Chapter 3

Basic Application Software

McGraw-Hill/Irwin

<text>

Competencies (Page 1 of 2)

- Discuss common features of most software applications
- Discuss word processors and word processing features
- Describe spreadsheets and spreadsheet features
- Discuss database management systems and database management features

Competencies (Page 2 of 2)

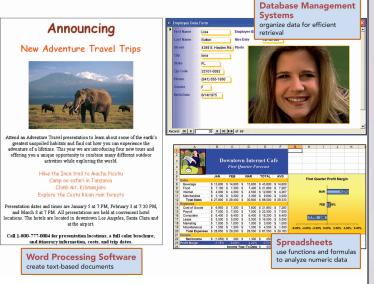
- Describe presentation graphics and presentation graphics features
- Discuss integrated software and software suites
- Describe ways to share data between applications

Introduction

- Tasks such as business correspondence, sales projections, graphic design, and data processing used to require trained specialists.
- All these tasks, and many more, can be accomplished using microcomputers and application software.
- Competent end users in today's word need to understand the capabilities of basic application software including word processors, spreadsheets, database management systems, and presentation programs.

Application Software

- Application software is end user software that is used to accomplish a variety of tasks
- Two categories
 - Basic applications (focus of this chapter)
 - Specialized applications



Basic Applications

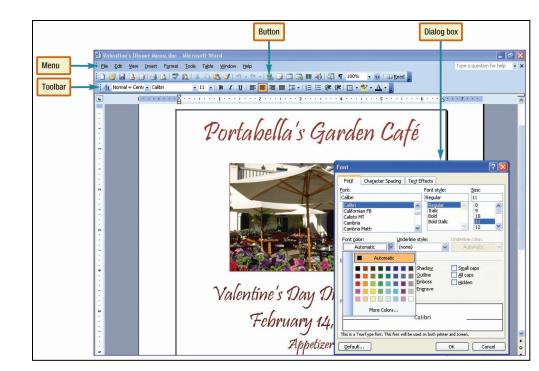
- Basic applications are also called generalpurpose
- Common types
 - Word processors
 - Spreadsheets
 - Database management systems
 - Presentation graphics

Specialized Applications

- Also known as <u>special-purpose applications</u>
- Includes thousands of other programs that are more narrowly focused on specific disciplines and occupations
- Best known
 - Graphic programs
 - Audio and video editors
 - Multimedia creation programs
 - Web authoring
 - Virtual reality programs

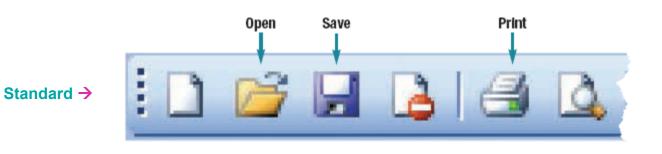
Common Features

- Graphical User Interface (GUI)
- Icons
- Windows
- Menus
- Toolbars



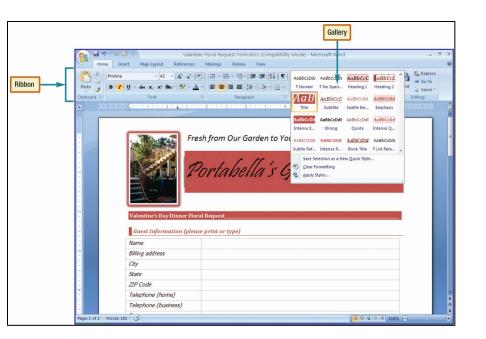
Toolbars

- Quick access to commonly used commands
- Contain buttons that provide shortcuts
- Examples
 - Standard Toolbar
 - Speech Recognition



Microsoft Office 2007

- Newest version of Microsoft Office
- New Interface
 - Ribbons
 - Contextual Tabs
 - Galleries



Web-Based Applications

- Access to applications stored on Web sites
- Application service providers (ASP)
 - Special sites
 - Allows access to Web-based applications





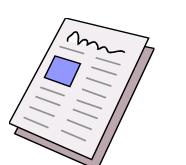
Speech Recognition

- Allows your voice to control application software
- For best results, use your voice and mouse or keyboard
 - Train the software
 - Control a program
 - Dictate a document

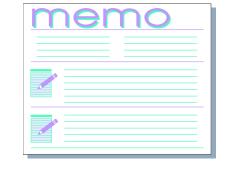


Word Processors

- Used to create text-based documents
 - Memos, letters, and faxes
 - Newsletters, manuals, and brochures
- Word processing programs
 - Microsoft Word
 - Corel WordPerfect
 - Lotus Word Pro
 - Mac: Pages
 - Mac: SimpleText







Word Processor Features

- Word Wrap
- Editing
 - Thesaurus
 - Find and Replace
 - Spelling and grammar checkers
- Formatting
 - Font and font sizing
 - Character effects
 - Bulleted and numbered lists

Font	Sample				
Arial	ABCabc				
Impact	ABCabc				
Times New Roman	ABCabo				
Broadway	ABCabc				

Word Processor Examples

- <u>Creating a Flyer</u>
- <u>Creating a Report</u>

Creating a Flyer

Spelling Checker Fonts and Font Size Correcting spelling and typing errors identified Using interesting fonts and a by the spelling checker creates an error-free and large font size in the flyer's title professional-looking document. grabs the reader's attention. Announcing New Adventure Travel Trips **Center Aligning** Center aligning all of the text in the flyer creates a comfortable, balanced appearance. Word Wrap Attend an Adventure Travel presentation to learn about some of the earth's greatest unspoiled habitats and find out how you can experience the The automatic word adventure of a lifetime. This year we are introducing four new tours and wrap feature frees offering you a unique opportunity to combine many different outdoor you to focus your activities while exploring the world. attention on the Hike the Inca trail to Machu Picchu content of the flyer. Camp on safari in Tanzania Climb Mt. Kilimanjaro Explore the Costa Rican rain forests Presentation dates and times are January 5 at 7 PM, February 3 at 7:30 PM, and March 8 at 7 PM. All presentations are held at convenient hotel **Character Effects** locations. The hotels are located in downtown Los Angeles, Santa Clara and at the airport. Adding character effects such as bold and color Call 1-800-777-0004 for presentation locations, a full color brochure, makes important and itinerary information, costs, and trip dates. information stand out and makes the flyer more visually interesting. **Grammar Checker** Incomplete sentences, awkward wording, and incorrect punctuation are identified and corrections are offered by the grammar checker.

Creating a Report



AutoCorrect

Footnote

the footnote feature.

footnote superscript

page to contain the

footnote text.

This feature inserts the

number and automatically formats the bottom of the

Peru As you enter text, you Geography and Climate

occasionally forget to capitalize the first word in a sentence. Fortunately, AutoCorrect recognizes the error and automatically capitalizes the word.

La Costa

La Costa Occupying the slender area along Peru's western coastline, La Costa, provides a division between the moutains and sen. Although some of this area is freline, monthy it is externely dy and ard. The Ander Mountains prevent generate ranual previolation coming from the east. Some areas in the south are considered diret than the Sahara Conversely, there are a few areas in this region where mountain rivers more the ocean that are green with life and do not give the impression of being in a desert at all.

Peru, located in South America, borders the Pacific Ocean on its west and shares common borders with the countries of Ecuador, Colombia, Brazil, and Bolivia. Peru is subdivided into three regions – La Costa, La Sierra, and La Selva — based on differing climate and geographical features. Though entirely within the tropics, Peru's climate

varies from region to region, ranging from tropical to arctic. Its varied climate corresponds to the sharply contrasting geographical features of seafront, mountains, and rainforests.

La Sierra

Inland and to the east is the mountainous region called La Sierra, encompassing Peru's share of the Andes mouthain range. The southern portion of this region is prone to volcanic activity, and some volcanoes are active today. La Strar is subject to day season from May to September, which is winter in that part of the other than the source of the sou



to spiernor, which is which in that part of the world. The weather is typically sunny, with moderate annual precipitation. The former Incan capital Cuzco is in this region, as well as the Sacred Valley of the Incas. This region also contains Lake Titicaca, the world's highest navigable lake.¹

Figure 1-Sacred Valley La Selva La Selva, a region of tropical rainforest, is the easternmost region in Peru. This region, with the eastern foot of the Andes Mountains, forms the Amazon Basin, into which

numerous rivers flow. La Selva is extremely wet, with some areas exceeding an annual precipitation of 137 inches. Its wettest season occurs from November to April. The eather here is humid and extremely hot.



Header or Footer Page numbers and other documentrelated information can be included in a header or footer.

Captions and Cross References Identifying figures with

captions and using cross references in a report makes the report easier to read and more professional.

> Table To concisely present and organize the weather information, you use a table.

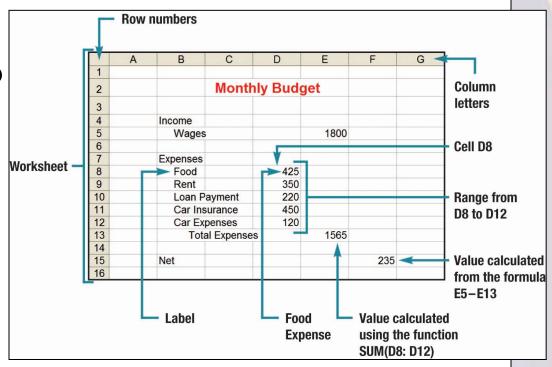
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Spreadsheets

Programs that manipulate numeric data

Spreadsheet programs

- Microsoft Excel
- Corel Quattro Pro
- Lotus 1-2-3
- Mac: Numbers



Spreadsheet Features

- Workbook files
- Worksheet or spreadsheet or sheet
- Formulas
- Functions
- Analytical graphs
 or charts
- What-if Analysis

Туре	Function	Calculates					
Financial	PMT	Size of loan payments					
	PV	Present value for an investment					
Mathematical	SUM	Sum of the numbers in a range of cells					
	ABS	Absolute value of a number					
Statistical	AVERAGE	Average or mean of the numbers in a range of cells					
	MAX	Largest number in a range of cells					
Logical	IF	Whether a condition is true; if true, a specified value is displayed; if not true, then a different specified value is displayed					
	AND	Whether two conditions are true; if both are true, then a specified value is displayed, if either one or both are not true, then a different specified value is displayed					

Spreadsheet Case

- Creating a Sales Forecast
- <u>Creating a Chart</u>
- Analyzing Your Data

Creating a Sales Forecast

Worksheets

Worksheets are used for a wide range of different applications. One of the most common uses is to create, analyze, and forecast budgets.

Text Entries

Text entries provide meaning to the values in the worksheet. The rows are labeled to identify the various sales and expense items. The columns are labeled to specify the months.

	Α	В	С	D		Е	F				
1 2 3 4 5			owntov			et Ca					
6		JAN	FEB	MAR	T	OTAL	AVG				
7	Sales										
8	Beverage	\$ 13,600	\$ 14,600	\$ 15,6		43,800	\$ 14,600				
9	Food	\$ 7,100	\$ 7,300	\$ 7,4	00 \$:	21,800	\$ 7,267				
10	Internet	\$ 4,000	\$ 4,300	\$ 4,5	\$ 000	¹ Ce	II.e.				
11	Merchandise	\$ 3,100	\$ 3,200	\$ 3,3	800 \$						
12	Total Sales	\$ 27,800	\$ 29,400	\$ 30,8	300 \$	8 Cell	s can cont	ain labels, numbers,			
13	Expenses						nulas, and	functions. A cell's			
14	Cost of Goods	\$ 6,950	\$ 7,300	\$ 7,6	500 \$ I	2 con	tent is ind	icated by the row an	d		
15	Payroll	\$ 7,500 \$ 7,500 \$ 7,500 <mark>\$ 2</mark> colun						bels. For example, cell D15			
16	Computers	\$ 6,400	\$ 6,400	\$ 6,4	00 \$			mber for the Payroll			
17	7 Lease \$ 5,500 \$ 5,500				\$ 000		cted for March.				
18	Marketing	\$ 1,000	\$ 1,000	\$ 1,0	000 \$	ente	onee onpe				
19	Miscellaneous	\$ 1,500	\$ 1,500	\$ 1,5	500 \$	4,500	\$ 1,500				
20	Total Expenses	\$ 28,850	\$ 29,200	\$ 29,5	500 \$	87,550	\$ 29,183				
21	Income										
22	Net Income	\$ (1,050)	\$ 200	\$ 1,3	\$ 000	450	\$ 150				
23	Profit Margin	-3.73%	0.68%	4.2	2%	0.51%					
24			Income Y	ear-To-E	ate \$	450					

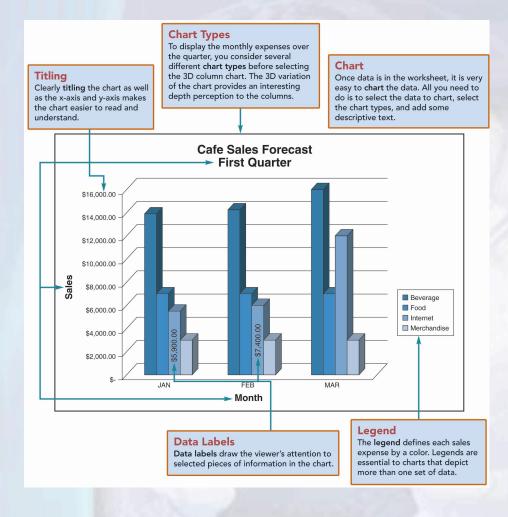
Functions

One advantage of using functions rather than entering formulas is that they are easier to enter. In this case, cell C20 (Total Expenses for February) contains the function SUM(C14: C19) rather than the formula = C14+C15+ C16+C17+C18+C19.

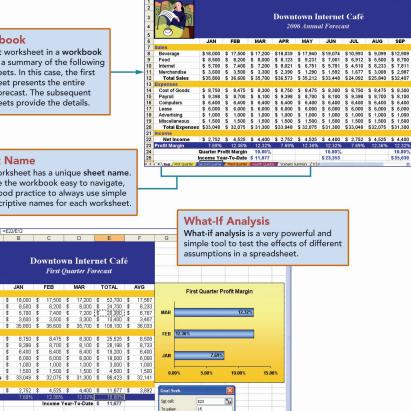
Formulas

Formulas provide a way to perform calculations in the worksheet. In this case, Cell B22 (Net Income for January) contains the formula = B12 (Total Sales for January) – B20 (Total Expenses for January).

Creating a Chart



Analyzing Your Data



y ghanging cell: \$E\$10 **%**

/DIC

OK Cancel

8.100

\$ 6,400 \$ 6,000

\$ 1,500

10.80%

\$35,030

Workbook

The first worksheet in a workbook is often a summary of the following worksheets. In this case, the first worksheet presents the entire year's forecast. The subsequent worksheets provide the details.

Sheet Name

JAN.

Beverage

Internet

xpenses

Lease

Merchandis Total Sales

Cost of Good

Payroll Computers

Marketing Miscellaneous

Total Expens

Net Income Profit Margin

Goal Seek

Fond

Each worksheet has a unique sheet name. To make the workbook easy to navigate, it is a good practice to always use simple yet descriptive names for each worksheet.

A common goal in many financial workbooks is to achieve a certain level of profit. Goal

seek allows you to set a goal and then will analyze other parts of the workbook that would need to be adjusted to meet that goal.

Database Management Systems (DBMS)

- A collection of related data
- Sets up a structure for data storage
- Database programs
 - Microsoft Access
 - Corel Paradox
 - Lotus Approach

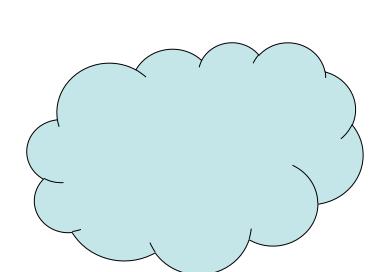
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	0145	Motomoto	Type	34.5 Dept-Ave.	Cypress Lake	n.	30005-0011	846-585-6573	Oknop Image	1
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	1254	121	Killy	IF E Anton An	Cypebox Labor	PL.	2225-225	346385199	Divise Hope	
	1234	Default	Oundam	IDC V. Souther Ave.	linte:	FL.	22707-11680	0410-080-0201	DENse Ince	2
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Database Features

- Relational
- Tables
 - Records
 - Fields
- Record sorting

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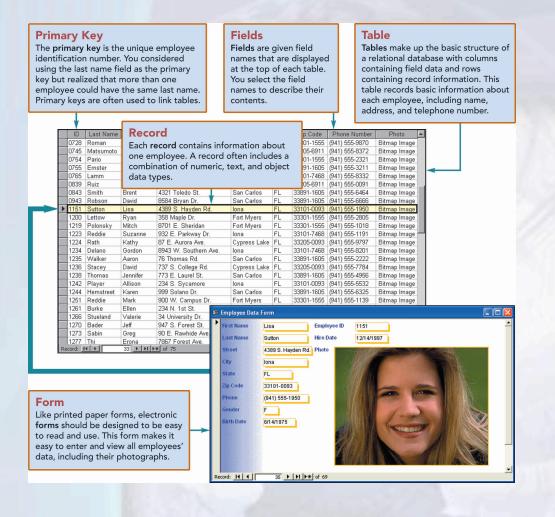
- Queries
- Forms
- Reports



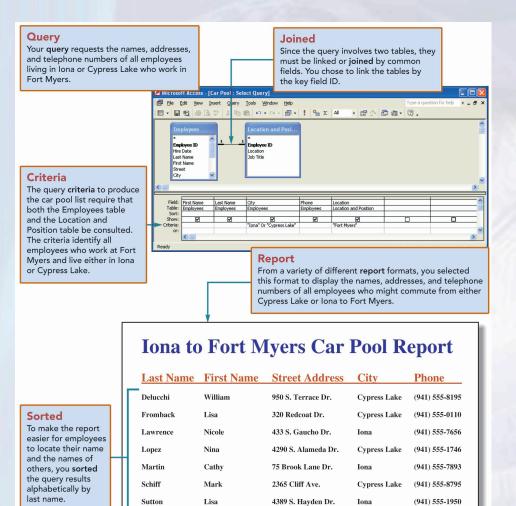
Database Case

- Creating a Database
- <u>Creating a Query</u>

Creating a Database



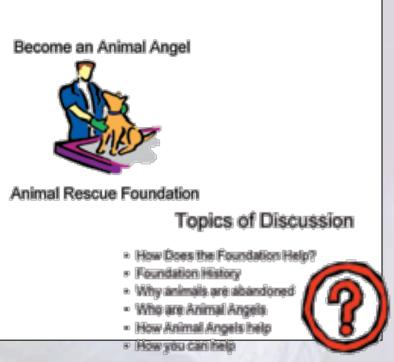
Creating a Query



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Presentation Graphics

- Programs that create visually interesting presentations
- Presentation programs
 - Microsoft PowerPoint
 - Corel Presentations
 - Lotus Freelance Graphics



Presentation Graphics Features

- Slides
- AutoContent wizard
- Design templates
- Master slide



Presentation Graphics Case

- Creating a Presentation
- <u>Updating a Presentation</u>

Creating a Presentation

Presentation Style

The AutoContent wizard asks you to select your **presentation style**. Since you anticipate presenting either directly from a computer monitor or from a projection device, you select the on-screen style.

How Does the Foundation Help?

- Provide Temporary Homes
- Provide Obedience
- Provide Veterinary
- Find Loving Perm
- How Does the Foundation Help?
 Foundation History

Topics of Discu

- Why animals are abandone
- Who are Animal Angels
 How Animal Angels help
- How you can help

AutoContent Wizard

One way to create a presentation is to use the **AutoContent Wizard**. This wizard guides you through the process of creating a variety of different types of presentations.

Templates

Templates provide an excellent way to quickly create a presentation by presenting a sample layout with sample text. You customize the presentation by replacing the sample text.



Updating a Presentation

Design Templates

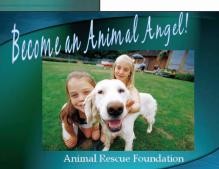
To make your presentation more professional and eyecatching, you select a **design template** and apply that template to your entire presentation.

How Does The Foundation Help?



Topics of Discussion

- How does the Foundat
 Foundation history.
 Why are animals aban
- Who are Animal Ang
- What do Animal Ar

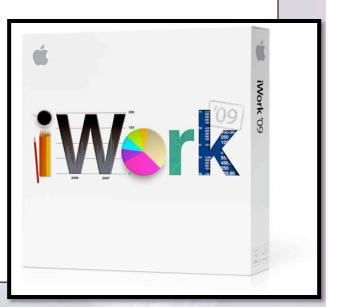


Master Slide

The **master slide** helps to compare different design templates quickly. By making a single change to this slide, all slides in the presentation are changed.

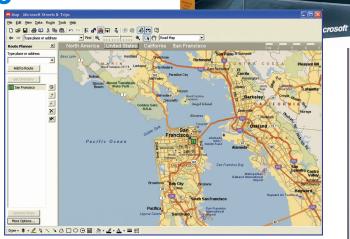
Integrated Packages

- A single program that provides the functionality of several widely used programs
 - Popular with many home users
 - Classified as personal or home software
- Advantages: cost, simplicity
- Disadvantage: limited functions
- Popular packages are Microsoft Works & Apple iWork



Software Suites

- Collection of separate application programs sold as a group
- Four types of suites
 - Productivity suite or Business suite
 - Personal suite or Home suite
 - Specialized suite
 - Utility suite



Office

al Edition 2003

Careers In IT

- Computer trainers instruct new users on the latest software or hardware
- Attributes
 - Good communication skills
 - Teaching experience
 - Detail oriented
 - IT Experience



- Comfort speaking to groups is a plus
- Earning potential of \$26,000 to \$54,000 annually

A Look to the Future

- Agents will help write papers, pay bills, and shop on the internet
 - Intelligent programs
 - Primitive agents currently exist
 - Microsoft and "Clippy"
 - Next Generation



Discussion Questions (Page 1 of 2)

- Explain the difference between generalpurpose and special-purpose applications.
- Discuss the common features of most software programs. Describe the new interface introduced with 2007 Microsoft Office.
- What is the difference between a function and a formula? How is a formula related to what-if analysis?

Discussion Questions (Page 2 of 2)

- What are presentation graphics programs? How are they used?
- What is the difference between an integrated package and a software suite? What are the advantages and disadvantages of each?