

Lesson 7

Software Fundamentals

Computer Literacy BASICS: A Comprehensive Guide to IC³, 3rd Edition

Objectives

- Identify the fundamental concepts of word-processing software.
- Identify the fundamental concepts of spreadsheet software.
- Identify the fundamental concepts of presentation software.
- Identify the fundamental concepts of database software.
- Identify the fundamental concepts of graphics and multimedia software.
- Identify the fundamental concepts of education and entertainment software.
- Identify the types and purposes of utility programs.
- Identify other types of miscellaneous software programs.

Vocabulary

- | | | |
|----------------------|-------------------------|----------------------------|
| • bitmapped graphics | • embedding (OLE) | • utility program |
| • cell | • presentation software | • vector graphics |
| • database | • primary key | • word-processing software |
| • datasheet | • query | • workbook |
| • field | • record | • worksheet |
| • multimedia | • spreadsheet | |
| • object | • table | |
| • object linking and | • text editor | |

Introduction

- Symbolically speaking, application software sits on _____ of system software because it cannot run _____ the operating system and system utilities.
- You can _____ application software as individual programs or as a suite.
- A _____ generally contains the following _____ types of programs: word processing, spreadsheets, presentations, and databases.

Word-Processing Programs

- You use word-processing software, like Microsoft Office Word, to create, _____, and print documents and then _____ the documents electronically.
- Word processors that support the _____ features generally are called _____ editors.
- Microsoft Word provides _____ that you can adjust and configure to suit your working _____. To display the Word Options dialog box, click the Office button and then click the Word Options button at the bottom of the menu.

Spreadsheet Concepts

- A _____ is a row-and-column arrangement of data.
- You use electronic spreadsheet software, like Microsoft Office _____, to evaluate, calculate, _____, analyze, and present numeric data.
- The _____ and columns can contain text, formulas, and numbers (_____).
- The _____ in Excel is referred to as a worksheet (or spreadsheet).
- An Excel file is called a _____.
- A _____ is the intersection of a column and a row.

- Each cell has a name, called the cell _____ (for example, A1).
- You can use _____ to emphasize specific entries, enhance the appearance of the spreadsheet, and make the information _____ to read and understand.

Presentation Concepts

- Presentation software, like Microsoft Office _____, is a computer program you use to organize and present information, normally in the form of a _____ show.
- Microsoft PowerPoint comes with _____-predesigned sets of fonts, colors, lines, fill _____, and other formatting.

Effective Presentation Guidelines:

- You can use presentation _____ to make any presentation more effective and interesting, but _____ get carried away with sounds, animation, and clip art.
- Before you create a presentation, plan and _____ the message that you want to communicate.
- Consider your audience and determine the presentation's _____, the location in which it will be given, and the equipment you will need.

Database Concepts

- _____ information management is the core of a successful business or organization and is important in your personal life.

Database Software Defined:

- A database is a collection of _____ information organized in a manner that allows for _____ search and retrieval.
- A database management system (DBMS) is a software program that is used to _____, maintain, and provide controlled access to data.

Database Structure:

- A _____ is composed of columns and rows, referred to as fields and records in Access.
- The primary key, which is assigned to a field, _____ identifies each record in a table.
- Using the data stored in the table, you can use Access to create the following objects: queries, _____, and reports.

Creating a Table:

- Creating a table is the _____ step in a three-step process and adding fields is the _____ step. The _____ step is to populate or add records to the table.
- _____ contains two basic views for working with tables—Design view and Datasheet view.

Forms:

- A form provides a convenient way to enter and view _____ in a table.
- **Queries:**
- A query enables you to _____ records that match specified criteria by providing a way for you to ask a question about the information stored in a database _____ or tables.

Reports:

- A report is a _____ object that allows you to _____, summarize, and print all or a portion of the data in a database.

Online Databases:

- Many Internet-based databases are dynamic and provide the capability for the user to _____ the content and products frequently.

Graphics and Multimedia Programs Concepts

- You use graphics and multimedia programs to create a _____ of illustrations and animation.

Drawing Programs:

- A drawing program is a _____ program that is used for creating illustrations.
- The image is saved in a _____ graphics format. This allows all individual parts of the picture to be _____, isolated, and scaled independently of the other parts.
- Images are created with a matrix of picture elements (_____) and are generated as bitmapped graphics.

Paint Programs:

- A _____ program allows the user to simulate painting on the computer through the use of a graphics _____ or a mouse.

Photo/Image Manipulation Programs:

- You use _____ editing software to edit images, _____, and logos.

Animation Programs:

- You use _____ software to create moving images and _____ graphics.

Multimedia Programs:

- Multimedia is defined as the use of _____, graphics, audio, and video in some combination to create an effective means of _____ and interaction.

Education and Entertainment Programs

- Educational and software programs are available for both children and adults. The following describes this type of software:
 - *Computer-based* _____ (CBT): Web based and/or computer-based training _____
 - *Computer games*: Single-user and multiuser _____; combines an _____ component with a game format
 - *Audio and video*: Software applications used to play _____ and video; Media Player is _____ with Windows
 - *Virtual reality*: A technology that lets users _____ with a computer-_____ environment

Utility Programs

- Utility programs help you perform computer _____ chores. Some examples are:
 - File _____ programs
 - _____, antiadware, and antispyware programs
 - Defragmentation
 - Backup program
 - Single-purpose _____ and accessories

Miscellaneous Software

- Financial and _____ programs

- _____ mail
- Chat, messaging, and _____ messaging software
- Web browser
- Computer-aided design (_____)
- Project management
- Groupware
- _____ conferencing
- Integrated programs
- Specialized software

Selecting Software:

- Select a product that is _____ for the task.

Software Integration:

- An object is the data or information that you want to _____ between the programs.
- You can insert _____ from one Office document into another Office document by copying and pasting, _____, and linking.

Summary

In this lesson, you learned:

- How to use word-processing software to create, edit, and print documents and then save the documents electronically. When creating a document, you can easily correct errors and modify data.
- A spreadsheet is a row-and-column arrangement of data. You use electronic spreadsheet software to evaluate, calculate, manipulate, analyze, and present numeric data. Calculations are updated automatically.
- A database is a collection of related information organized in a manner that provides for rapid search and retrieval. You use database software to create, maintain, and provide controlled access to data.
- A database can consist of one table or a collection of tables, which are composed of columns and rows, referred to as fields and records. The primary key, which is assigned to a field, uniquely identifies each record in a table. You can also create queries, forms, and reports using database software.
- How to use graphics and multimedia programs to create a variety of illustrations and animation. Most graphics applications fall into one of two main categories: vector or bitmap graphics.
- Educational programs include computer-based training, computer games, audio and video software, and virtual reality programs.
- Utility programs help you perform computer housekeeping chores such as managing the computer's resources and managing files.
- Miscellaneous software includes programs such as e-mail applications, Web browsers, and project management software.