book reviews

Foundations of Ajax

Ryan Asleson, Nathaniel Schutta, APress, 2005, \$39.99
ISBN: 1590595823

Asynchronous JavaScript and Extensible Markup Language (XML) (Ajax) techniques are not new, but they are newly practical in building more responsive Web clients that do not require full page refreshes to reflect changes in a local area of a page. This book is an excellent introduction to

Ajax that opts for simplicity in its examples and avoids extraneous details.

Ajax is used to build more responsive Web clients. The client uses JavaScript, and can work with any server-side language, such as Java, PHP: hypertext preprocessor, or Perl. Examples in this book use Java on the server. Downloadable code from the publisher's site is very easy to use with Tomcat. For each chapter, one only needs to copy a Web application archive (WAR) file to a Tomcat folder to be able to run all of that chapter's examples. Although clearly written, with careful explanations, the book does assume some prior exposure to JavaScript and Web application development.

The "Introducing Ajax" chapter gives a cogent history of Web applications, showing why Ajax has recently become practical. In addition to identifying the advantages of Ajax, the authors carefully point out some changes to the user's experience, of which developers should be aware. They suggest starting by trying Ajax in places where it can be most useful, such as validation.

The chapter "Using the XMLHttpRequest Object" presents the core of Ajax, the creation of an XMLHttpRequest object, the sending of an asynchronous request, and the provision of a callback method that executes when the response arrives. The code for the first example forms the core of all later examples, so the pattern is easy to discern. The authors have done well to keep things simple, but they may have overdone it in the real estate-listing example, in which the user's price selections have no effect.

This book is a fine introduction for almost anyone with the suggested background. Some Web gurus may prefer to grapple with a longer tome, with more complex examples and more coverage of advanced topics, but most will prefer the smooth sailing found here; they can navigate the deeper waters later if desired.—*Arthur Gittleman*

Switching to VoIP

Ted Wallingford, O' Reilly & Associates, 2005, \$39.95
ISBN: 0596008686

Have you ever wanted to receive incoming telephone calls directly on your PDA, or redirect outgoing calls to either voice over Internet protocol (VoIP) over your home broadband Internet connection or to the traditional telephone service? Have you ever wanted to have customized voice-

mail services, forward voicemail automatically to your e-mail address, or design your own telephone services?

If you answered yes to any of these questions, then you should probably switch to VoIP. This leap might turn you into a small telecommunications operator, offering you the possibility of designing your own voice-processing services, where the only limitation will be your imagination and skills. In addition to these exciting and technically attractive activities, VoIP is a major building block for a cost-effective, enterprise-level communication service.

This book offers a good way to learn about VoIP technology. Most of the existing books covering VoIP are either technology-/vendor-specific or address only particular VoIP protocols such as session initiation protocol (SIP) or H.323. VoIP is more than just a signaling stack, however, and existing open source projects such as Asterisk and Sipfoundry can turn a low-cost Linux box with some optional hardware (namely, DIGIUM cards) into a high-quality enterprise private branch exchange (PBX).

The Asterisk platform is described very well, and advanced topics, such as the configuration of dial plans, are covered extensively. Most of the chapters include practical project assignments, making for very interesting applied exercises. In addition to simple VoIP communication settings, the book covers advanced topics related to security, quality of service, troubleshooting tools, and porting legacy applications to converged networks.

If you are working with VoIP for a living, or just as a hobby, and need an open source and very flexible platform, then this book is a wonderful learning resource. If you are teaching a course on VoIP, you will find creative ideas for class projects and assignments. If you are wishing to grasp the essentials of a new and promising technology, this book is an essential reference.—*Radu State*

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