Books on Macintosh programming

If you're new to programming the Macintosh, you might find yourself overwhelmed by the complexity of the Macintosh Toolbox and unfamiliar programming techniques. When the Macintosh was introduced in 1984, very little technical information was available to casual programmers, and even commercial developers had a hard time figuring out how to get things to work correctly.

The Macintosh is even more complex today than it was in 1984, but now there are more places you can go for information. Several good books introduce programming the Macintosh and teach some of the finer points of using the Macintosh Toolbox. No matter which books you choose to get started, *Inside Macintosh* is indispensable.

Books from Apple

Inside Macintosh Volumes I-VI (Addison-Wesley) is the official reference that describes the more than 1,000 Macintosh Toolbox routines. You might be able to get by without it for a while, but if you're planning to write serious applications, you just can't do without it. At six volumes, it represents a hefty investment. The first three volumes cover the fundamentals. Volumes IV and V cover the additions and changes made with the introduction of the Mac Plus, Macintosh SE, and Macintosh II. Volume VI covers the changes introduced with System 7.

Apple is in the process of replacing *Inside Macintosh I-VI* with the *New Inside Macintosh* (Addison-Wesley). The *New Inside Macintosh* reorganizes the information in *Inside Macintosh I-VI* according to topic: there's a volume on Files, another on Memory, another on Processes, and so on. The new organization lets you find information more quickly and lets Apple update the volumes more easily. Apple publishes new volumes every few months. At press time, both *Inside Macintosh I-VI* and part of the *New Inside Macintosh* are available.

In addition to *Inside Macintosh*, Apple also publishes these books through Addison-Wesley:

- Human Interface Guidelines: The Apple Desktop Interface
- Technical Introduction to the Macintosh Family
- Programmers Introduction to the Macintosh Family
- Guide to the Macintosh Family Hardware, Second Edition
- Apple Numerics Manual, Second Edition
- LaserWriter Reference
- Inside AppleTalk
- Designing Cards and Drivers for the Macintosh Family, Second Edition
- Macintosh Worldwide Devlopment: Guide to System Software

You won't need all these books when you get started. Some of the books, like *Human Interface Guidelines*, are useful for all Macintosh programmers. Other books, like *Inside AppleTalk*, are meant for programmers working on specific kinds of applications. These books are available from APDA (see below), technical bookstores and computer stores, and in some general bookstores.

Learning C

There are far too many books that teach you the C language to mention here. However, there is one that is specifically geared to Macintosh users. *Learn C on the Macintosh* (Addison-Wesley) by Dave Mark teaches you such programming basics as functions, variables, pointers, data types, data structures, and file input and output. It includes THIN C, a cusomized version of THINK C, so you have everything you need to start programming. A coupon that lets you buy THINK C at a reduced price is also included. THIN C requires 1 megabyte of RAM, two 800K disk drives or a hard drive, and system software 6.0 or later.

Learning How to Program the Macintosh

Macintosh C Programming Primer, Volume I: Inside the Toolbox Using THINK C (Addison-Wesley) by Dave Mark and Cartwright Reed is a good introduction to Macintosh programming for those already familiar with C. This tutorial explains how to use the Toolbox, handle resources, and write a Macintosh application. The current edition has been revamped to include information on System 7. The second volume, Macintosh C Programming Primer, Volume II: Mastering the Toolbox Using THINK C covers more advanced topics like Color QuickDraw and code resources.

The first volume of these books is also available in a Pascal version called *Macintosh Pascal Programming Primer, Volume I: Inside the Toolbox Using THINK Pascal* (Addison-Wesley), also by Dave Mark and Cartwright Reed.

Macintosh C Programming by Example (Microsoft Press) by Kurt W.G. Matthies and Thom Hogan is another good introduction from the authors of the "Power Programming" column in MacUser. It shows you how to build an application shell that you can build upon to create your own applications. Other examples illustrate layered software design, memory management, the Toolbox, the file system, and System 7 features. A disk is included that contains source files and project files for six sample applications

Stephen Chernicoff's four volume set, *Macintosh Revealed* (Hayden Books), is another step-by-step introduction to Macintosh programming. Chernicoff shows you how to build a working application and points out the parts of Inside Macintosh you really need to know as opposed to the parts you just need to be aware of. The programs in the books are written in MPW Pascal, but they're not too difficult to translate to THINK Pascal or to THINK C.

Scott Knaster is the author of two books on Macintosh programming. The first, *How to Write Macintosh Software* (Addison-Wesley), teaches you what goes on inside the Toolbox. This book contains some valuable tips about debugging Macintosh programs. The second book, *Macintosh Programming Secrets* (Addison-Wesley), deals with some of the conventions and techniques that have become standard in Macintosh programs. It also contains information about the Macintosh II and the Mac SE. These books are more technical than *Macintosh Revealed* and are loaded with pictures, diagrams, and examples.

Finally, *MacTutor* is the leading technical journal for Macintosh programming. The articles range from tutorial examples to advanced techniques. MacTutor covers several languages, not just C and Pascal, and most of the examples are written in THINK C and THINK Pascal. (All of the programs in the magazine are available on disk.)

Apple Computer, Inc.

Apple Computer is naturally one of the best places for information about Macintosh programming. Apple administers the Apple Partner and Apple Associate program for commercial and non-commercial software developers. For more information, contact Apple:

Apple Computer, Inc. 20525 Mariani Avenue, MS 75-2C Cupertino, CA 95014

(408) 974-4897

Apple Programmer's and Developer's Association

The Apple Programmer's and Developer's Association (APDA) is Apple's in-house membership organization that distributes technical information to programmers and developers. APDA is a great source for Technical Notes, programming utilities, reference books, and information about announced (but unreleased) products. For information about membership and products, contact APDA directly:

Apple Programmer's and Developers Association (APDA) Apple Computer, Inc. 20525 Mariani Avenue, MS 33G Cupertino, CA95014-6299

(800) 282-2732 (USA) (800) 637-0029 (Canada) (408) 562-3910 (Other) (408) 562-3971 (Fax)

CompuServe

Symantec has a forum on CompuServe specifically for its customers. Simply type GO SYMANTEC at any ! prompt. You'll find discussions here about programming in general and THINK C and THINK Pascal in particular. The data libraries contain utilities as well as sources for many programs.

CompuServe also has an Apple developers forum. Just type GO MACDEV at any ! prompt. This forum is a good place to get in touch with the Macintosh programming community.

If you don't have a CompuServe account, call (800) 848-8199, representative #124, to request a free introductory membership.