

Figures, Tables, and Listings

Preface

About This Book xv

Chapter 1

Introduction to File Management 1-3

Figure 1-1	The two forks of a Macintosh file	1-5
Figure 1-2	Logical blocks and allocation blocks	1-7
Figure 1-3	Logical end-of-file and physical end-of-file	1-8
Figure 1-4	The Macintosh hierarchical file system	1-10
Figure 1-5	The disk switch dialog box	1-11
Figure 1-6	A typical File menu	1-12
Listing 1-1	Handling the File menu commands	1-13
Listing 1-2	Testing for the availability of routines that operate on FSSpec records	1-14
Listing 1-3	A sample document record	1-15
Listing 1-4	Handling the New menu command	1-16
Listing 1-5	Creating a new document window	1-17
Listing 1-6	Handling the Open menu command	1-19
Figure 1-7	The default Open dialog box	1-19
Listing 1-7	Opening a file	1-20
Listing 1-8	Reading data from a file	1-22
Listing 1-9	Writing data into a file	1-24
Listing 1-10	Updating a file safely	1-25
Listing 1-11	Handling the Save menu command	1-26
Listing 1-12	Handling the Save As menu command	1-27
Figure 1-8	The default Save dialog box	1-28
Figure 1-9	The new folder dialog box	1-29
Figure 1-10	The name conflict dialog box	1-29
Listing 1-13	Copying a resource from one resource fork to another	1-30
Figure 1-11	A Revert to Saved dialog box	1-30
Listing 1-14	Handling the Revert to Saved menu command	1-31
Listing 1-15	Handling the Close menu command	1-32
Listing 1-16	Closing a file	1-33
Listing 1-17	Opening files at application launch time	1-35
Listing 1-18	Opening a preferences file	1-36
Listing 1-19	Adjusting the File menu	1-37

Chapter 2

File Manager 2-5

Table 2-1	Routines for opening file forks	2-7
Table 2-2	Routines for operating on open file forks	2-9
Table 2-3	Routines for operating on closed files	2-9
Table 2-4	Routines for operating on directories	2-10
Table 2-5	Routines for manipulating working directories	2-11

Table 2-6	Routines for operating on volumes	2-12
Table 2-7	Routines for manipulating working directories	2-13
Table 2-8	Shared environment routines	2-15
Figure 2-1	Access and deny mode synchronization	2-16
Table 2-9	Access mode translation	2-17
Figure 2-2	Access privileges information in the <code>ioACAccess</code> field	2-19
Figure 2-3	Identifying a file in HFS	2-30
Listing 2-1	Testing for <code>PBCatSearch</code>	2-34
Table 2-10	How <code>FSMakeFSSpec</code> interprets its parameters	2-36
Listing 2-2	Deleting a file's resource fork	2-38
Table 2-12	Fields in <code>ioSearchInfo1</code> and <code>ioSearchInfo2</code> used for a directory	2-40
Table 2-11	Fields in <code>ioSearchInfo1</code> and <code>ioSearchInfo2</code> used for a file	2-40
Listing 2-3	Searching a volume with <code>PBCatSearch</code>	2-42
Listing 2-4	Searching a volume using a recursive, indexed search	2-44
Listing 2-5	Constructing the full pathname of a file	2-46
Listing 2-6	Determining the amount of free space on a volume	2-48
Listing 2-7	Determining whether a volume is sharable	2-49
Listing 2-8	Determining whether file sharing is enabled	2-50
Listing 2-9	Determining whether a file can have ranges locked	2-51
Listing 2-10	Locking a file range to append data to the file	2-52
Figure 2-4	Organization of partitions on a disk	2-56
Figure 2-5	Organization of a volume	2-57
Figure 2-6	The structure of a B*-tree file	2-64
Figure 2-7	The structure of a node	2-65
Figure 2-8	Structure of a B*-tree node record	2-67
Figure 2-9	A sample B*-tree	2-68
Figure 2-10	Header node structure	2-69
Listing 2-11	Reading a drive queue element's flag bytes	2-86

Chapter 3

Standard File Package 3-3

Figure 3-1	The default Open dialog box	3-5
Figure 3-2	The default Save dialog box	3-6
Figure 3-3	The New Folder dialog box	3-6
Figure 3-4	The name conflict dialog box	3-7
Figure 3-5	The Save dialog box customized with radio buttons	3-8
Figure 3-6	The Save dialog box customized with a pop-up menu	3-9
Figure 3-7	The Open dialog box customized with a pop-up menu	3-9
Figure 3-8	The Open dialog box customized to allow selection of a directory	3-10
Figure 3-9	The Open dialog box when no directory is selected	3-11
Figure 3-10	The Open dialog box with a long directory name abbreviated	3-11
Figure 3-11	A volume selection dialog box	3-12
Listing 3-1	Handling the Open menu command	3-14
Listing 3-2	Specifying more than four file types	3-15
Listing 3-3	Presenting a customized Open dialog box	3-17
Listing 3-4	The definition of the default Open dialog box	3-18
Listing 3-5	The definition of the default Save dialog box	3-18

Listing 3-6	The item list for the default Open dialog box	3-18
Listing 3-7	The item list for the default Save dialog box	3-19
Listing 3-8	A sample file filter function	3-21
Listing 3-9	A sample dialog hook function	3-27
Listing 3-10	A sample modal-dialog filter function	3-30
Listing 3-11	Determining the current directory	3-31
Listing 3-12	Determining the current volume	3-32
Listing 3-13	Setting the current directory	3-32
Listing 3-14	Setting the current volume	3-32
Listing 3-15	Setting the current directory	3-33
Listing 3-16	A file filter function that lists only directories	3-34
Listing 3-17	Setting a button's title	3-35
Listing 3-18	Handling user selections in the directory selection dialog box	3-35
Listing 3-19	Presenting the directory selection dialog box	3-37
Listing 3-20	A file filter function that lists only volumes	3-38
Listing 3-21	Handling user selections in the volume selection dialog box	3-39
Listing 3-22	Presenting the volume selection dialog box	3-40

Chapter 4

Alias Manager 4-3

Figure 4-1	Resolving a relative path	4-6
Listing 4-1	Creating an alias record	4-9
Listing 4-2	Storing an alias record as a resource	4-12

Chapter 5

Disk Initialization Manager 5-3

Figure 5-1	The disk initialization dialog box	5-5
Figure 5-2	Alternate buttons for the disk initialization dialog box	5-6
Figure 5-3	The disk initialization warning	5-6
Figure 5-4	The disk naming dialog box	5-6
Figure 5-5	The Finder's disk erasing dialog box	5-7
Listing 5-1	Responding to disk-inserted events	5-10
Listing 5-2	Reinitializing a valid disk	5-11
Listing 5-3	Reinitializing a validly formatted disk without using the standard interface	5-12
Listing 5-4	Initializing an uninitialized disk without using the standard interface	5-13
Listing 5-5	Changing default volume characteristics	5-15

