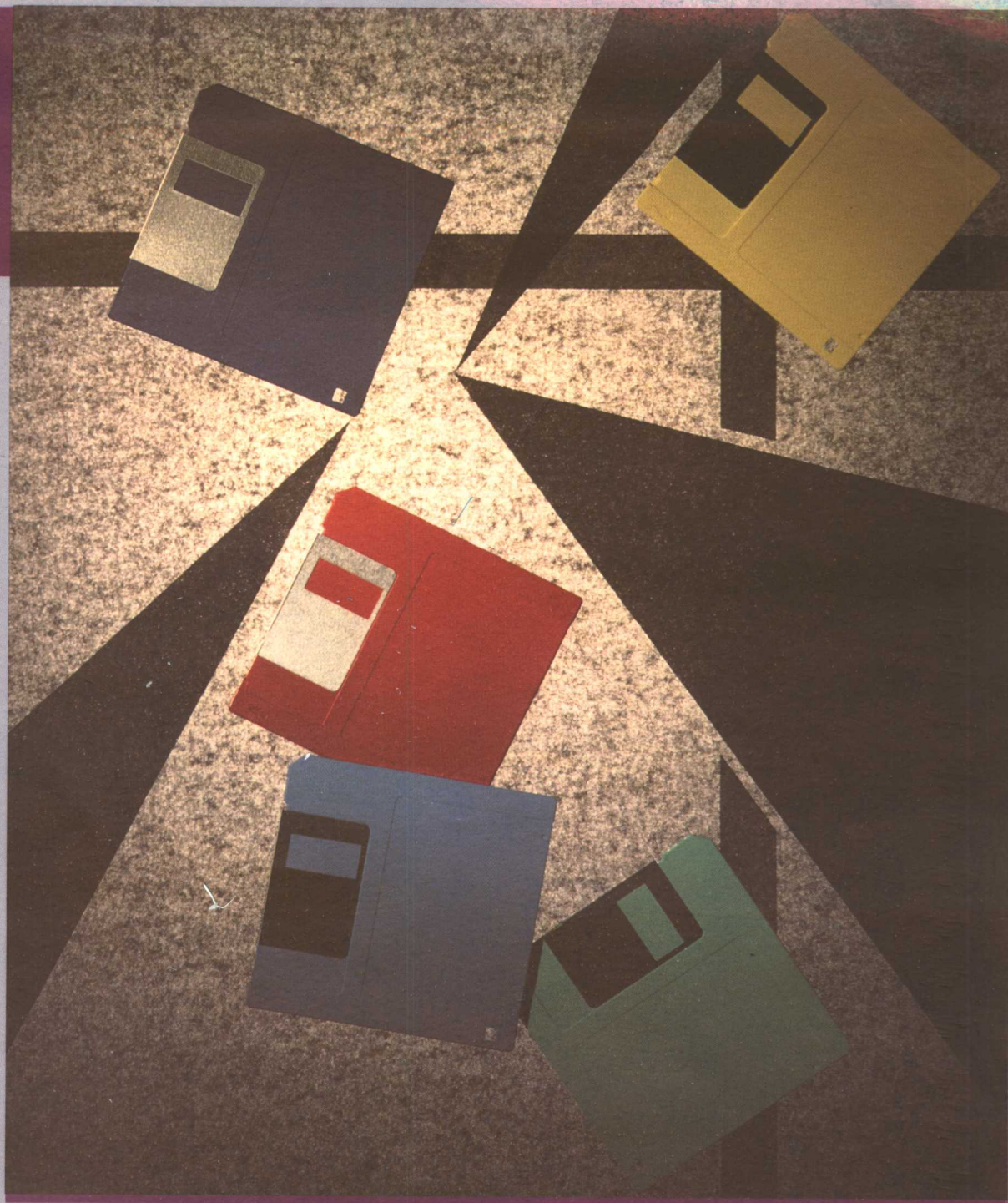


**IRWIN**  
ADVANTAGE  
SERIES FOR  
COMPUTER  
EDUCATION

**HUTCHINSON**  
**SAWYER**  
**COULTHARD**



DOS<sup>®</sup> 5.0  
WordPerfect<sup>®</sup> 5.1  
Lotus<sup>®</sup> 1-2-3<sup>®</sup> (2.2 and 2.3)  
dBase IV<sup>®</sup>



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**DOS<sup>®</sup> 5.0**  
**WORDPERFECT<sup>®</sup> 5.1**  
**LOTUS<sup>®</sup> 1-2-3<sup>®</sup> (2.2 AND 2.3)**  
**dBASE IV<sup>®</sup>**

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**Sarah E. Hutchinson**  
**Stacey C. Sawyer**  
**Glen J. Coulthard**

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**THE IRWIN ADVANTAGE SERIES**  
**FOR COMPUTER EDUCATION**



**IRWIN**

Burr Ridge, Illinois  
Boston, Massachusetts  
Sydney, Australia



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# **Module A**

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**DOS® 5.0**

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## SESSION 1

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# DOS 5.0: FUNDAMENTALS

A microcomputer operating system is the software program that runs the computer. It is the first program loaded when the computer is turned on, and without it you cannot use your word processing software, spreadsheet software, or any other applications software programs.

Microsoft DOS is the most commonly used microcomputer operating system. Understanding DOS will help you to get the most out of your computer and applications software programs. This session gets you started with the basics.

### PREVIEW

*When you have completed this session, you will be able to:*

Explain the purpose of an operating system.

•

Describe the features of DOS 5.0.

•

Explain the process of booting a computer.

•

Execute several commands from the DOS command line.

•

Load the DOS Shell.

•

Describe the components of the DOS Shell.

•

Access the DOS Shell Help facility.

•

Leave the DOS Shell.



## SESSION OUTLINE

---

- Why Is This Session Important?
- What Is DOS?
  - File Management
  - Directory and Disk Management
- File- and Disk-Naming Conventions
  - File-Naming Conventions
  - Disk-Drive-Naming Conventions
- Working with DOS
  - The Command Line
  - The DOS Shell
- Internal and External Commands
- Loading DOS: The Boot Process
- Using the Keyboard
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  - Entering Commands
  - Moving from Disk to Disk
  - Setting the Clock (DATE and TIME)
  - Displaying the DOS Version (VER)
  - Displaying a List of Files (DIR)
  - Clearing the Screen (CLS)
  - Getting Help (HELP)
- Working with the DOS Shell
  - How the Mouse Is Used
  - How the Keyboard Is Used
- Using the DOS Shell
  - The Guided Tour
  - Moving the Selection Cursor
  - Menu Bar
  - Dialog Boxes
  - Getting Help
  - Accessing the Command Line
  - Exiting the DOS Shell
- Summary
  - Command Summary
- Key Terms
- Exercises
  - Short Answer
  - Hands-On



---

## WHY IS THIS SESSION IMPORTANT?

This module leads you step-by-step through DOS 5.0. Whether you are new to computers or new to DOS, this module provides you with a comprehensive overview of the most popular operating system for microcomputers. In each of the following sessions, you will learn commands and procedures for managing your work on the computer.

This session explores the basics of file and disk management, discusses the conventions for naming files and disk drives, and summarizes the boot or startup process. In this session, you execute commands from the command line and the DOS Shell. Besides changing the date and time of the computer, you use the DIR command to list files and the HELP command to retrieve assistance at the command line. The latter half of the session guides you through the parts of the DOS Shell. The DOS Shell, a relative newcomer to the DOS operating system, provides a graphical environment to make managing files and disks easier.

---

## WHAT IS DOS?

DOS is an abbreviation for Disk Operating System. An **operating system** is a collection of software programs that manages, coordinates, and in a sense brings life to the computer hardware (the physical components of a computer). Every computer must have an operating system to control its basic input and output operations, such as receiving commands from the keyboard (input) and displaying information to the screen (output). An operating system is also responsible for managing the storage areas of a computer, namely hard disks and floppy diskettes.

Without an operating system, you could not communicate with the computer. When you give the computer a command, the operating system communicates your instructions to the brain of the computer, called the microprocessor or CPU. You cannot speak directly to the CPU since it only understands **machine language**. If you are working in an applications software program, such as WordPerfect or Lotus, commands that you give the application are sent to the operating system and then communicated to the microprocessor.



There are several operating systems available for microcomputers, including MS/PC-DOS, DR DOS, PC-MOS, OS/2, Windows NT, UNIX, XENIX, and the Macintosh OS. Microsoft Windows is not an operating system; it is a software program that works with DOS to provide a graphical environment for your computer. Although each operating system has its advantages, the majority of IBM and IBM-compatible microcomputers use MS-DOS or PC-DOS. These two operating systems are almost identical except for their respective producers, Microsoft and IBM. This module is designed for both MS-DOS 5.0 and PC-DOS 5.0.

## FILE MANAGEMENT

DOS provides several tools for performing basic file management tasks such as copying files, renaming files, and deleting files. There are two categories of files that appear on hard disks and floppy diskettes: **program files** and **data files**. Program files consist of computer instructions for performing a certain task or for running an applications software program, like WordPerfect or Lotus. Data files contain the work that you create using an application program, such as a letter or spreadsheet. The DOS file management commands are used to manage both program and data files.

Table 1.1 shows the similarities between a manual and an electronic file management system.

---

| <b>Table 1.1</b><br>File Management:<br>Comparison | <i>Manual System</i>  | <i>Electronic System</i>   |
|--|---|--|
|  | Place a document in a filing cabinet for permanent storage          | Save a document in a disk file for permanent storage on the hard disk or a floppy diskette |
|  | Use a photocopier to duplicate an important document                | Use DOS to copy and back up an important disk file   |
|  | Throw away old documents to free up room in the filing cabinet      | Use DOS to delete a file from the hard disk or a floppy diskette                           |
|  | Retrieve a document from the garbage that you mistakenly threw away | Use DOS to undelete a file that was mistakenly erased                                      |
|  | File a document under a new name                                    | Use DOS to rename a file   |



## DIRECTORY AND DISK MANAGEMENT

Directory management refers to the organization of program and data files on a disk. Because one hard disk can store data that would normally fill several large filing cabinets, you must learn how to organize and maintain your disk. On a new disk, there is only one area for storing files: the **root directory**. Although the capacity of a root directory is limited to storing 512 files, DOS enables you to create additional directories on the hard disk, called **subdirectories**. Rather than using the root directory for storage, you place the program and data files into subdirectories.

Think of the root directory as the top of a filing cabinet and each subdirectory as a drawer or folder in the cabinet. Obviously, you could not continually place documents on top of a cabinet without the files reaching the ceiling. The ceiling, in this example, represents the maximum number of files allowed in the root directory. One solution to this example would be move the files from the top of the filing cabinet into the cabinet drawers. On the computer, this activity represents moving files from the root directory to subdirectories on the hard disk. A hard disk's capacity for subdirectories is vast compared to a filing cabinet's capacity for folders. You can also create subdirectories within subdirectories. The organization of subdirectories on a hard disk is called a **directory structure** or **directory tree**.

In addition to creating directory structures, DOS commands prepare new disks for storing data and verify the reliability of existing disks. Table 1.2 compares a manual and an electronic storage system.

---

**Table 1.2**  
Directory and Disk  
Management:  
Comparison

*Manual System*

*Electronic System*

Label folders and drawers in a filing cabinet for holding related information

Use DOS to create subdirectories for holding related disk files

Prepare a new filing cabinet

Use DOS to format or initialize a new disk

Check the structural integrity of a filing cabinet (make sure that none of the drawers stick and that all file folders are accessible)

Use DOS to check the integrity of a disk and to verify the readability of disk files