

Table of Contents

Dedication	iii
Preface	xi

Chapter 1: Introducing ASP.NET AJAX

Introduction	1-2
Uses of AJAX	1-2
Components of AJAX	1-3
The Postback	1-4
Synchronous Postback	1-4
Asynchronous Postback	1-4
ASP.NET and AJAX	1-5
Installation and Configuration Issues of ASP.NET AJAX	1-5
AJAX Libraries	1-6
Working with ASP.NET AJAX	1-7
Creating an AJAX-enabled Web Page	1-7
Basic Controls of ASP.NET AJAX	1-14
Advantages and Limitations of AJAX	1-14
Self-Evaluation Test	1-15
Review Questions	1-16

Chapter 2: Basics of AJAX

Introduction	2-2
The UpdatePanel Control	2-2
Properties of the UpdatePanel Control	2-3
Advantages of Using the UpdatePanel Control	2-9
Performing Updates with Triggers	2-10
Using Multiple UpdatePanel Controls	2-15
Updating the Master Page Using the UpdatePanel Control	2-18
Limitations of the UpdatePanel Control	2-21
The UpdateProgress Control	2-24
Properties of the UpdateProgress Control	2-26
Life Cycle of Page Request	2-34
Self-Evaluation Test	2-35
Review Questions	2-36
Exercise 1	2-38
Exercise 2	2-38

Chapter 3: Handling the Timer Control

Introduction	3-2
--------------	-----

Members of the Timer Control	3-2
Using the Timer Control inside the UpdatePanel Control	3-3
Using the Timer Control outside the UpdatePanel Control	3-7
Using the Timer Control in Multiple UpdatePanel Controls	3-10
Using the Timer Control without the UpdatePanel Control	3-14
Self-Evaluation Test	3-20
Review Questions	3-20
Exercise 1	3-22

Chapter 4: AJAX with JavaScript

Introduction	4-2
Technologies Behind AJAX	4-2
JavaScript	4-2
CSS	4-2
XML	4-3
Basics of JavaScript	4-3
The document.write() Command	4-6
JavaScript Blocks	4-6
JavaScript Comments	4-6
JavaScript Variables	4-7
Conditional Statements	4-7
Loop Statements	4-9
The alert Statement	4-11
Events in JavaScript	4-12
Data Types in JavaScript	4-12
Operator Handling in JavaScript	4-13
Exception Handling in JavaScript	4-13
Object-oriented Concept	4-15
Classes	4-15
Namespaces	4-16
Inheritance	4-16
Interface	4-16
Reflection	4-16
Enumeration	4-16
Prototype Inheritance	4-17
The Class Type	4-18
The registerClass Method	4-18
JavaScript Object Notation (JSON)	4-19
Data Types supported by JSON	4-19
The eval() function	4-21
Self-Evaluation Test	4-22
Review Questions	4-23
Exercise 1	4-24

Chapter 5: Components of AJAX

Introduction	5-2
The ScriptManager Class	5-2
Members of the ScriptManager Class	5-3
The XMLHttpRequest Object	5-17
HTTP	5-17
Syntax of the XMLHttpRequest Object	5-17
Methods of the XMLHttpRequest Object	5-19
Properties of the XMLHttpRequest Object	5-24
Limitations of the XMLHttpRequest Object	5-25
Self-Evaluation Test	5-26
Review Questions	5-27
Exercise 1	5-28

Chapter 6: AJAX Control Toolkit

Introduction	6-2
Installation and Configuration	6-2
Installing the AJAX Control Toolkit	6-2
Configuring the AJAX Control Toolkit	6-4
The Accordion Control	6-8
Members of the Accordion Control	6-8
The AlwaysVisibleControlExtender Control	6-15
Members of AlwaysVisibleControlExtender Control	6-15
The CollapsiblePanelExtender Control	6-18
Members of the CollapsiblePanelExtender Control	6-18
The ConfirmButtonExtender Control	6-23
Members of the ConfirmButtonExtender Control	6-23
The FilteredTextBoxExtender Control	6-26
Members of the FilteredTextBoxExtender Control	6-26
Self-Evaluation Test	6-31
Review Questions	6-32
Exercise 1	6-32

Chapter 7: Rich Toolkit Controls

Introduction	7-2
The DragPanelExtender Control	7-2
Members of the DragPanelExtender Control	7-2
The AnimationExtender Control	7-6
Members of the AnimationExtender Control	7-6
The CalendarExtender Control	7-12
Members of the CalendarExtender Control	7-12
The CSS Classes of the CalendarExtender Control	7-13
The MutuallyExclusiveCheckboxExtender Control	7-16
Members of the MutuallyExclusiveCheckboxExtender Control	7-16

The TabContainer Control	7-22
Members of the TabContainer Control	7-22
Members of the TabPanel Control	7-23
Self-Evaluation Test	7-28
Review Questions	7-28
Exercise 1	7-29
Exercise 2	7-29

Chapter 8: The XMLHttpRequest Object

Introduction	8-2
Browser Compatibility	8-2
Request Objects for Different Browsers	8-3
Request and Response using XMLHttpRequest	8-6
Sending a Request to the Server	8-6
Receiving Response from the Server	8-6
Retrieving the Requested Data from the Server	8-11
Self-Evaluation Test	8-20
Review Questions	8-20
Exercise 1	8-21

Chapter 9: Members of AJAX Library

Introduction	9-2
The String Class	9-2
The trim Function	9-2
The trimStart Function	9-3
The trimEnd Function	9-3
The startsWith Function	9-4
The endsWith Function	9-4
The format Function	9-5
The Array Class	9-9
The add Function	9-9
The addRange Function	9-10
The clear Function	9-11
The clone Function	9-11
The contains Function	9-12
The dequeue Function	9-12
The enqueue Function	9-13
The indexOf Function	9-14
The insert Function	9-14
The remove Function	9-15
The removeAt Function	9-15
The Number Class	9-20
The format Function	9-20
The localeFormat Function	9-21
The parseInvariant Function	9-21

The parseLocale Function	9-22
The Date Class	9-25
The format Function	9-25
The localeFormat Function	9-26
The parseInvariant Function	9-26
The parseLocale Function	9-27
The Boolean Class	9-31
The parse Function	9-31
Self-Evaluation Test	9-32
Review Questions	9-33
Exercise 1	9-34
Exercise 2	9-34

Chapter 10: XML Support in AJAX

Introduction	10-2
Creating DOM Object	10-2
Displaying XML Data Using the DOM Object	10-2
XPath	10-5
XPath Nodes	10-5
Operators Used in XPath	10-12
Functions Used in XPath	10-16
Node Functions	10-16
Numeric Functions	10-17
String Functions	10-19
Boolean Functions	10-21
Date and Time Functions	10-22
Sequences Functions	10-28
Context Functions	10-30
fn:current-dateTime()	10-30
fn:current-date()	10-30
fn:current-time()	10-31
fn:implicit-timezone()	10-31
XSLT	10-31
Self-Evaluation Test	10-34
Review Questions	10-35
Exercise 1	10-36
Exercise 2	10-36
Index	1