SOFTWARE TOOLS FOR MANAGING INFORMATION

A Hands-On Workbook
with Introductions to:

DOS

WordPerfect®

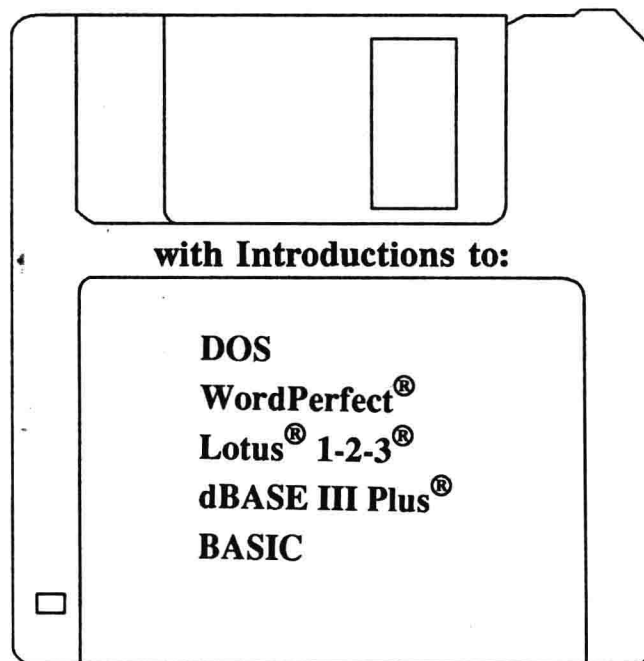Lotus®

dBASE III® Plus®

BASIC

James N. Morgan

Software Tools for Managing Information:

a Hands-On Workbook

with Introductions to:

DOS
WordPerfect®
Lotus® 1-2-3®
dBASE III Plus®
BASIC

James N. Morgan

PREFACE

This workbook is designed to serve as a supplementary text in introductory computer literacy and information systems courses which contain a substantial "hands-on" component, or to serve as the major text for introductory courses in computer applications or end user computing. It is available as a supplementary text to James A. O'Brien's textbook **Introduction to Information Systems in Business Management**. However, the workbook does not specifically reference Professor O'Brien's text, and it is designed to accompany any general introductory computing or information systems text for courses requiring a hands on introduction to popular software applications.

As each piece of software is covered in this workbook, there is an introductory chapter and a second chapter which introduces more advanced concepts. In computer literacy and information systems courses which use this workbook for only a portion of the course, it may not be possible to cover all of the chapters of this workbook. For a brief overview of how the software is used, the first chapter on each type of software can be covered, while the second chapter can be used as a resource material to help build on the computing skills learned in the class. Instructors may also choose to cover portions of the advanced chapters but leave other portions to be explored by students on their own.

The first chapter of this workbook introducing DOS should be covered first, but, after that, the remaining chapters can be covered in any desired order. For example, an instructor who wants students to be exposed to formal programming methods before working with application packages may choose to cover Chapters 9 through 11 immediately after covering the material on DOS.

KEY INSTRUCTIONAL FEATURES OF THIS WORKBOOK

The design of this text includes several features intended to help you master fundamental concepts required to successfully use common application software packages. Key features of this workbook include the following: Practice Exercises, Keys Terms an Concepts, Review Quiz, Hands on Assignments, and Command Summaries.

Each chapter in this workbook contains several Practice Exercises. Throughout the chapter, a group of commands and concepts relating to the use of a software package is introduced through text description, and then there is a Practice Exercise using those commands and concepts. For effective use of this text it is important that the Practice Exercises be performed on the computer immediately after reading the related text material. While you can read a whole chapter of text and then perform all of the Practice Exercises associated with that chapter, the most efficient way to master the material is to perform each Practice Exercise as you get to it in the reading. In fact, if you have ready access to a computer, this workbook should be read while sitting at your computer. In this way you can perform each practice exercise as you come to it, and you can use your PC to verify how commands operate as you are reading their

descriptions in the workbook. Some of the Practice Exercises require you to modify existing application files. These files are available to you on the Workbook Data Disk which was inserted in your Workbook.

At the end of each chapter there is a list of the Key Terms and Concepts covered in that chapter. This can be used as a check list to ensure that you have mastered the key concepts of the chapter. The page number on which each concept is first introduced is indicated (in parentheses) after each term to make it easy for you to refresh your memory about a term or concept by reviewing its description in the text.

The Review Quiz at the end of each chapter can be used as a test of your mastery of the key terms and concepts described in the text. The answers to many of the Review Quiz Questions are taken from the Key Terms and Concepts, and the remaining answers are terms or ideas related to the Key Terms and Concepts of the chapter.

The Hands-On Assignments are designed to help you master the hands-on use of each software package. Instructors may require several of these assignments to be completed and turned in to demonstrate your ability to effectively utilize the software to produce applications. In addition, you may want to complete additional Hands-on Assignments to further your mastery of how the software works or to become more proficient in using features of the software that have not been emphasized in your class. Many of the Hands-On Assignments ask you to modify applications which have been partially completed these assignment files can be found on the Workbook Data Disk.

Command Summary material for each of the software packages covered in this workbook is included in a Learning Aids Appendix at the end of the book. The summaries are designed to give a brief review of the structure of all of the important commands used in each package within the space of two or three pages. Thus, they allow you to find a needed command more quickly than would be possible by looking it up in the text of your workbook. I recommend that you cut these Command Summaries out of your text so that you can conveniently use them to remind yourself of the structure of needed commands while you are building applications.

ACKNOWLEDGEMENTS

Many people have made important contributions to this text which should be acknowledged here. James O'Brien provided me with the opportunity to write this workbook as a part of the supporting materials for his textbook, **Introduction to Information Systems in Business Management**, Sixth Edition. He has also allowed me to include revised materials from an earlier version of his text in this workbook, and has provided me with much valuable encouragement and support on this and other writing projects. Three reviewers, John E. Powell of the University of South Dakota, Harold C. Daniels of Palm Beach Community College, and Johannes Aarsen of The Wichita State University, provided a number of helpful comments which have been incorporated into this text. My wife Teresa devoted several hours to proofreading at a crucial time in the development of this text and much support and understanding throughout its development. Finally, a special

TABLE OF CONTENTS

CHAPTER 1: USING THE PC AND DOS

Learning Objectives

After completing this chapter you should:

☐   Be able to describe the major hardware components of a PC system.

☐   Understand how the layout of the PC keyboard differs from a standard typewriter keyboard, and be able to use some of the most important special function keys.

☐   Describe the key characteristics of various forms of disk storage devices, and be able to use floppy disks effectively on your PC system.

☐   Understand and be able to use fundamental DOS commands to:
    a. **FORMAT** a new disk,
    b. **COPY**, **RENAME**, and **ERASE** files,
    c. produce a screen listing or printout of the contents of
       a file,
    d. copy the entire contents of one disk to another disk,
    e. compare the contents of two files or disks.

INTRODUCTION TO PC SYSTEMS

This section provides an introduction to the use of personal computers (PCs) and their operating systems. It assumes you have access to:

☐ An IBM PC or compatible with at least 256K (about 256,000 bytes) of main memory, two floppy diskette drives (or one floppy and one hard disk drive), a video display monitor, and a printer.

☐ A copy of DOS (the main system control program) for the PC. Either the IBM version (called PC-DOS) or the generic version (called MS-DOS) will do. This appendix assumes you use DOS Version 2.0 or higher.

The first personal computers were developed by the Apple corporation. However, IBM PCs and compatibles are the most common kind of microcomputer in the business world. Many manufacturers of computers have made their own versions of the PC. IBM Personal Computers are regarded as a standard. Other versions usually act like an IBM PC, so they are called "IBM compatibles" or "clones." Such compatibles are not always perfect imitations of IBM microcomputers, so you will sometimes find a program that runs well on an IBM PC, but not on a compatible.

What you will read here are the features and uses of PCs that are widely found. Descriptions should be valid for most PCs, including IBM's Personal System2 line. What is not covered here is a set of microcomputers that are not compatible with IBM equipment. These include all Apple computers, most Commodore, Atari, and older Radio Shack computers, and any computer running the CP/M operating system.

What are the unique features of IBM PCs and compatibles? It is not the physical appearance of the microcomputer. Basically, it is a combination of the internal circuitry and the operating system that is unique. Most important is the use of microprocessor chips by the Intel Corporation--the 8088, 8086, 80286, 80386, and 80486. The four chips are fairly compatible. For example, an 80286 will execute any instruction that an 8088 will execute (but not vice versa).

Physical Setup

Personal computers may vary quite a bit in their components, but still have a lot in common. If you have a "desktop" model, you will have at least the following four separate major components shown in Figure 1-1.

1. A **system unit**. Inside this unit are the circuit boards, a power supply, a cooling fan, and possibly a hard disk drive. The circuit boards contain many microelectronic memory, logic, and control chips, including the main **microprocessor**. At the back of the unit are several outlets of various kinds. These allow the computer to use peripheral devices such as a visual-display screen, printer, keyboard, and perhaps a modem for communicating with other computers. At the front of the system unit you will usually see one or two **floppy disk** drives and a **hard disk** drive if you have one.

These secondary storage devices are used to store data and programs until they must be transferred into the primary storage chips (memory) of the computer.

Figure 1-1 A typical PC setup. Common variations include the use of a hard disk, half-height drives placed one above the other, or 3.5-inch floppy disk drives.

Video Monitor

System Unit

Keyboard

Diskette Drives

Printer
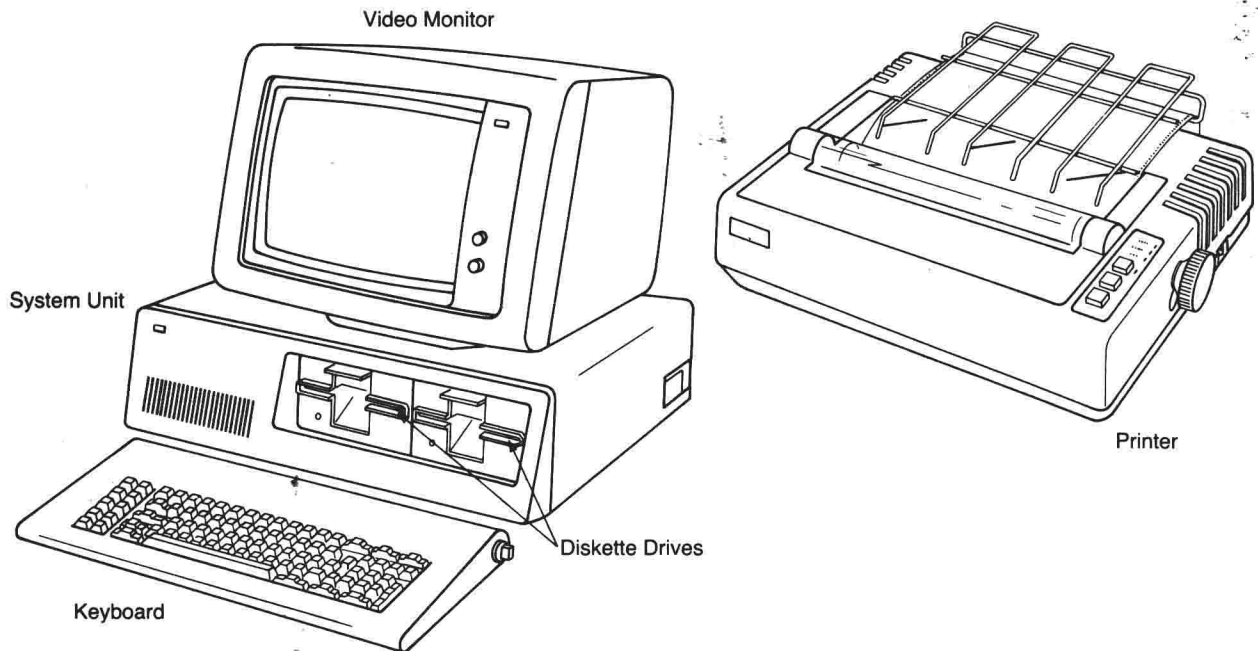
2.   A **video monitor**, usually resting on top of the system unit. This visual display unit normally looks like a television set; it may have either a color or monochrome display. Most visual display units make use of the cathode-ray tube technology, so they are frequently called CRTs. An important concept when working with computers that use visual display devices is the **cursor**, which indicates where on the display the next character will appear. Usually the cursor looks like a flashing line or rectangle. When your computer is turned on, if you type a few spaces (using the space bar at the bottom of the keyboard), you should be able to see the cursor move to the right.

3.   A **keyboard**. The keyboard is usually connected to the computer's system unit by a long, coiled cable somewhat like a telephone receiver cable. This allows you to move the keyboard around to suit yourself. If you have never seen one of these keyboards before, you should take a moment to familiarize yourself with its general layout before going on. Figure 1-2 shows a typical PC keyboard. Notice that there are many more keys than on a typical typewriter keyboard. The arrangement of the nonalphanumeric keys is also different from that of a typewriter, and is not standard for all PCs. For example,