Introduction

The by Example Series

How does the *by Example* series make you a better programmer? The *by Example* series teaches programming using the best method possible. After a concept is introduced, you'll see one or more examples of that concept in use. The text acts as a mentor by figuratively looking over your shoulder and showing you new ways to use the concepts you just learned. The examples are numerous. While the material is still fresh, you see example after example demonstrating the way you use the material you just learned.

The philosophy of the *by Example* series is simple: The best way to teach computer programming is using multiple examples. Command descriptions, format syntax, and language references are not enough to teach a newcomer a programming language. Only by looking at many examples in which new commands are immediately used and by running sample programs can programming students get more than just a feel for the language.

Who Should Use This Book

XML by *Example* is intended for people with some basic HTML coding experience. If you can write a simple HTML page and if you know the main tags (such as <P>, <TITLE>, <H1>), you know enough HTML to understand this book. You don't need to be an expert, however.

Some advanced techniques introduced in the second half of the book (Chapter 7 and later) require experience with scripting and JavaScript. You need to understand loops, variables, functions, and objects for these chapters. Remember these are advanced techniques, so even if you are not yet a JavaScript wizard, you can pick up many valuable techniques in the book.

This book is for you if one of the following statements is true:

- You are an HTML whiz and want to move to the next level in Internet publishing.
- You publish a large or dynamic document base on the Web, on CD-ROM, in print, or by using a combination of these media, and you have heard XML can simplify your publishing efforts.
- You are a Web developer, so you know Java, JavaScript, or CGI inside out, and you have heard that XML is simple and enables you to do many cool things.

- You are active in electronic commerce or in EDI and you want to learn what XML has to offer to your specialty.
- You use software from Microsoft, IBM, Oracle, Corel, Sun, or any of the other hundreds of companies that have added XML to their products, and you need to understand how to make the best of it.

You don't need to know anything about SGML (a precursor to XML) to understand *XML by Example*. You don't need to limit yourself to publishing; *XML by Example* introduces you to all applications of XML, including publishing and nonpublishing applications.

This Book's Organization

This book teaches you about XML, the eXtensible Markup Language. XML is a new markup language developed to overcome limitations in HTML.

XML exists because HTML was successful. Therefore, XML incorporates many successful features of HTML. XML also exists because HTML could not live up to new demands. Therefore, XML breaks new ground when it is appropriate.

This book takes a hands-on approach to XML. Ideas and concepts are introduced through real-world examples so that you not only read about the concepts but also see them applied. With the examples, you immediately see the benefits and the costs associated with XML.

As you will see, there are two classes of applications for XML: publishing and data exchange. Data exchange applications include most electronic commerce applications. This book draws most of its examples from data exchange applications because they are currently the most popular. However, it also includes a very comprehensive example of Web site publishing.

I made some assumptions about you. I suppose you are familiar with the Web, insofar as you can read, understand, and write basic HMTL pages as well as read and understand a simple JavaScript application. You don't have to be a master at HTML to learn XML. Nor do you need to be a guru of JavaScript.

Most of the code in this book is based on XML and XML style sheets. When programming was required, I used JavaScript as often as possible. JavaScript, however, was not appropriate for the final example so I turned to Java.

You don't need to know Java to understand this book, however, because there is very little Java involved (again, most of the code in the final example is XML). Appendix A, "Crash Course on Java," will teach you just enough Java to understand the examples.

Conventions Used in This Book



Examples are identified by the icon shown at the left of this sentence:

Listing and code appears in monospace font, such as

<?xml version="1.0"?>

NOTE

Special notes augment the material you read in each chapter. These notes clarify concepts and procedures.

TIP

You'll find numerous tips offering shortcuts and solutions to common problems.

CAUTION

The cautions warn you about pitfalls that sometimes appear when programming in XML. Reading the caution sections will save you time and trouble.

What's Next

XML was introduced to overcome the limitations of HTML. Although the two will likely coexist in the foreseeable future, the importance of XML will only increase. It is important that you learn the benefits and limitations of XML so that you can prepare for the evolution.

Please visit the *by Example* Web site for code examples or additional material associated with this book:

<http://www.quecorp.com/series/by_example/>

Turn to the next page and begin learning XML by examples today!