	12
Dynamic News Content	13
Syndication	13
Advertising	13
Online Polls	13
Discussion Forums	13
Site Newsletters	13
Online Shopping	14
Summary	14
Chapter 2: Planning the Web Site	17
The Problem	18
What We Need to Know	18
Base Architecture	18
Keeping Track of Users	18
Directory Structure	19
Application Layers	19
Coding Standards	20
The Design	21
The Solution	22
The Base Architecture	22
Logging Into the Site	22
User Sessions	22
Error Handling	23
Common Function Library	23
Configuration of Global Parameters	23
The Two Faces of DVD Life	23
Different User Types	24
Implementation	24
Directory Structure	25
Directory Tree Depth	25
What We'll Use	25
Configuration	27
The .htaccess File	28
The config.php File	28
The Database, Application Code, and UI	28
The Data Layer	29
The Application Code Layer	29
The User Interface (UI)	30
Programming Standards	30
Program Variables	30
HTTP Request Variables	31
Functions	32
Classes	33
Summary	33

Chapter 3: Designing the User Interface	35
The Problem	35
The Design	36
Browser Issues	38
Choosing Supported Browsers	38
Cascading Style Sheets (CSS)	39
Reusable Page Elements	41
The Header	42
The Navigation	42
The Main Content	42
The Footer	42
Building the Page	42
Error Handling	43
The Solution	44
Styles	44
Reusable Page Elements	47
The Template Framework File	49
Error Handling	52
Summary	54
Chapter 4: Managing Users and Sessions	57
The Problem	58
The Design	59
Feature and Functionality Aspects	59
Designing the Data Layer	61
The Admin Users Table	62
The Admin Applications Table	63
The Admin Permissions Table	63
Designing the Data Objects	63
The Users Class	64
The Session Class	65
The Solution	67
Implementing the Data Layer	69
apress_admin_users	69
apress_admin_apps	69
apress_admin_perms	70
Implementing the Data Objects	70
class.users.php	70
class.session.php	86
Data Object Error Handling	92
Presentation Layer	93
CMS Login Page	94
CMS Web Master Listing	97
CMS Web Master Form Page	100
Summary	104

Table of Contents

Chapter 5: Visitor Accounts	107
The Problem	108
The Design	108
Feature Functionality Aspects	109
Designing the Data Layer	109
The Accounts Table	110
The Account Addresses Table	110
The Account Preferences Table	111
Designing the Data Object	112
The Accounts Class	112
The Solution	113
Implementing the Data Layer	115
apress_accounts	115
apress_account_addr	115
apress_account_prefs	116
Implementing the Data Object	116
class.accounts.php	116
Presentation Layer	134
Account Login Page	134
Account Registration Page	136
Password Reminder Page	139
Account Management Page	140
Account Newsletter Preferences Page	143
Account Shipping Information Page	144
Summary	148
Chapter 6: Dynamic News Content	151
The Problem	152
The Design	153
Designing the Data Layer	154
The News Types Table	154
The News Table	154
The News Comments Table	155
Designing the Data Object	155
The News Class	156
The Solution	157
Implementing the Data Layer	159
apress_news_types	159
apress_news	159
apress_news_comments	160
Implementing the Data Object	160
class.news.php	160
Presentation Layer	171
CMS News Item Listing	172

CMS News Item Form	174
Public News Item Listing	177
Public News Item Detail Page	180
Summary	185
Chapter 7: Syndication	187
The Problem	188
Requirements	188
The Design	189
The RSS Format	189
Designing the Data Object	191
The RSS Feed Class	191
The Application Flow	192
The Solution	193
Implementing the Data Object	193
class.rssfeed.php	193
rss.php	201
Checking the Data	203
Summary	207
Chapter 8: Advertising	209
The Problem	210
Impressions	210
Click-Throughs	210
Scheduled Display	211
Syndication	211
Requirements	211
The Design	211
Designing the Data Layer	212
The Advertisement Table	212
The Client Table	213
The Activity Table	213
Designing the Data Object	214
The Ads Data Object	214
The Solution	217
Implementing the Data Layer	218
apress_ads	219
apress_ads_clients	219
apress_ads_activity	219
Implementing the Data Object	220
class.ads.php	220
Presentation Layer	238
CMS Advertisement Listing	238

Table of Contents

CMS Advertisement Management Form	241
CMS Client Listing Page	247
CMS Client Management Form	249
Front-End Implementation of the Advertisement	251
Redirect Page via Click-Through	253
Auditing Reports Page	254
Summary	257
Chapter 9: Online Polls	259
The Problem	260
The Design	261
Designing the Data Layer	262
The Apress Polls Table	262
The Apress Poll Answers Table	262
Designing the Data Object	263
The Polls Class	263
The Solution	265
Implementing the Data Layer	266
apress_polls	266
apress_polls_answers	267
Implementing the Data Object	267
class.polls.php	267
Presentation Layer	278
CMS Poll Listings Page	279
CMS Poll Management Form	281
Web Site Poll Page	285
Summary	291
Chapter 10: User Discussion Forums	293
The Problem	294
The Problem Statement	295
The Design	295
Application Flow	295
Users	296
Visitors	297
Designing the Data Layer	298
The Topics Table	298
The Replies Table	299
The Favorites Table	299
Designing the Data Objects	300
The Helper Class	300
The Topic Class	301
The Reply Class	302
Administrative Functionality	303

The Solution	304
Implementing the Data Layer	304
apress_forums	304
apress_forums_replies	304
apress_forums_prefs	305
Implementing the Data Objects	305
class.forumhelp.php	305
class.forumtopic.php	309
class.forumreply.php	323
Implementing the Forum's UI	332
The Required UI Files	332
index.php	333
starttopic.php	339
showtopic.php	341
postreply.php	345
Summary	348
Chapter 11: Newsletters and Mailing Lists	351
The Problem	352
The Design	353
Designing the Data Layer	354
The Newsletters Table	354
The Accounts Table	355
The Account Preferences Table	356
Designing the Data Object	356
The Newsletter Class	357
The Solution	358
Defining Configuration Constants	360
Implementing the Data Layer	361
apress_newsletters	361
Implementing the Data Object	361
class.newsletter.php	361
Building the Send Daemon	379
Running the Send Daemon	380
UNIX	380
Windows	381
Building the CMS Newsletter Application	381
CMS Application Files	381
<i>CMS Newsletter Listing</i>	381
<i>CMS Newsletter Management Form</i>	384
Summary	389

Table of Contents

Chapter 12: Shopping Carts **391**

The Problem **392**

Interface Requirements	392
Products List	392
Product Details	392
View Shopping Cart	392
Other Features	393
Application Requirements	393
Add/Edit Product	393
View Products	393
Publish/Stage Product	393

The Design **393**

Designing the Data Layer	393
The Products Table	394
Designing the Data Objects	395
The Products Class	395
The Shopping Cart Class	396
Designing the Customer Interface	397
The Products List Page	397
The Product Details Page	398
The View Shopping Cart Page	398
Designing the Administration Interface	399
Products List	399
The Add/Edit Page	399

The Solution **399**

Implementing the Data Layer	399
apress_products	400
Implementing the Data Objects	400
class.products.php	400
class.shopping_cart.php	412
Building the CMS Application	418
CMS Product Listing	418
CMS Add/Edit Product Page	420
Building the User Front-End	422
Site Product List Page	423
Building the Products Display	426
Product Display List Page	427
Product Display Details Page	429

Summary **430**

Chapter 13: Checking Out **433**

The Problem **434**

Interface Requirements	434
Account Preferences	434
Check Out Page	434
My Orders List	434
My Orders Details Page	434

Table of Contents

Application Requirements	435
View Orders	435
Order Details	435
Order Delivery Status	435
The Design	435
Designing the Data Layer	436
The Orders Table	436
The Order Items Table	437
Designing the Data Object	438
The Orders Class	438
Designing the Check Out Process	439
The Solution	440
Implementing the Data Layer	442
apress_orders	442
apress_order_items	442
Implementing the Data Object	442
class.orders.php	443
Building the Check Out Process	454
Check Out Page	455
<i>Handle Posted Data</i>	456
Building the 'My Orders' Page	462
<i>Orders List Page</i>	462
<i>Order Details Page</i>	464
Building the CMS Application	467
Summary	467
Chapter 14: The Road Ahead	469
Our Finished Site	469
Refactoring	472
Our Base Structure	472
Real Life Annoyances	473
Looking for More Flexibility in Look and Feel	473
HTML Tag Replacers	474
PHP Code Replacers	474
More PEAR	475
Classes Everywhere	475
The Little Details	476
Pushing MySQL to the Edge	478
Getting Too Busy	479
More XML	479
Get Building	480
Join the Community	480
Mailing Lists	481
Is There More to Come?	481
Index	483
