

Lecture 3

Application Software

Ameer Kadhim Hadi
Faculty of IT college Network Department
University Of Babylon
it.info.networks@gmail.com

Objectives Overview

Identify the four categories of application software

Describe characteristics of a user interface

Identify the key features of widely used business programs

Identify the key features of widely used graphics and multimedia programs

Objectives Overview

Identify the key features of widely used home, personal, and educational programs

Discuss Web applications

Identify the types of application software used in communications

Describe the learning aids available for application software

Application Software

- **Application software** consists of programs designed to make users more productive and/or assist with personal tasks

To make business activities more efficient

To assist with graphics and multimedia projects

To support home, personal, and educational tasks

To facilitate communications

Application Software

Four Categories of Application Software

Business

- Word Processing
- Spreadsheet
- Database
- Presentation
- Note Taking
- Personal Information Manager (PIM)
- Business Software for Phones
- Business Software Suite
- Project Management
- Accounting
- Document Management
- Enterprise Computing



Graphics and Multimedia

- Computer-Aided Design (CAD)
- Desktop Publishing (for the Professional)
- Paint/Image Editing (for the Professional)
- Photo Editing (for the Professional)
- Video and Audio Editing (for the Professional)
- Multimedia Authoring
- Web Page Authoring



Home/Personal/Educational

- Software Suite (for Personal Use)
- Personal Finance
- Legal
- Tax Preparation
- Desktop Publishing (for Personal Use)
- Paint/Image Editing (for Personal Use)
- Photo Editing and Photo Management (for Personal Use)
- Clip Art/Image Gallery
- Video and Audio Editing (for Personal Use)
- Home Design/Landscaping
- Travel and Mapping
- Reference and Educational
- Entertainment



Communications

- Web Browser
- E-Mail
- Instant Messaging
- Chat Room
- Text, Picture, Video Messaging
- RSS Aggregator
- Blogging
- Newsgroup/Message Board
- FTP
- VoIP
- Video Conferencing

Application Software

- Available in a variety of forms:

**Packaged
software**

**Custom
software**

**Web
application**

**Open source
software**

Shareware

Freeware

**Public-domain
software**

Application Software

- **System software** serves as the interface between the user, the application software, and the computer's hardware
 - Utility programs

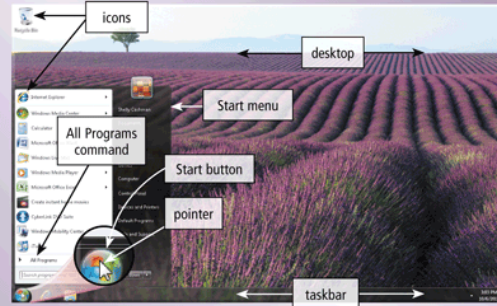


Application Software

One Way to Start and Interact with a Program from Windows

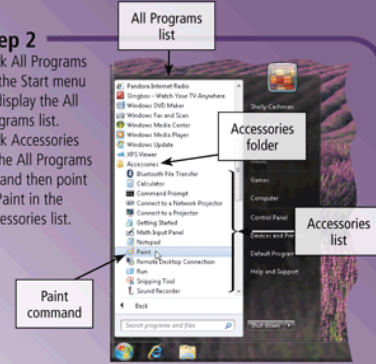
Step 1

When you turn on a PC-compatible computer, Windows loads into memory and displays the desktop on the screen. Click the Start button on the Windows taskbar to display the Start menu.



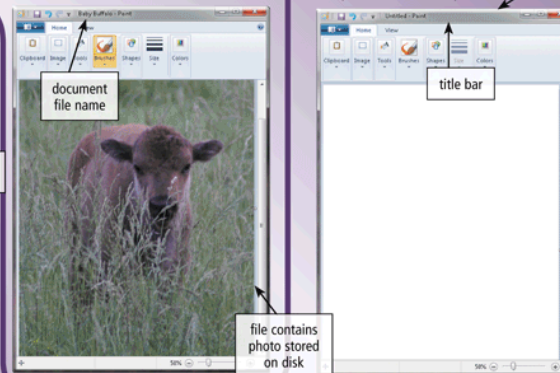
Step 2

Click All Programs on the Start menu to display the All Programs list. Click Accessories in the All Programs list and then point to Paint in the Accessories list.



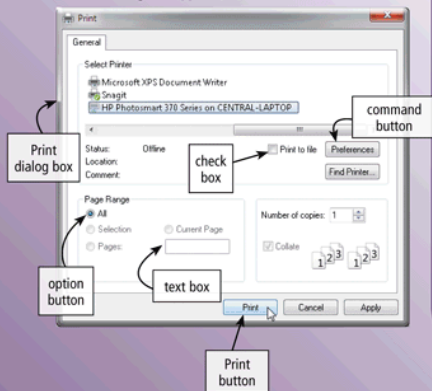
Step 3

Click Paint. The Paint window opens on the desktop.



Step 5

Instruct the Paint program to print the photo. When the Print dialog box appears, click its Print button.



Step 4

Instruct the Paint program to open a file that is stored on the hard disk.

Business Software

- **Business software** is application software that assists people while performing business activities

Word
Processing

Spreadsheet

Database

Presentation

Note taking

Personal
information
manager

Business
software for
phones

Business
software
suites

Project
management

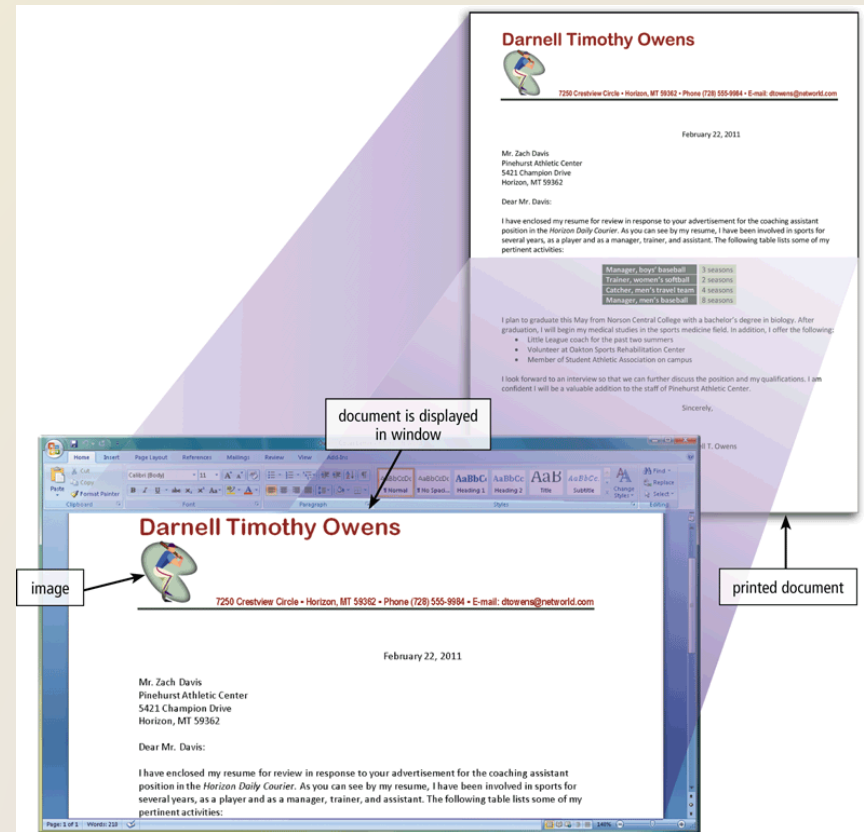
Accounting

Document
management

Enterprise
computing

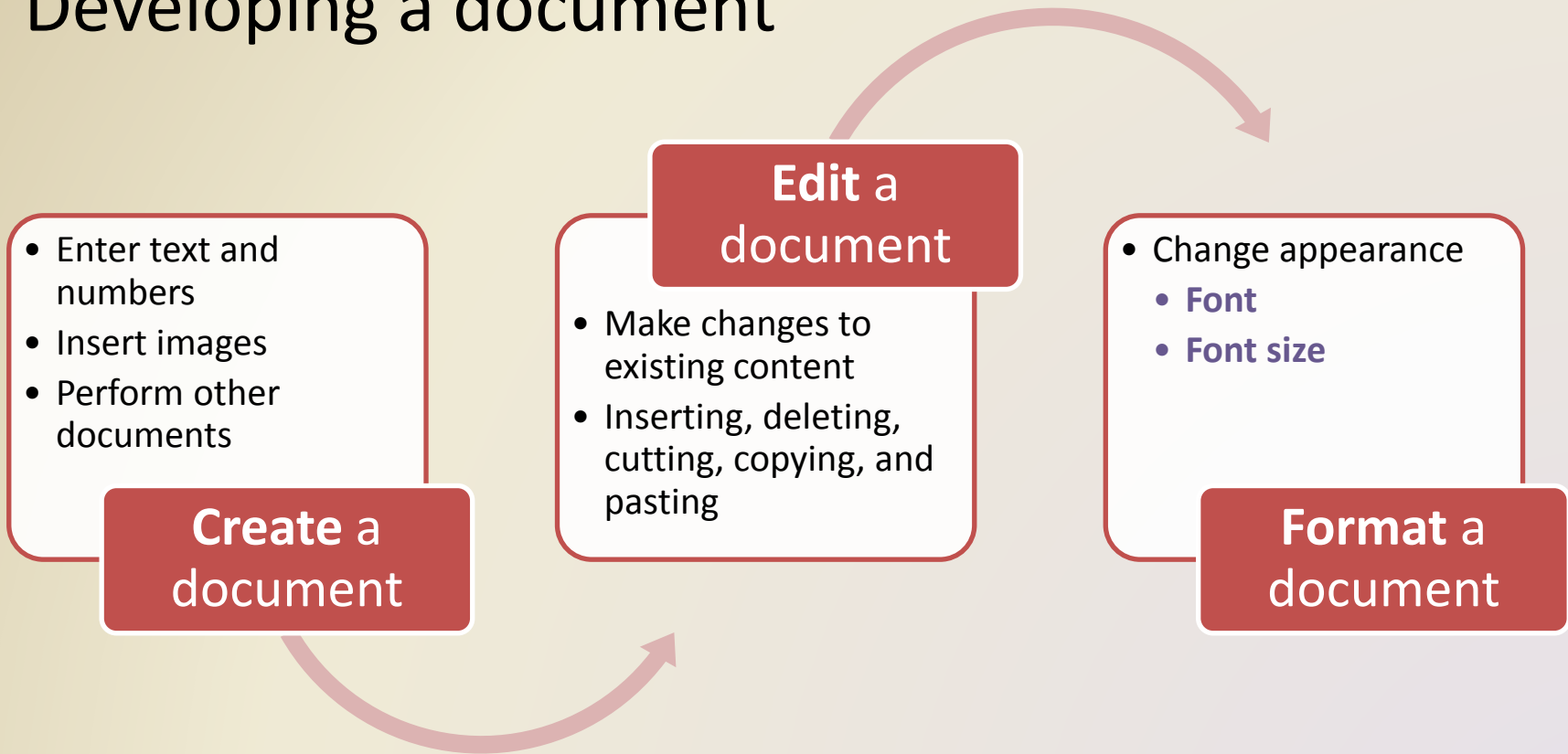
Business Software

- **Word processing software** allows users to create and manipulate documents
- **Clip art** is a collection of electronic drawings, photos, and other images



Business Software

- Developing a document



Business Software

- Spreadsheet software allows users to organize data in rows and columns and perform calculations

function assigned to active cell

columns B, C, D, and E

worksheet

rows 3, 4, 5, and 6

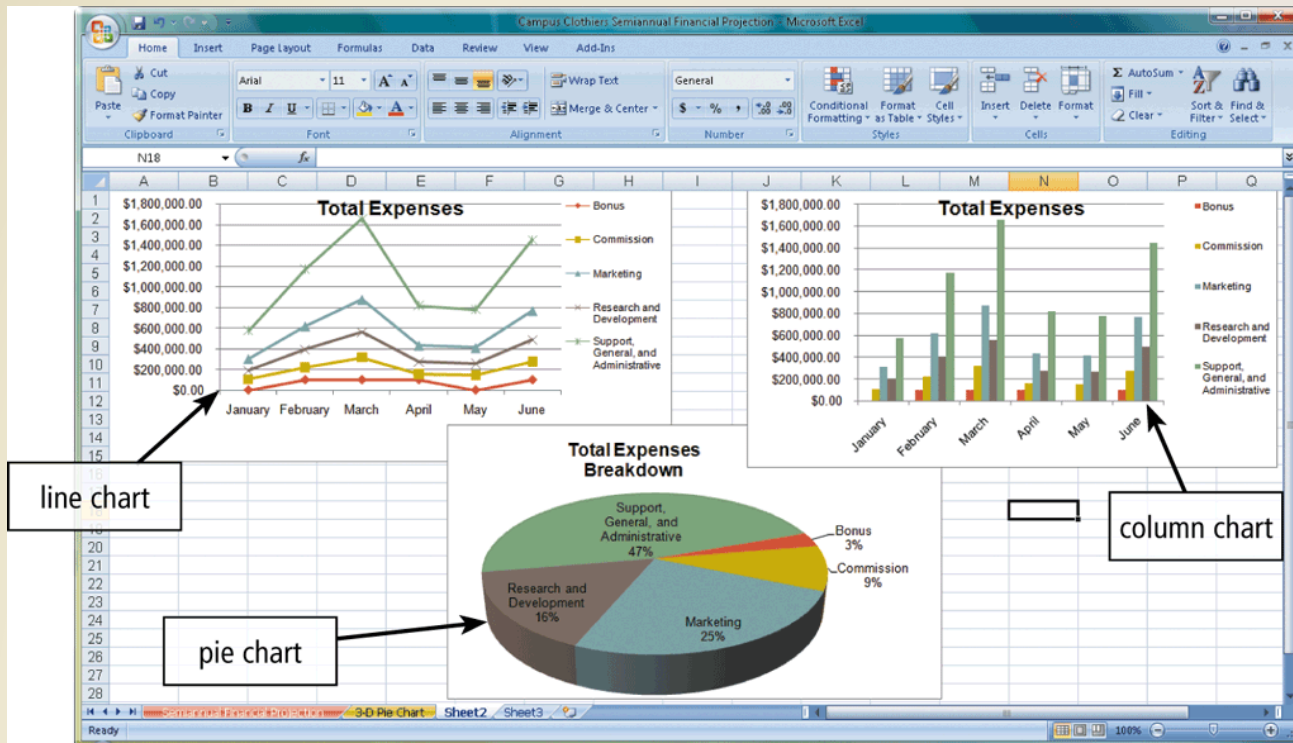
cell B4

cell B14 is active

Campus Clothiers							
Semianual Projected Gross Margin, Expenses, and Operating Income							
	January	February	March	April	May	June	Total
Sales	\$3,383,909.82	\$6,880,576.15	\$9,742,702.37	\$4,818,493.53	\$4,566,722.63	\$8,527,504.39	\$37,919,908.89
Cost of Goods Sold	1,319,724.83	2,683,424.70	3,799,653.92	1,879,212.48	1,781,021.83	3,325,726.71	14,788,764.47
Gross Margin	\$2,064,184.99	\$4,197,151.45	\$5,943,048.45	\$2,939,281.05	\$2,785,700.80	\$5,201,777.68	\$23,131,144.42
Expenses							
Bonus	\$0.00	\$100,000.00	\$100,000.00	\$100,000.00	\$0.00	\$100,000.00	\$400,000.00
Commission	109,977.07	223,618.72	316,637.83	156,601.04	148,418.49	277,143.89	1,232,397.04
Marketing	304,551.88	619,251.85	876,843.21	433,664.42	411,005.04	767,475.40	3,412,791.80
Research and Development	194,574.81	395,633.13	560,205.39	277,063.38	262,586.55	490,331.50	2,180,394.76
Support, General, and Administrative	575,264.67	1,169,697.95	1,656,259.40	819,143.90	776,342.85	1,449,675.75	6,446,384.51
Total Expenses	\$1,184,368.44	\$2,508,201.65	\$3,509,945.83	\$1,786,472.74	\$1,598,352.92	\$3,084,626.54	\$13,671,968.11
Operating Income	\$879,816.55	\$1,688,949.80	\$2,433,102.62	\$1,152,808.32	\$1,187,347.88	\$2,117,151.14	\$9,459,176.31

Business Software

- Charting depicts data in a spreadsheet in graphical form



Business Software

- A **database** is a collection of data organized in a manner that allows access, retrieval, and use of that data
 - **Database software** allows users to create, access, and manage a database

The screenshot shows a Microsoft Access database window titled 'InPerson Fitness1: Database (Access 2011)'. The 'Table Tools' ribbon is active, showing the 'Datashheet' view. The main window displays a table with the following data:

Client Numl	Last Name	First Name	Address	Telephone Number	Amount Paid	Balance	Trainer Number
AB10	Alvarez	Francine	23 Robbins	555-4321	\$300.00	\$24.00	203
BR18	Breeton	Alex	345 Levick	555-6987	\$324.00	\$32.00	205
FE47	Ferber	Jane	68 Passmore	555-3412	\$420.00	\$36.00	207
GMS0	Gammon	Fred	98 Magee	555-8789	\$560.00	\$50.00	205
HJ05	Hejjer	Bill	314 Oakley	555-4365	\$240.00	\$48.00	203
KL10	Klinger	Cynthia	44 Rising Sun	555-4576	\$640.00	\$0.00	203
MA24	Manchester	Liz	67 Fanshawe	555-8787	\$348.00	\$40.00	207
PR30	Preston	Mike	75 Ulhrich	555-4454	\$440.00	\$40.00	205
SA23	Santoro	Maria	134 Castor	555-9780	\$340.00	\$36.00	207
TR35	Trent	Jerry	167 Martin	555-7667	\$480.00	\$42.00	205

Below the main table, a secondary table is visible with the following data:

Trainer Number	Last Name	First Name	Telephone Number	Hourly Rate	Start Date	Comment	Web Page
203	Kim	Rachel	555-0101	\$18.00	2/5/2011	Working toward a degree in physical therapy. Member of volunteer fire department.	http://www.site.com/ac2003/trainer1.htm
205	Martinez	Alex	555-1243	\$18.50	3/14/2011	Has a degree in Recreation Management. Runs marathons.	http://www.site.com/ac2003/trainer3.htm
207	Pretsch	Pat	555-2662	\$18.00	6/2/2011	Coaches high school tennis.	http://www.site.com/ac2003/trainer4.htm

Annotations in the image include:

- A box labeled 'fields' with arrows pointing to the column headers of the main table.
- A box labeled 'records' with arrows pointing to the rows of the main table.
- A box labeled 'Client table' with an arrow pointing to the 'Client Service' table in the left-hand pane.
- A box labeled 'Trainer table' with an arrow pointing to the 'Trainer' table in the left-hand pane.

Business Software

- **Presentation software** allows users to create visual aids for presentations to communicate ideas, messages, and other information to a group

The image shows a vertical stack of five presentation slides. The top slide features a large red leaf with a tree branch and a small tree icon, with the text 'California Arbor Day' below it. The second slide is titled 'Trees for Our Region' and contains a table with columns for 'Name', 'Where to Plant', and 'Comments'. The table lists 'Douglas' and 'Evergreen' tree types with their respective planting locations and care instructions. The third slide is titled 'BENEFITS OF PLANTING TREES' and features a Venn diagram with three overlapping circles: 'Control soil erosion' (purple), 'Remove carbon dioxide from air' (orange), and 'Increase property values' (blue). The fourth slide is titled 'Tree Care Schedule' and shows a calendar grid for April, May, and June with tasks like 'Prune', 'Plant', and 'Water' scheduled across the months. The bottom slide is titled 'What tree type is best for blocking winter winds?' and shows three green pentagons labeled 'Evergreen', 'Shade', and 'Palm' against a background of trees.

Name	Where to Plant	Comments
Douglas	Crabapple, Ginkgo, Hawthorn, Kentucky Coffeetree, Redbud	Due west of west windows Grow best in full sun, tolerate urban conditions
Evergreen	Alderleaf, Fl. Hawthorn, Juniper, Pine, Spruce, Yew	North side of building to block winter wind and to save energy Generally prefer well-drained, moist soil

Business Software

- **Note taking software** is application software that enables users to enter typed text, handwritten comments, drawings, or sketches anywhere on a page

The screenshot displays a note-taking application interface. The main content area shows a page titled "Cardiovascular Systems" with a sub-section "Circulatory System Variations". It features three diagrams: a Planaria with labels for "Gastrovascular cavity", "Pharynx", and "Mouth"; an Insect with labels for "Tubular heart", "Lateral hearts", and "Ventral blood vessel"; and an Earthworm with labels for "Dorsal blood vessel" and "Ventral blood vessel". Below the diagrams are the labels "Planaria: gastrovascular cavity", "Insect: open circulation", and "Earthworm: closed circulation". A handwritten red note with an arrow pointing to the Earthworm diagram says "This will be on the test!". Below the diagrams is a section titled "Human Heart" with a bulleted list: "• Primordium forms in cardiogenic plate at cranial end of embryo", "• Angiogenic cell clusters lie in horseshoe shape", and "• Tube can be subdivided into". The application's right sidebar shows a list of notes under "Top Priority", including "Spanish Lit Paper", "Return chemistry text", "Pay fall semester tuition", and "Call Mom". The top of the application shows the date "9/18", time "11:11 AM", and "Page Group: 1 of 2".

Business Software

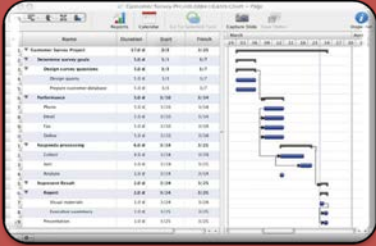
- A **software suite** is a collection of individual programs available together as a unit
- A **personal information manager (PIM)** is application software that includes

Appointment
calendar

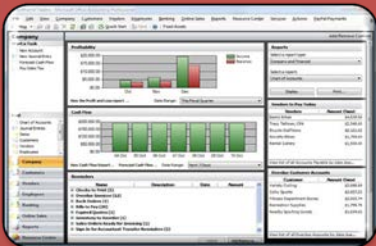
Address
book

Notepad

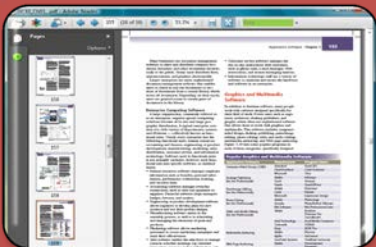
Business Software



Project management software allows a user to plan, schedule, track, and analyze the events, resources, and costs of a project



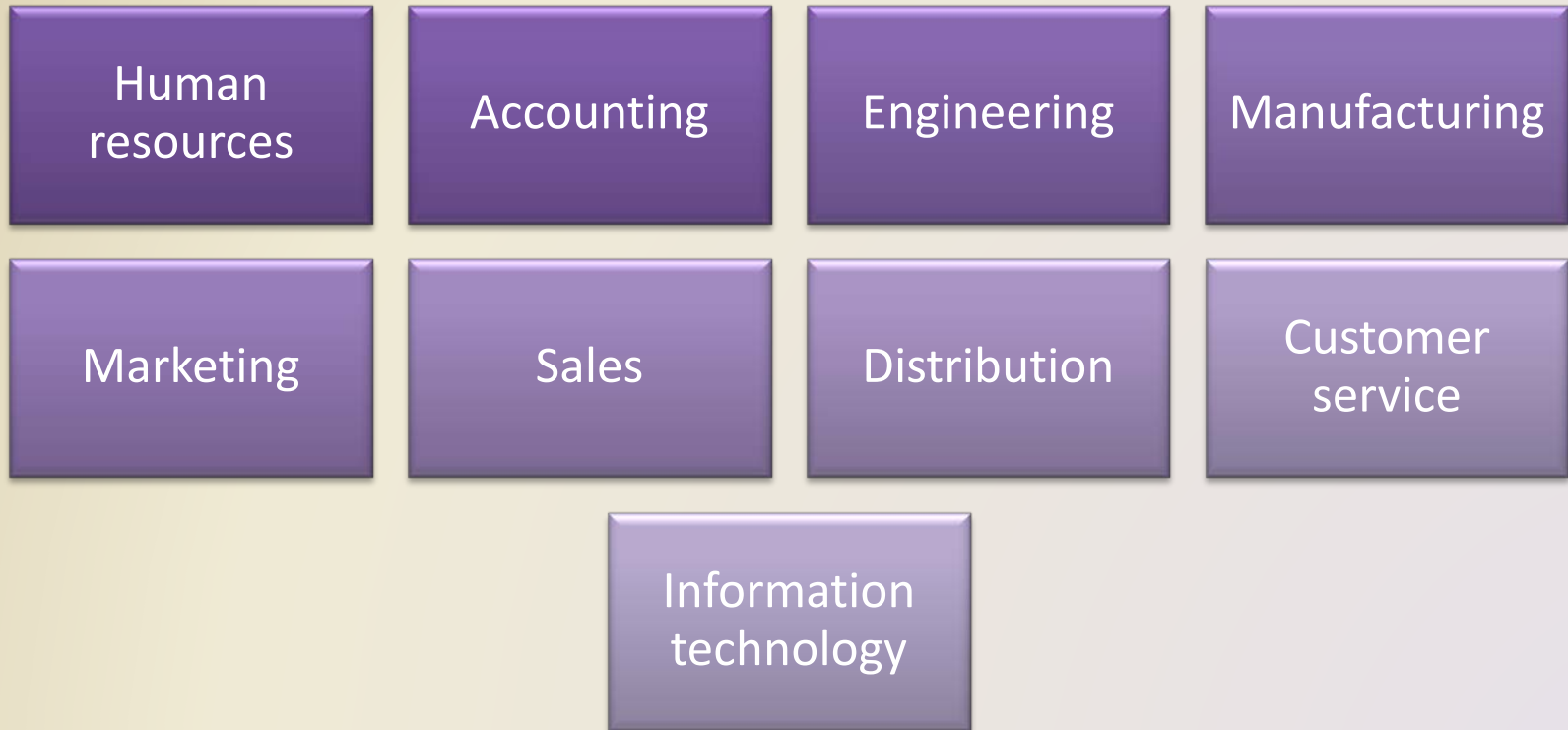
Accounting software helps companies record and report their financial transactions



Document management software provides a means for sharing, distributing, and searching through documents by converting them into a format that can be viewed by any user

Business Software

- Enterprises typically require special computing solutions for various functional units



Graphics and Multimedia Software

Popular Graphics and Multimedia Software

Application Software	Manufacturer	Program Name	Application Software	Manufacturer	Program Name
Computer-Aided Design (CAD)	Autodesk	AutoCAD	Video and Audio Editing (for the Professional)	Adobe	Audition
	Chief Architect	Chief Architect			Premiere Pro
	Microsoft	Visio			Soundbooth
Desktop Publishing (for the Professional)	Adobe	InDesign		Avid Technology	Avid Media Composer
	Corel	Ventura		Cakewalk	SONAR
	Quark	QuarkXPress		Sony	ACID Pro
Paint/Image Editing (for the Professional)	Adobe	Illustrator	Multimedia Authoring	Adobe	Director
	Corel	Painter		Agilix	GoCourse
	Microsoft	Expression Design		SumTotal Systems	ToolBook Instructor
Photo Editing (for the Professional)	Adobe	Photoshop	Web Page Authoring	Adobe	Dreamweaver
	Arcadia	PhotoPerfect Ultimate			Fireworks
	Nik Software	Nik Professional Suite	Flash	Microsoft	Expression Web
					SharePoint Designer

Graphics and Multimedia Software



**Computer-aided design
(CAD) software**



**Desktop publishing
software**



**Paint/Image editing
software**

Graphics and Multimedia Software



Professional photo editing software



Video and audio editing software



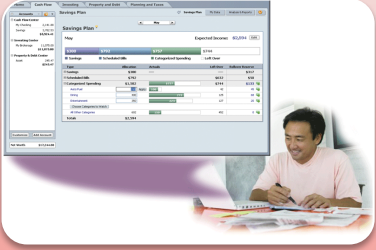
Multimedia authoring software

Graphics and Multimedia Software

- **Web page authoring software** helps users of all skill levels create Web pages that include multimedia and interactive content



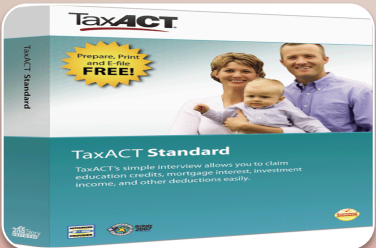
Software for Home, Personal, and Educational Use



Personal finance software

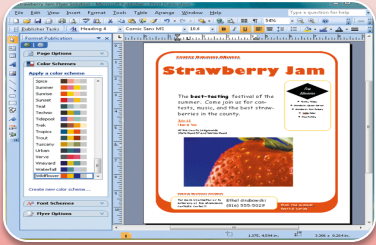


Legal software



Tax preparation software

Software for Home, Personal, and Educational Use



Personal DTP software



Personal paint/image editing software



Personal photo editing software

Software for Home, Personal, and Educational Use



Clip art/image gallery

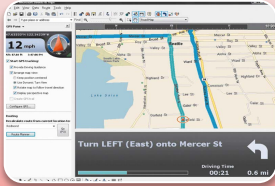


Video and audio editing software



Home design/landscaping software

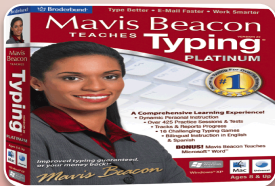
Software for Home, Personal, and Educational Use



Travel and mapping software



Reference software



Educational software



Entertainment software

Web Applications

- A Web application (**Web app**) is a Web site that allows users to access and interact with software from any computer or device that is connected to the Internet

Popular Web Applications

Program Name	Type of Application Software	Program Name	Type of Application Software
Britannica.com	Reference	MSN Encarta	Reference
Dictionary.com	Reference	Photoshop Express	Photo Editing
Flickr	Photo Editing and Photo Management	Picnik	Photo Editing
Gmail	E-Mail	TaxACT Online	Tax Preparation
Google Docs	Productivity Suite	TurboTax Online	Tax Preparation
Google Earth	Travel and Mapping	Windows Live Calendar	Personal Information Manager
Google Maps	Travel and Mapping	Windows Live Hotmail	E-Mail
		YouSendIt	File Transfer and E-Mail

Web Applications

campus clothiers semiannual financial projection - Windows Internet Explorer

http://spreadsheets.google.com/ccc?key=pgcKPiYLSjY-hMCANvS34QA&hl=en

campus clothiers semiannual financial projection

Google Docs

campus clothiers semiannual financial...

Share Autosaved on 10:27 AM

File Edit View Format Insert Tools Form Help

\$ % 123 11pt B Abc

	January	February	March	April	May	June	Total
Campus Clothiers							
Semiannual Projected Gross Margin, Expenses, and Operating Income							
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Sales	\$3,383,909.82	\$6,880,576.15	\$9,742,702.37	\$4,818,493.53	\$4,566,722.63	\$8,527,504.39	\$37,919,908.89
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Gross Margin	\$2,064,184.99	\$4,197,151.45	\$5,943,048.45	\$2,939,281.05	\$2,785,700.80	\$5,201,777.68	\$23,131,144.42
Expenses							
Bonus	\$0.00	\$100,000.00	\$100,000.00	\$100,000.00	\$0.00	\$100,000.00	\$400,000.00
Commission	109,977	223,619	316,638	156,601	148,418	277,144	1,232,397
Marketing	304,552	619,252	876,843	433,664	411,005	767,475	3,412,792
Research and Development	194,575	395,633	560,205	277,063	262,587	490,332	2,180,395
Support, General, and Administrative	575,265	1,169,698	1,656,259	819,144	776,343	1,449,676	6,446,385
Total Expenses	\$1,184,368.44	\$2,508,201.65	\$3,509,945.83	\$1,786,472.74	\$1,598,352.92	\$3,084,626.54	\$13,671,968.11
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Add Sheet Semianual Financial Projection 3-D Pie Chart Sheet2 Sheet3

Application Software for Communications

Web Browser

E-Mail

Instant Messaging

Chat Room

Text, Picture, Video
Messaging

RSS Aggregator

Blogging

Newsgroup/Message
Board

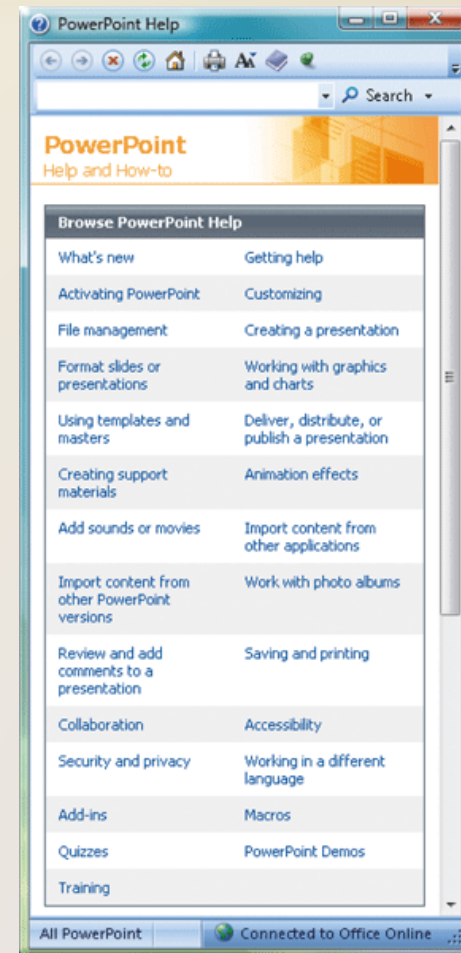
FTP

VoIP (Internet
Telephony)

Video Conferencing

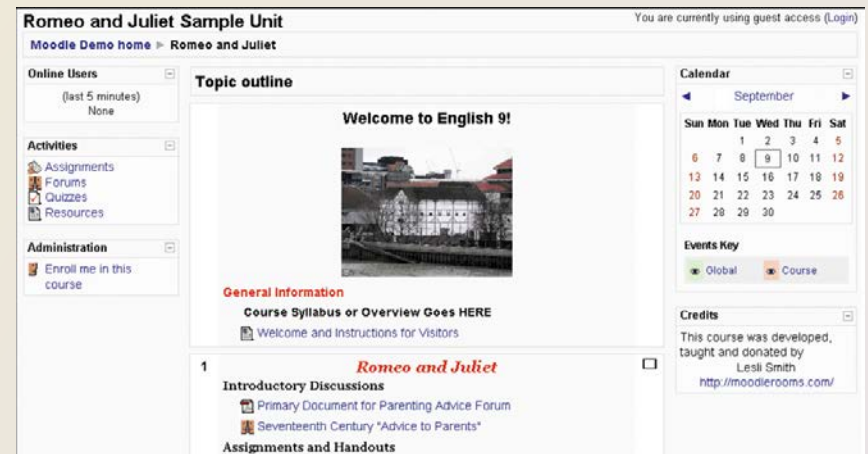
Learning Tools for Application Software

- **Online Help** is the electronic equivalent of a user manual
- You can ask a question or access the Help topics in subject or alphabetical order



Learning Tools for Application Software

- **Web-based training** is a type of CBT that uses Internet technology and consists of application software on the Web
- **Distance learning (DL)** is the delivery of education at one location while the learning takes place at other locations



The screenshot shows a Moodle course page titled "Romeo and Juliet Sample Unit". The page is displayed in a three-column layout. The left column contains navigation menus for "Online Users" (showing none), "Activities" (Assignments, Forums, Quizzes, Resources), and "Administration" (Enroll me in this course). The main content area is titled "Topic outline" and features a "Welcome to English 9!" message with a photo of a building. Below this, there is a "General Information" section with a link to "Course Syllabus or Overview Goes HERE" and a "Welcome and Instructions for Visitors" document. The "Topic outline" also lists "1 Introductory Discussions" with links to "Primary Document for Parenting Advice Forum" and "Seventeenth Century 'Advice to Parents'", followed by "Assignments and Handouts". The right column contains a "Calendar" for September, an "Events Key" (Global, Course), and a "Credits" section stating the course was developed and donated by Lesli Smith, with a link to http://moodlerooms.com/.

Summary

How to start and interact with application software

Overview of a variety of business software, graphics and multimedia software, and home/personal/educational software, and communications software

Web applications

Learning tools for application software