

LESSON NOTES 9

Year/Level: 11 Subjects: Computer Studies

Strand:	CE 1 CE 2 Application Package
Sub-strand:	CE 11.2.1 Application Software
Content Learning Outcome:	<ul style="list-style-type: none">❖ Presentation graphics❖ Integrated packages and software suites❖ Advanced application

Lesson Notes

Presentation Graphics

- ❖ Program can display numeric data in a visual format for analysis and presentation purposes.
- ❖ These programs are often used by marketing or sales people as well as many others.
- ❖ Most commonly used presentation graphics programs are Microsoft PowerPoint, Corel Presentation and Lotus Freelance Graphics.
- ❖ Features that are common to most presentation graphics include the following: **design layout, schemes templates and Animations**

Integrated Packages and Software Suites

Integrated package

- ❖ Is a single program, which combines two or more applications programs
- ❖ An integrated package provides the functionality of a word processor, spreadsheet, database and more.
- ❖ An integrated package usually shares a common user interface and you can switch from one application to another and cut or copy data from one to another.

Advantage

Is that the cost of an integrated package is much less than the cost of purchasing a word processor, spreadsheet and database.

Disadvantage

The capabilities of each function (such as word processing) are not as extensive as in the specialized programs (such as Microsoft Word).

Software suite

- ❖ Is a collection of separate application programs bundle together and sold as a group
- ❖ The most popular software suite is Microsoft Office, which comes in different version.

Advanced Application

Advanced applications include graphics programs, audio and video, multimedia, Web authoring and artificial intelligence and virtual reality.

Graphics programs

- ❖ Advanced graphics programs are used by professionals in graphic arts.
- ❖ Three types are desktop publishers, image editors, and illustration programs.
 - Desktop publishing programs*
 - Allow one to mix text and graphics to create publications of professional quality.
 - Used by graphic artists to create brochures, newsletters, newspapers and textbooks.
 - Popular desktop publishing programs include Adobe Frame-Maker, Adobe PageMaker, Corel Ventura, and QuarkXPress.
 - Image editors*
 - Also known as **paint programs**, are used to create and to modify bitmap images files.
 - In a **bitmap file**, the image is made up of thousands of dots or pixels to represent images.
 - Popular professional image editor programs include Adobe Photoshop, Corel Photo-Paint, and Paint Shop Pro.

Illustration programs

- Also known as **draw programs**, are used to modify **vector images**.
- In a vector file, the image is composed of a collection of objects such as lines, rectangles and ovals.

Graphic suites

Is the bundling of the separate graphics programs as a group. The advantage of the graphics suites is that a large variety of graphics programs can be purchased at a lower cost.

Audio and Video

- ❖ Using audio and video editing software enables user to compile movies.

Multimedia

- ❖ *Multimedia* also called **hypermedia** is the integration of all sorts of media into one form of presentation. The media may include video, music, voice, graphics, and text.

Web Authoring

- ❖ *Web authoring* programs are typically used to create sophisticated commercial sites.
- ❖ Also known as Web page editors and HTML editors, these programs provide support for web sites design and HTML coding.
- ❖ Widely used authoring programs include Macromedia, Dreamweaver, Net Objects Fusion and Microsoft FrontPage.

Artificial intelligence (AI)

- ❖ Attempts to develop computer systems that can mimic or simulate human senses, thought processes and actions.
- ❖ Three areas which human talents and abilities have been enhanced with computerized intelligence: robotics, knowledge-based systems, and virtual reality.

Robots

are computer-controlled machines that mimic the motor activities of humans and some are used for household activities, entertainment purposes, while most are used in factories and hazardous environment to handle dangerous, repetitive tasks with high degree of precision.

Industrial Robots

- Are used in factories to perform assembly-line tasks and also capable of performing a variety of tasks.
- This includes machines which are used in automobile plants to do welding, polishing, and painting.

Mobile Robots

- Are those which act as transports and are widely used for a variety of tasks
- For example, the police and the military use them to locate and disarm explosive devices.

Humanoids

Knowledge-based systems

- ❖ Also known as expert systems are computer programs that provide advice to decision makers who would otherwise rely on human experts.
- ❖ Expert systems have been developed in areas such as medicine, geology, architecture, military science, financial analysis and nature.

Virtual reality

- ❖ Incorporates interactive sensory equipment (headgear and gloves) allowing users to experience alternative realities generated in 3-D by a computer, thus imitating the physical world.
- ❖ The headgear has earphones and three-dimensional stereoscopic screens.