

Contents

Foreword	xxi
Introduction	xxiii
Chapter 1: Introduction to DotNetNuke and Resources	1
Versions Explained	1
3.x Versions	2
4.x Versions	2
5.x Versions	3
Packages Explained	3
Starter Kit	3
Source Package	5
Install Package	5
Upgrade Package	6
Resources	6
DotNetNuke.com	6
Community Resources	9
Summary	10
Chapter 2: Creating the Development Environment	11
Development Models	11
Web Site Projects (WSP)	12
Web Application Projects (WAP)	12
WSP Versus WAP Features	13
Selecting a Visual Studio Edition	13
Express Editions	14
Other Editions	14
Installing DotNetNuke	15
Configuring SQL Server	15
Configuring DotNetNuke Files	18
Configuring File Permissions	19
Configuring Internet Information Services (IIS)	20
Executing DotNetNuke Installation	23
Installing Development Templates	26
Installing VB.NET Templates	27
Installing C#.NET Templates	28
Summary	28

Chapter 3: Under the DotNetNuke Hood	29
 Tabs	29
Key Data Elements	31
Integration Points	31
 Modules	31
Key Data Elements	32
Integration Points	32
 Skins	32
Skin Objects	33
Containers	33
 Users	33
Default User Types	34
DotNetNuke Roles/Permissions	34
Key Data Elements	35
 Portals	35
Parent Portals	35
Child Portals	35
Key Data Elements	36
 Localization	36
 Scheduled Tasks	36
 Settings	36
Host Settings	37
Portal Settings	37
Module Settings	37
 Summary	37
Chapter 4: Guestbook Module Requirements	39
 Guestbook Module Requirements	39
Overview	39
Guestbook Settings Control	40
View Guestbook Control	40
Sign Guestbook Settings Control	40
Sign Guestbook Control	41
Database Structure	41
Requirements Summary	42
 Data Isolation	42
Portal-Level Isolation	42
Module-Level Isolation	42
User-Data Isolation	43
 Key Requirements-Gathering Information	43
 Summary	44

Chapter 5: Starting the Module Creation Process	45
Creating the Module Project	45
Creating the GuestbookCS Module	46
Creating the Project	46
Configuring the Project	47
Creating the GuestbookVB Module	49
Creating the Project	49
Configuring the Project	50
What Was Created?	53
Summary	53
Chapter 6: Investigating DotNetNuke Components	55
DotNetNuke Data Access Layer (DAL)	55
DataProvider(.cs/.vb)	56
SqlDataProvider(.cs/.vb)	57
xx.xx.xx.SqlDataProvider Files	62
DotNetNuke UI Base Classes	65
PortalModuleBase	65
ModuleSettingsBase	67
DotNetNuke Module Manifest (.dnn) File	68
Guestbook Manifests	68
Manifest Components	71
Summary	74
Chapter 7: Creating the Module Back End	75
Data Methods Needed	75
Creating the DataProvider(.cs/.vb) File	76
Creating the SqlDataProvider (.cs/.vb) File	79
Creating the Information Object Class	85
Creating the Controller Class	89
Creating the 01.00.00.SqlDataProvider Script	93
Creating the Uninstall.SqlDataProvider File	101
Summary	105
Chapter 8: Creating the Localized Module Interface	107
DotNetNuke Localization	107
DotNetNuke Resource Files	108
Localized Controls and Classes	108

Contents

Creating Settings.ascx	109
User Control Markup	110
Code Behind	112
Localization File	115
Creating ViewSettings.ascx	116
User Control Markup	116
Code Behind	117
Localization File	119
Creating ViewGuestbook(CS/VB).ascx	119
User Control Markup	119
Code Behind	121
Localization File	127
Creating EditGuestbook(CS/VB).ascx	129
User Control Markup	129
Code Behind	129
Localization File	132
Creating SignGuestbook.ascx	132
User Control Markup	133
Code Behind	137
Localization File	140
Final Module Manifest Additions	142
Adding Module Definitions	142
Adding a File Listing	143
Modules and CSS	144
Summary	144
Chapter 9: Packaging, Installing, and Debugging the Module	145
Module Installation	145
Import Module Manifest	146
Manually Execute SqlDataProvider files	147
Testing the Module	148
Packaging the Module	149
Manual File Creation	150
Batch File Creation	150
DotNetNuke-Generated Packages	151
Other Options	153
Debugging	154
Distribution and Testing Considerations	155
Summary	155

Chapter 10: Implementing Optional DotNetNuke Interfaces	157
IPortable	157
Implementation	158
IHydratable	161
Implementation	161
ISearchable	163
Implementation	163
IUpgradable	165
Implementation	165
IActionable	166
Implementation	166
IPropertyAccess	168
Implementation	168
Usage	171
Summary	172
Chapter 11: DotNetNuke Scheduled Tasks	173
Scheduling System Overview	173
Considerations with Scheduled Tasks	174
Sample Task Creation	174
Working with the Scheduler	177
Summary	179
Chapter 12: DotNetNuke User Controls	181
Registering the Controls	181
CAPTCHA Control	182
TextEditor Control	184
SectionHead Control	185
Paging Control	187
Url and UrlTracking Controls	188
Other Controls	191
Summary	191
Chapter 13: Module Navigation and Communication	193
Module Navigation	193
NavigateUrl	193
EditUrl	195
Module Isolation	196
Dynamically Loaded Controls	198

Contents

MultiView Control	198
Multiple User Controls	199
Inter-Module Communication	200
IModuleCommunicator	200
IModuleListener	201
Considerations	202
Summary	203
Chapter 14: Third-Party Components and Controls	205
Compatibility	205
Deployment/Maintenance Issues	206
Incompatible Assembly Versions	206
Removed Assembly Files	207
Developer Responsibility	207
Summary	207
Chapter 15: DotNetNuke, Modules, and Ajax Functionality	209
ASP.NET Ajax	209
Enabling by Control	210
Manually Enabling	211
Considerations When Using ASPNET Ajax	213
ASP.NET Ajax Control Toolkit	213
Considerations with Ajax Control Toolkit	215
jQuery Support	215
jQuery Configuration	215
jQuery Usage	216
Summary	217
Chapter 16: Creating Skin Objects	219
When to Use Skin Objects	219
Creating a “Current Time” Skin Object	220
Cleaning the Solution	220
Coding the Object	221
Completion of the Code	224
Installing the Skin Object (Locally)	224
Creating the Installation Package	227
Adding a Skin Object to a Skin	231
Summary	232

Chapter 17: Creating Authentication Providers	233
What Is an Authentication Provider?	233
Example of Authentication Provider Use	234
Items to Consider When Creating a Provider	235
Providing Only Authentication	236
Can Co-exist with Other Providers	236
Investigating Provider Code	236
Code Location and Project Setup	237
Interface Code	237
DotNetNuke Manifest	246
Installation Package	249
Installation Differences (Versions 4.6.x Versus 5.x)	249
Administration Differences (Versions 4.6.x Versus 5.x)	250
Summary	250
Chapter 18: DotNetNuke Development Best Practices	251
Things to Do	251
Pick a Minimum Supported Version and Enforce It	251
Use the DotNetNuke API	252
Reuse Common Controls	252
Test, Test, and Test Again	252
Support Localization and Globalization	253
Things to Avoid	254
Modification of web.config	254
Modifying Core Components	254
Requiring Nonstandard Implementation	254
Summary	255
Appendix A: Community Resources	257
Appendix B: Additional web.config Options	261
Appendix C: Distributing Modules	265
Appendix D: Additional .DNN Manifest Options	271
Appendix E: Working with DotNetNuke Entities	283
Index	297