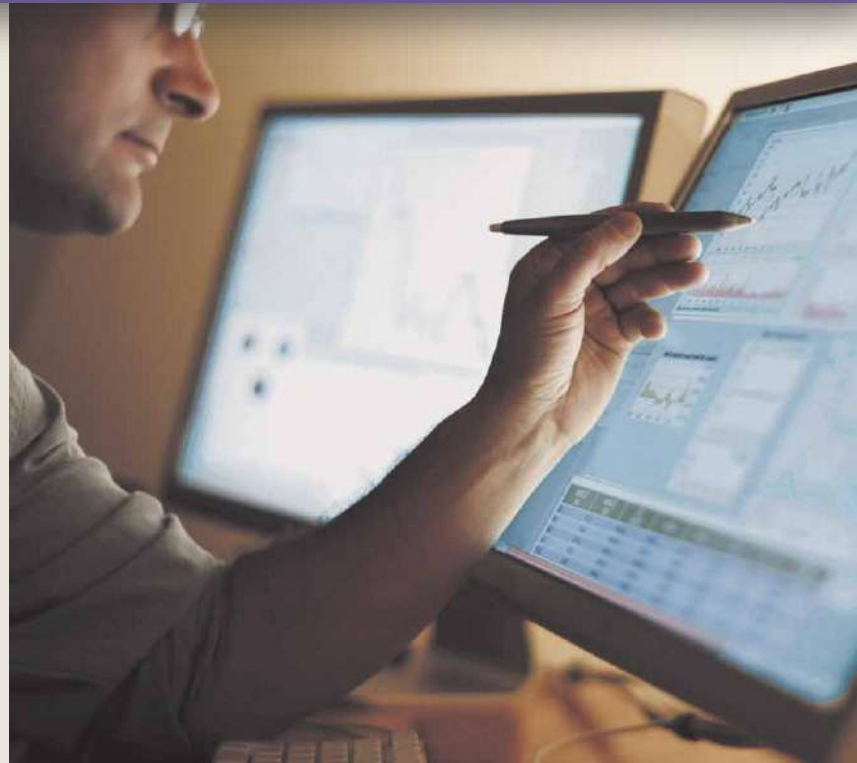


Chapter Three

Application Software

**Discovering
Computers 2011**

Living in a Digital World



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**

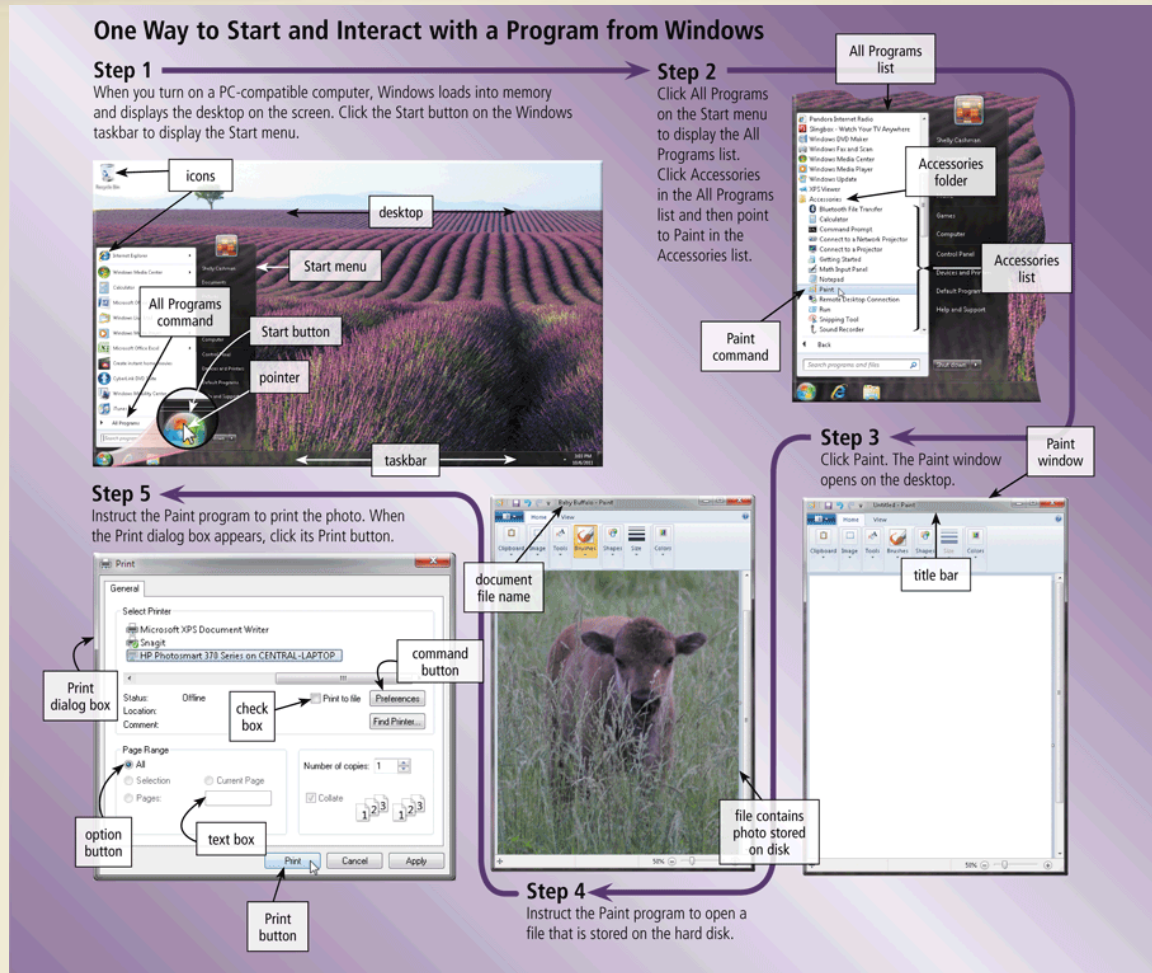
Application Software

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



Click to view Web Link,
click Chapter 3, Click Web
Link from left navigation,
then click Antivirus Programs
below Chapter 3

Application Software



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

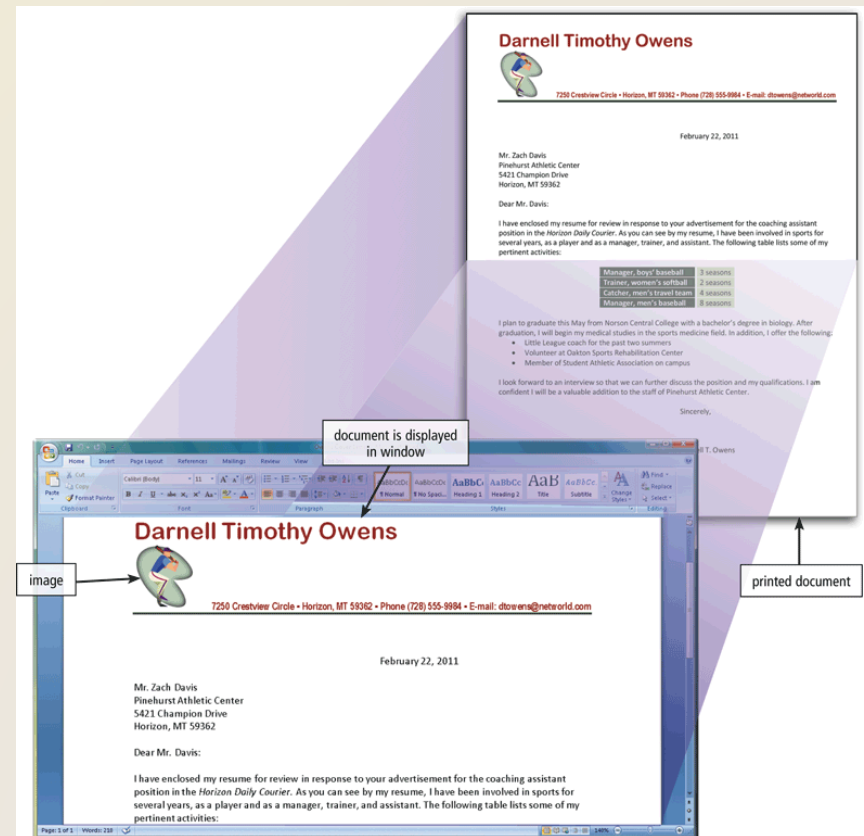
Accounting

Document
management

Enterprise
computing
software

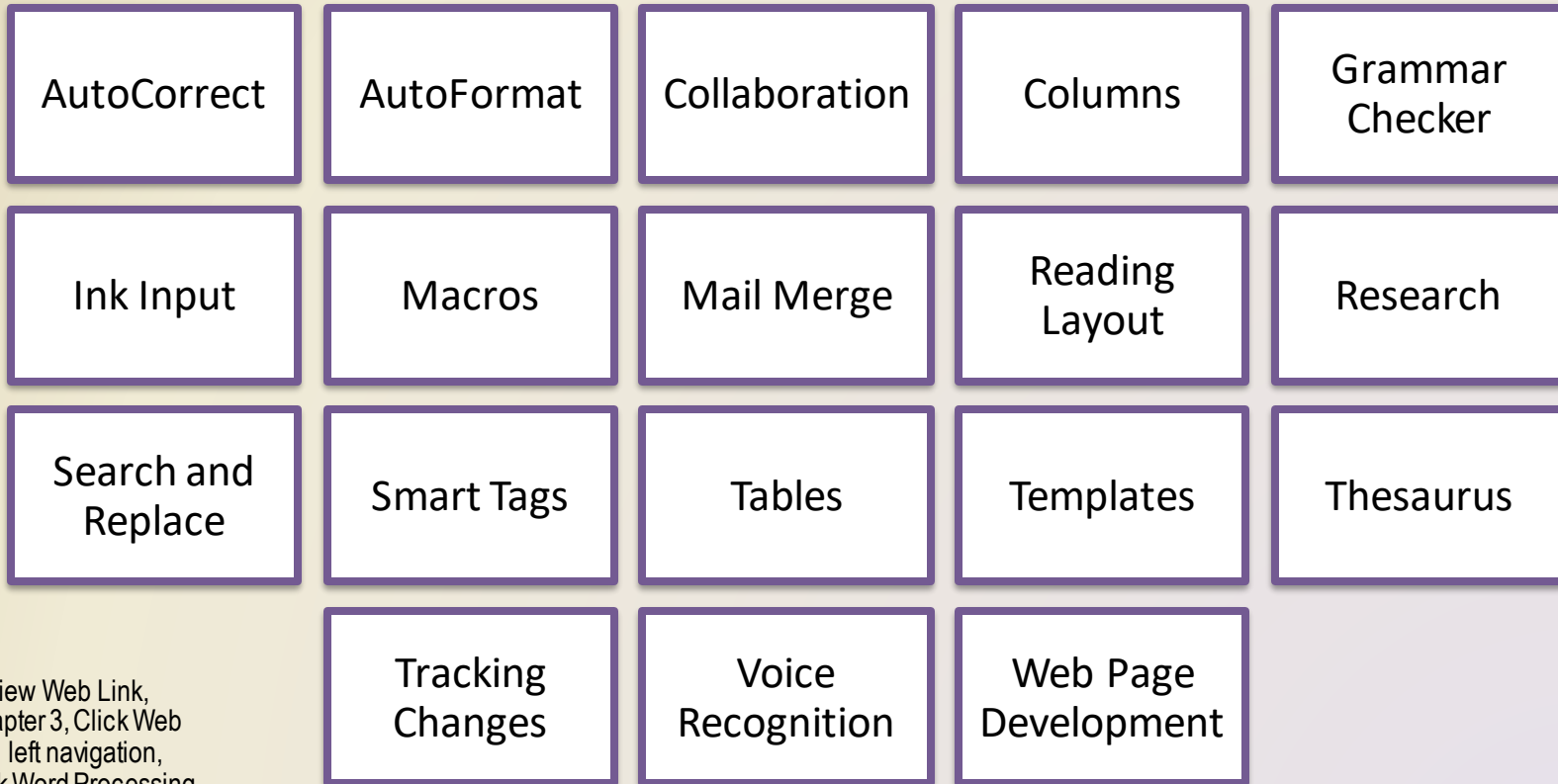
Business Software

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



Business Software

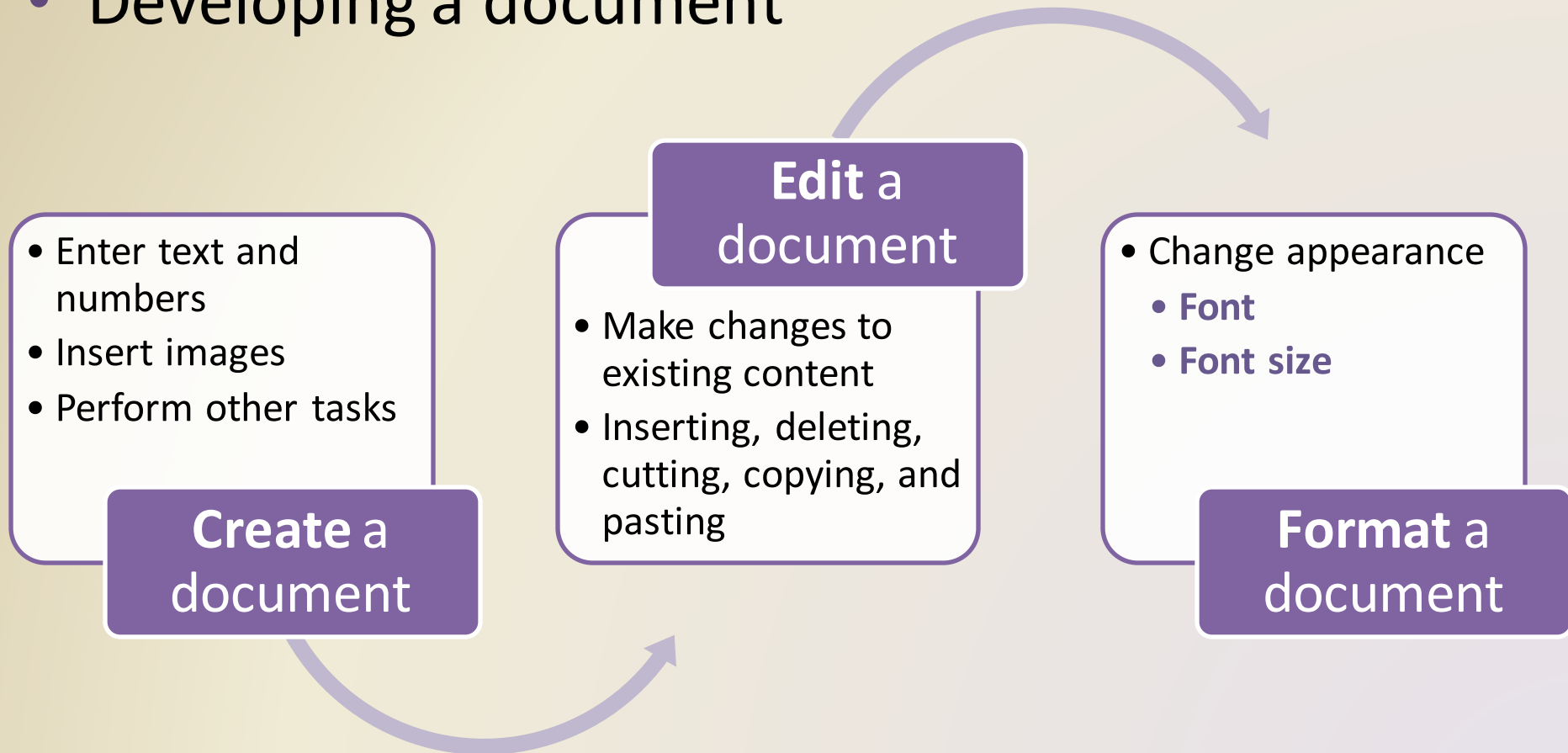
- Additional word processing features include



Click to view Web Link, click Chapter 3, Click Web Link from left navigation, then click Word Processing Software below Chapter 3

Business Software

- Developing a document



Business Software

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

Handwritten Spreadsheet Data:

| | 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 |

Excel Spreadsheet Data:

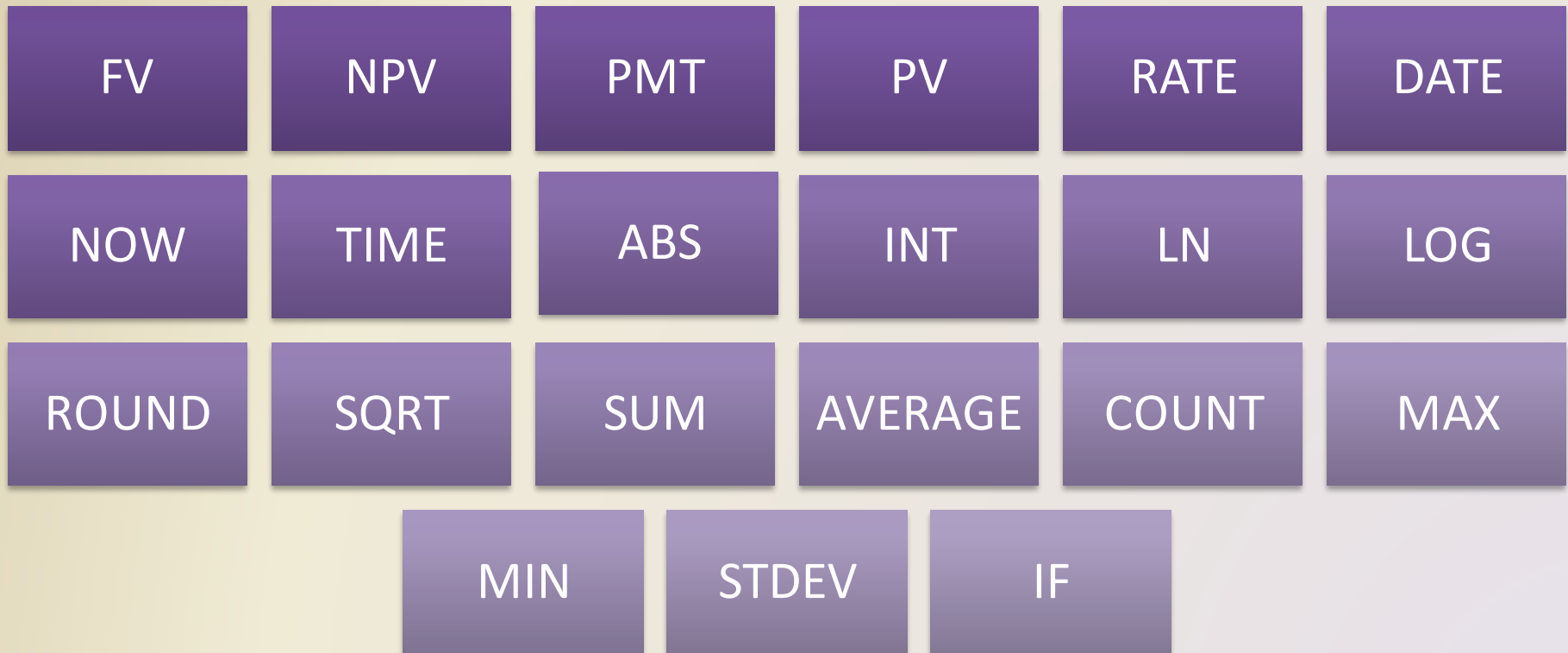
| | January | February | March | April | May | June | Total |
|--------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|
| Sales | \$3,383,909.82 | \$6,880,576.15 | \$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 | \$0.00 | \$100,000.00 | \$400,000.00 |
| Commission | 109,977.07 | | 316,637.83 | 156,601.04 | 148,418.49 | 277,143.89 | 1,232,397.04 |
| Marketing | 304,551.88 | | 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 | 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 |
| 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 |

Click to view Web Link, click Chapter 3, Click Web Link from left navigation, then click Spreadsheet Software below Chapter 3



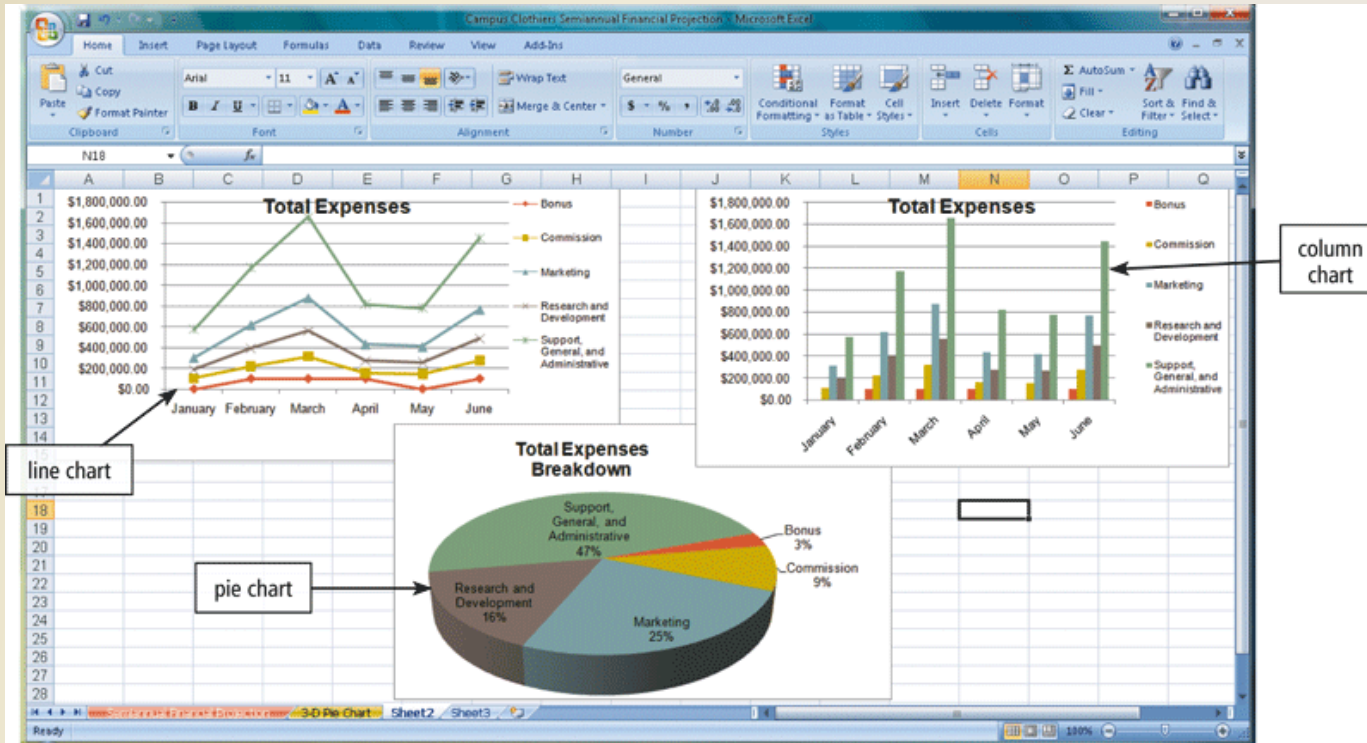
Business Software

- A function is a predefined formula that performs common calculations



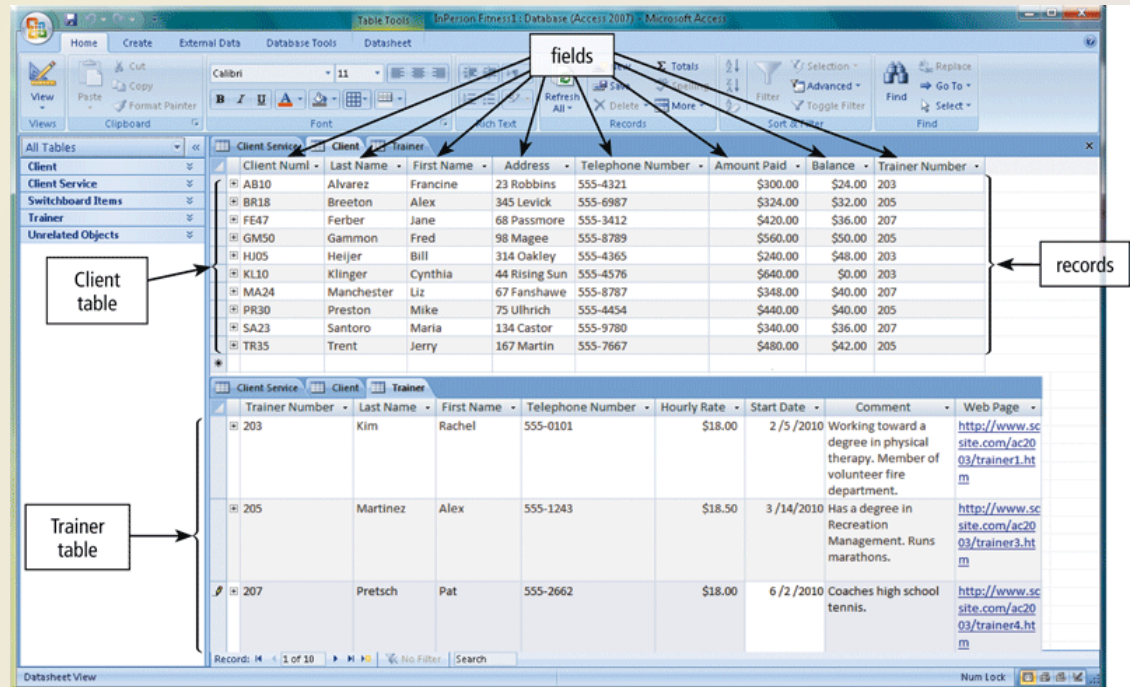
Business Software

- 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 the Microsoft Access interface with a table named 'Client' displayed in Datasheet View. The table has the following columns: Client Num, Last Name, First Name, Address, Telephone Number, Amount Paid, Balance, and Trainer Number. The data rows are as follows:

| Client Num | 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 |
| GM50 | Gammon | Fred | 98 Magee | 555-8789 | \$560.00 | \$50.00 | 205 |
| HJ05 | Heijer | 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 | Santorio | Maria | 134 Castor | 555-9780 | \$340.00 | \$36.00 | 207 |
| TR35 | Trent | Jerry | 167 Martin | 555-7667 | \$480.00 | \$42.00 | 205 |

Annotations in the image include:

- A box labeled 'fields' with arrows pointing to the column headers of the 'Client' table.
- A box labeled 'records' with arrows pointing to the data rows of the 'Client' table.
- A box labeled 'Client table' with an arrow pointing to the 'Client' table.
- A box labeled 'Trainer table' with an arrow pointing to the 'Trainer' table below.

The 'Trainer' table has the following columns: Trainer Number, Last Name, First Name, Telephone Number, Hourly Rate, Start Date, Comment, and Web Page. The data rows are:

| Trainer Number | Last Name | First Name | Telephone Number | Hourly Rate | Start Date | Comment | Web Page |
|----------------|-----------|------------|------------------|-------------|------------|---|---|
| 203 | Kim | Rachel | 555-0101 | \$18.00 | 2/5/2010 | 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 | 3/14/2010 | Has a degree in Recreation Management. Runs marathons. | http://www.site.com/ac2003/trainer3.htm |
| 207 | Pretsch | Pat | 555-2662 | \$18.00 | 6/2/2010 | Coaches high school tennis. | http://www.site.com/ac2003/trainer4.htm |

Click to view Web Link, click Chapter 3, Click Web Link from left navigation, then click Database Software below Chapter 3



Business Software

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

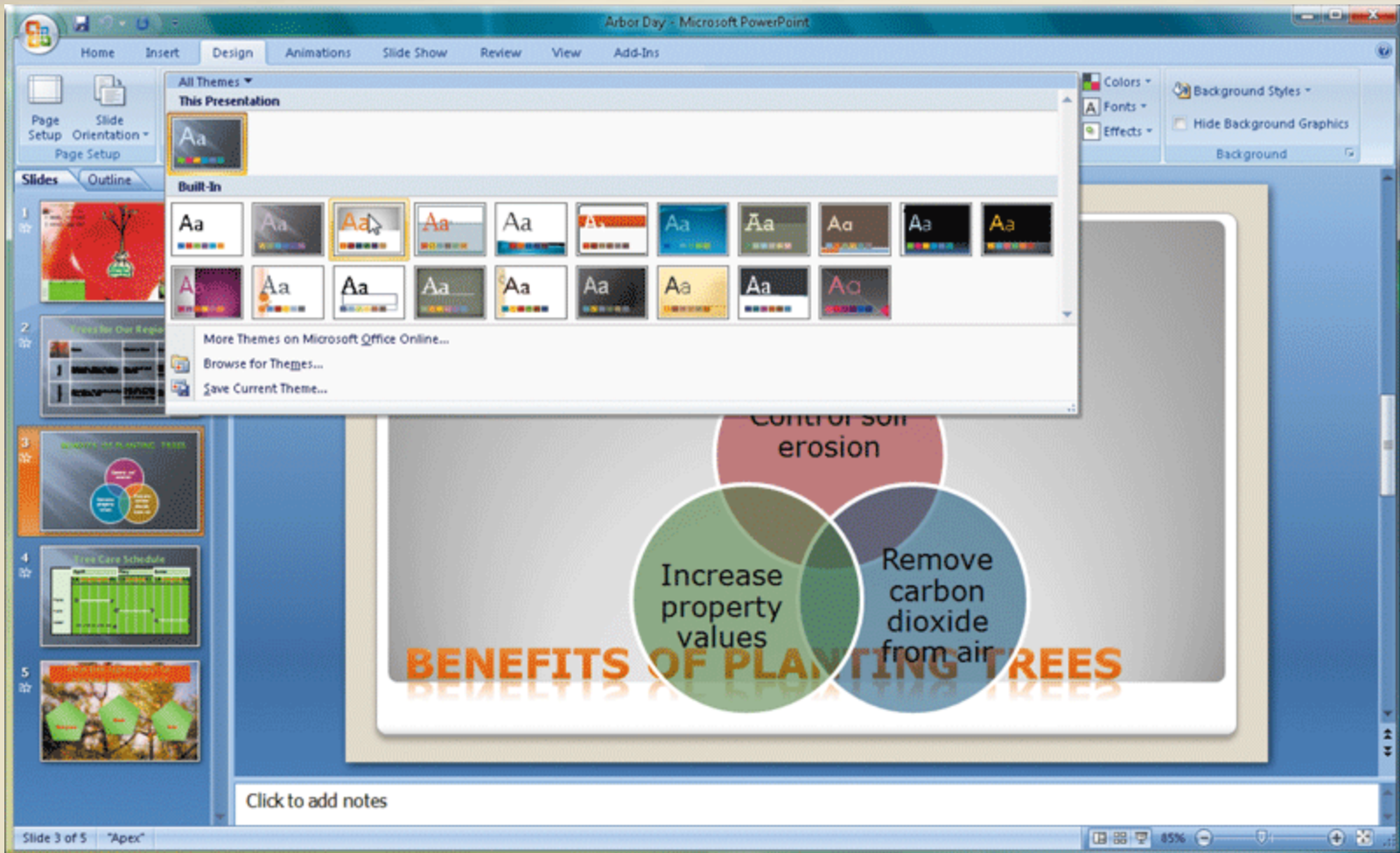


Click to view Web Link, click Chapter 3, Click Web Link from left navigation, then click Presentation Software below Chapter 3

| Name | Number of Trees | Comments | |
|-----------|--|--|---|
| Doak | Franklin's, Orange, Mountain, Kentucky, Coleridge, Redwood | One each of each species | One each of 100 each, 1000 each, 10000 each |
| Evergreen | Arbutus, Fir, Hemlock, Juniper, Pine, Spruce, Yew | North side of building to block winter wind and to save energy | Generally profit with 10000, 100000 each |

| | April | May | June |
|-------|-------|-------|----------|
| Prune | 16 | 30 10 | 31 15 30 |
| Plant | | | |
| Water | | | |

Business Software



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 shows a note-taking application window titled "Cardiovascular Systems". The main content area displays a diagram titled "Circulatory System Variations" with three columns:

- Planaria:** gastrovascular cavity. Labels: Gastrovascular cavity, Pharynx, Mouth.
- Insect:** open circulation. Labels: Tubular heart.
- Earthworm:** closed circulation. Labels: Dorsal blood vessel, Lateral hearts, Ventral blood vessel.

Handwritten red text with an arrow pointing to the Earthworm diagram says: "This will be on the test!".

Below the diagram is a section titled "Human Heart" with a list of bullet points:

- Primordium forms in cardiogenic plate at cranial end of embryo
- Angiogenic cell clusters lie in horseshoe shape
- Tube can be subdivided into

The application interface includes a top bar with "9/18 11:11 AM" and "Page Group: 1 of 2". On the right, there is a sidebar with a "Top Priority" list containing items like "Spanish Lit Paper", "Return chemistry text", "Pay fall semester tuition", and "Call Mom".

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



Click to view Web Link,
click Chapter 3, Click Web
Link from left navigation,
then click Microsoft Office
below Chapter 3

Business Software

- Scaled down versions of software are available to work with smart phones and other mobile devices



Business Software



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



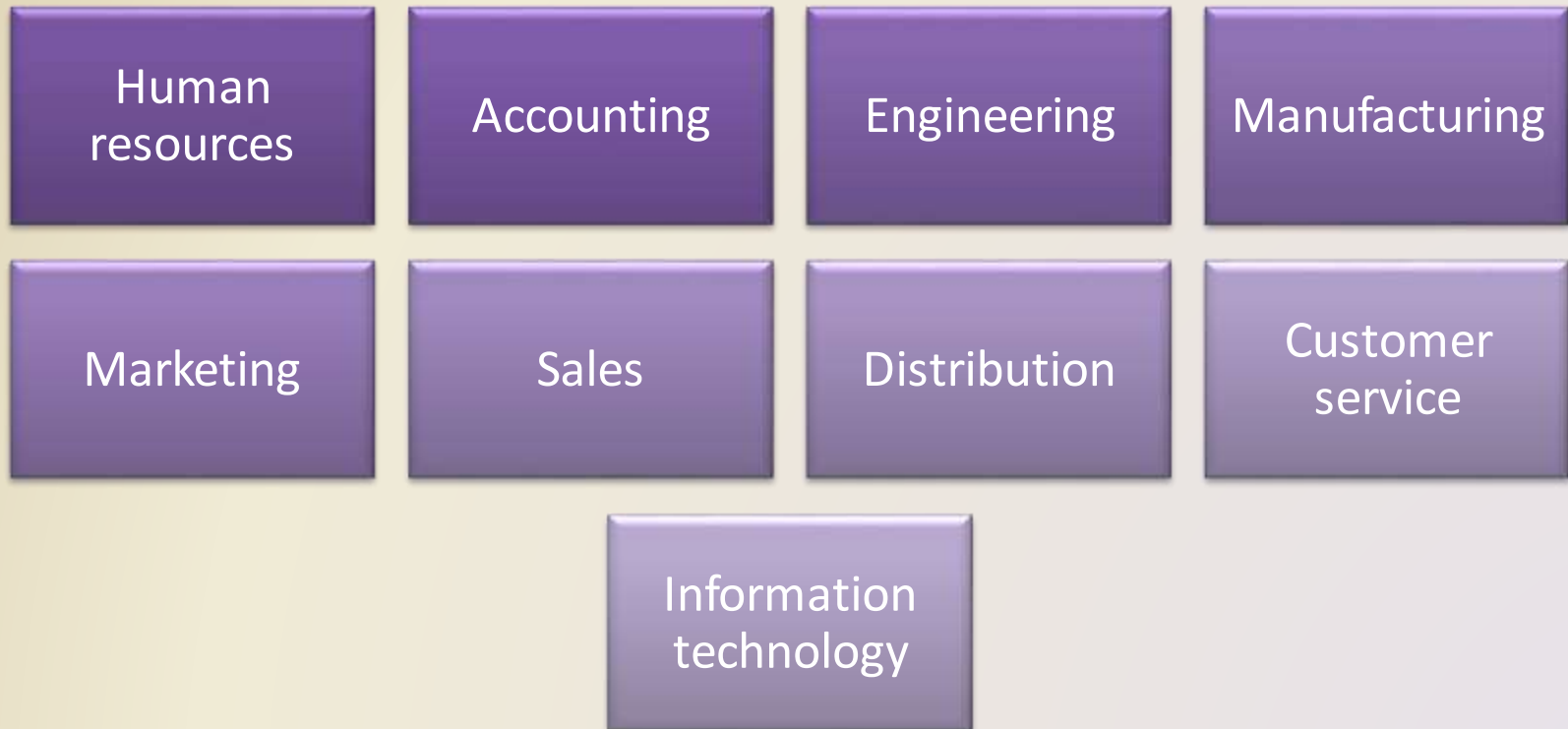
Accounting software helps companies record and report their financial transactions



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

Graphics and Multimedia Software



Computer-aided design (CAD) software



Desktop publishing software



Paint/Image editing software



Click to view Web Link, click Chapter 3, Click Web Link from left navigation, then click Graphics Software below Chapter 3

Graphics and Multimedia Software



Professional photo editing software



Video and audio editing software



Multimedia authoring software

Video: MediaCell Video Converter



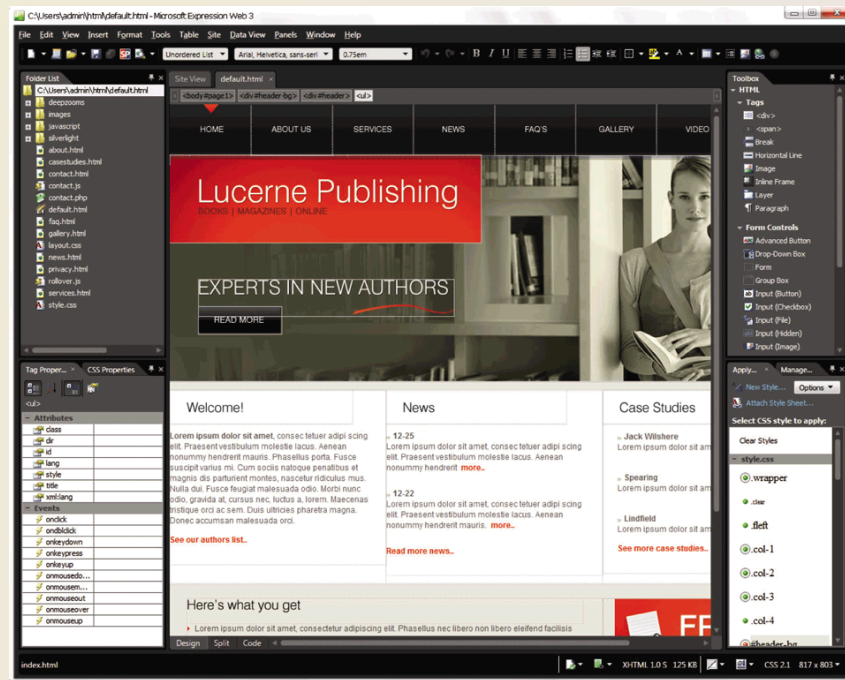
[CLICK TO START](#)

Graphics and Multimedia Software

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



Click to view Web Link, click Chapter 3, Click Web Link from left navigation, then click Web Page Authoring Software below Chapter 3



Software for Home, Personal, and Educational Use



Personal finance software



Legal software

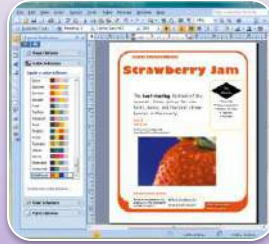


Tax preparation software



Click to view Web Link, click Chapter 3, Click Web Link from left navigation, then click Tax Preparation Software below Chapter 3

Software for Home, Personal, and Educational Use



Personal DTP software



Personal paint/image editing software



Personal photo editing software



Click to view Web Link, click Chapter 3, Click Web Link from left navigation, then click Desktop Publishing Software below Chapter 3

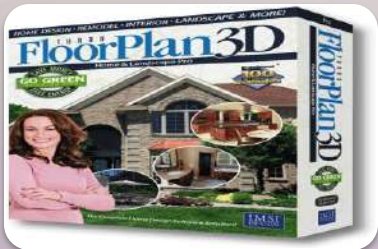
Software for Home, Personal, and Educational Use



Clip art/image gallery

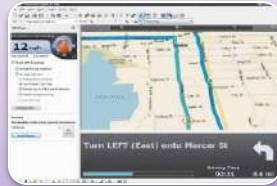


Video and audio editing software



Home design/landscaping software

Software for Home, Personal, and Educational Use



Travel and mapping software



Reference software



Educational software



Entertainment software



Click to view Web Link,
click Chapter 3, Click Web
Link from left navigation,
then click Game Software
below Chapter 3

Web Applications

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

Web Applications

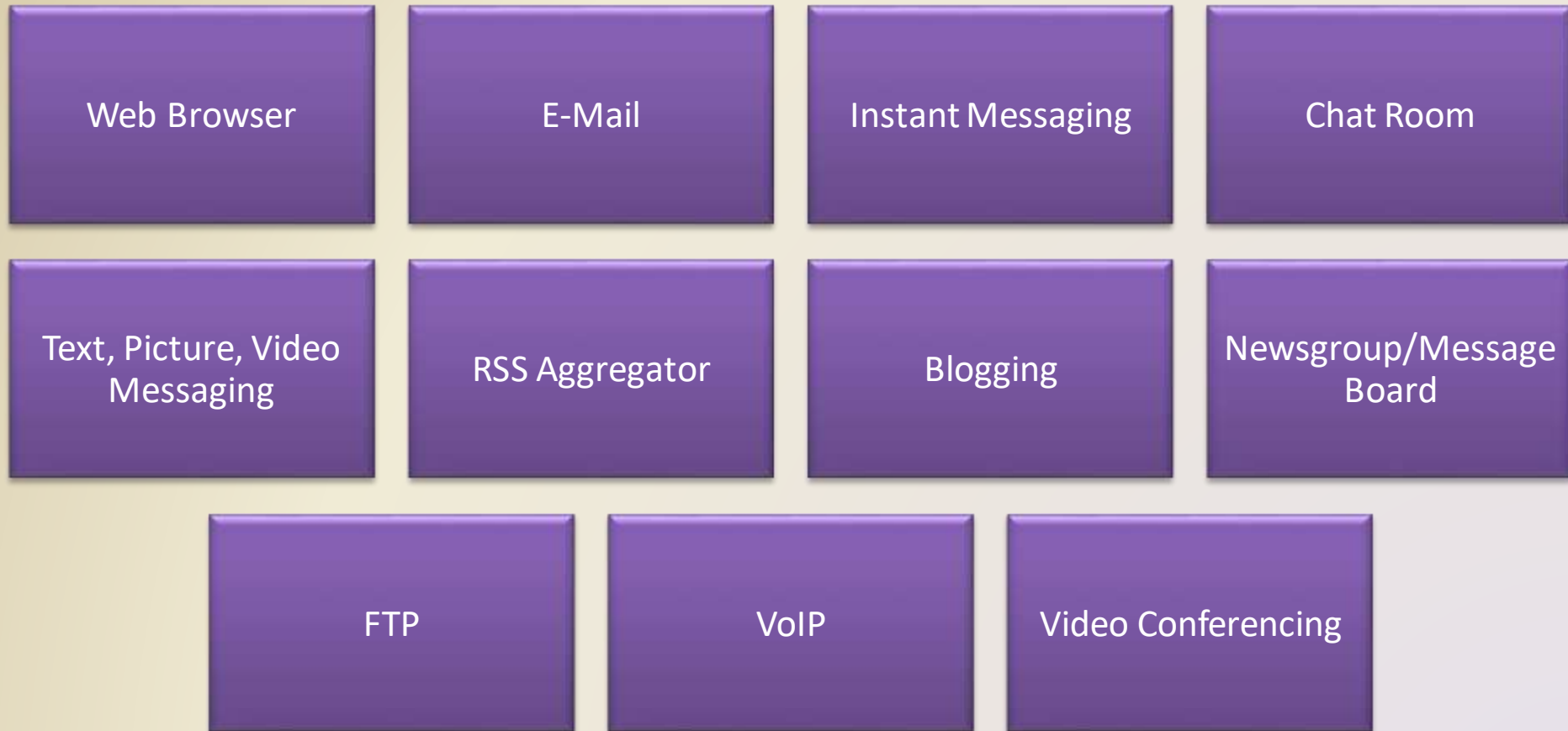
The screenshot shows a web browser window displaying a Google Docs spreadsheet. The spreadsheet is titled "campus clothiers semiannual financial projection" and contains the following data:

| | 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 | 1,319,725 | 2,683,425 | 3,799,654 | 1,879,212 | 1,781,022 | 3,325,727 | 14,788,764 |
| 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 |



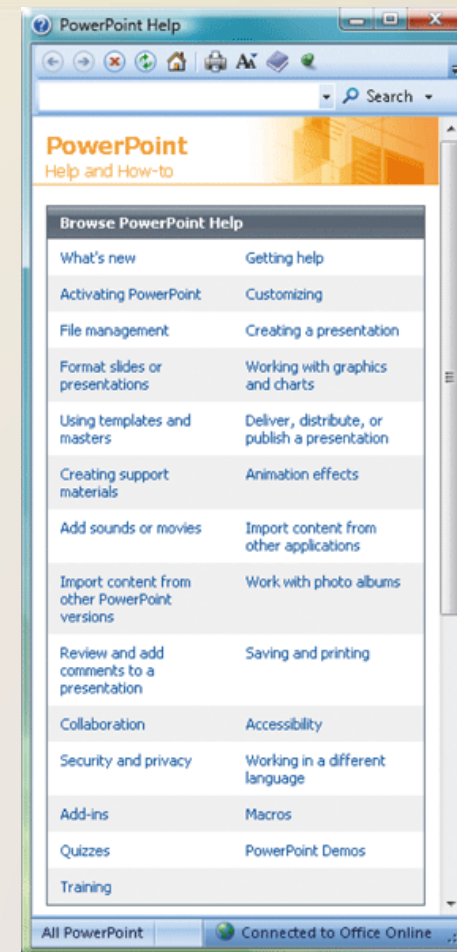
Click to view Web Link, click Chapter 3, Click Web Link from left navigation, then click Google Docs below Chapter 3

Application Software for Communications



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 viewed through a browser, with a status bar at the top right indicating "You are currently using guest access (Login)". The page layout includes a left-hand navigation menu with sections for "Online Users" (showing "None" for the last 5 minutes), "Activities" (with links for Assignments, Forums, Quizzes, and Resources), and "Administration" (with a link to "Enroll me in this course"). The main content area is titled "Topic outline" and features a "Welcome to English 9!" message with a photograph of a building. Below this, there is a "General Information" section with a link to "Course Syllabus or Overview Goes HERE" and another link for "Welcome and instructions for Visitors". A section titled "1" contains "Introductory Discussions" with links to a "Primary Document for Parenting Advice Forum" and a "Seventeenth Century *Advice to Parents*" document, followed by "Assignments and Handouts". On the right side, there is a "Calendar" for the month of September, an "Events Key" showing "Global" and "Course" events, and a "Credits" section stating the course was developed, taught, and donated by Lesli Smith, with a link to "http://moodlerooms.com/".