Pairwork: Student A

UNIT 2

- Workgroup server
- Dual Pentium IV 1.4GHz processor
- 133MHz system bus
- 256MB ECC SDRAM (upgradable to 2GB)
- Hot plug 60GB 7200rpm LVD SCSI hard drive upgradable to 180GB of internal storage
- Dell 19" (17.9" VIS) SVGA colour monitor
- 24/52X EIDE CD-ROM drive and 3.5" 1.44MB floppy disk drive

Options

- **APC 1400 SmartUPS**
- **High performance RAID adapter with 128MB cache**
- **Hot-plug redundant power supplies**
- **3 Year Next-business-day on-site service**

UNIT 3

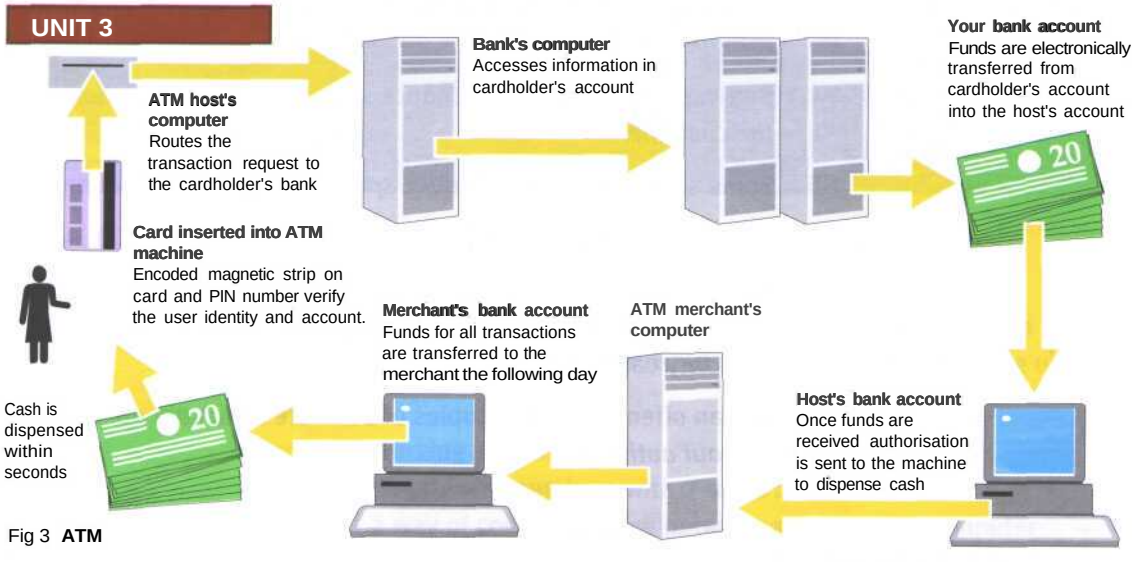


Fig 3 **ATM**

UNIT 6

Mac OS The graphically-oriented operating system used on Apple Macintosh microcomputers.

MS-DOS The most widely used operating system ever on PC-compatible microcomputers; MS-DOS has been technologically surpassed in recent years and is no longer being revised.

MVS, VM, OS/390 Operating systems used on IBM mainframes.

NetWare A widely used operating system on local area networks (LANs).

OS/2 The operating system designed for high-end PC-compatible microcomputers; was available in both desktop version and a version for network administration.

Penpoint An operating system designed for pen-based computers.

Windows NT Microsoft Windows operating system built from ideas developed in VMS and used for servers and workstations. More secure and stable than Windows 9X systems.

UNIT 8

reviews

Tomb Raider 4: The Last Revelation

Sega Dreamcast | Core Design/Eidos | ★★★

Although this is essentially the same game that recently appeared on the PlayStation, some fancy enhancements push this up to accelerated PC level. In fact, The Last Revelation is probably the best-looking version so far.

The Dreamcast remains unstretched but the visuals capture the Egyptian mood perfectly. The plot sees Lara returning to what she does best - raiding tombs in her usual physics-defying manner - but this time she stays in Egypt rather than globe-trotting.

So, what is The Last Revelation? The chances are only a few will ever find out because this is a very tricky game. You will need to prepare for periods of intense frustration and annoyance, punctuated by some superb sequences.

If only Lara would move in the direction you point. If only she jumped when you press 'jump' rather than run those fatal final steps. If only the puzzles were less obscure.

So why bother? Well, the characterisation and the storyline are of sufficient quality to encourage perseverance. Also, solving a stubborn puzzle or back-flipping over a chasm is undeniably good fun. This is the best version yet and will do for now, but a radical overhaul is needed before Lara returns again.

Greg Howson

UNIT9

Explain to your partner with the help of these notes what DVD disks are, how DVD disks store such large quantities of information and how that information is read.

DVD = Digital Versatile Disk

- can hold complete movie
- like CD in size and thickness
- but CD drives use red laser light, DVD drives use blue
- blue laser has shorter wavelength therefore data can be denser

DVDs can be double-sided

- each side can have two layers
- top layer 4.7GB, bottom layer 3.8GB, total capacity = 17GB
- data transfer rate twice rate of CD-ROM

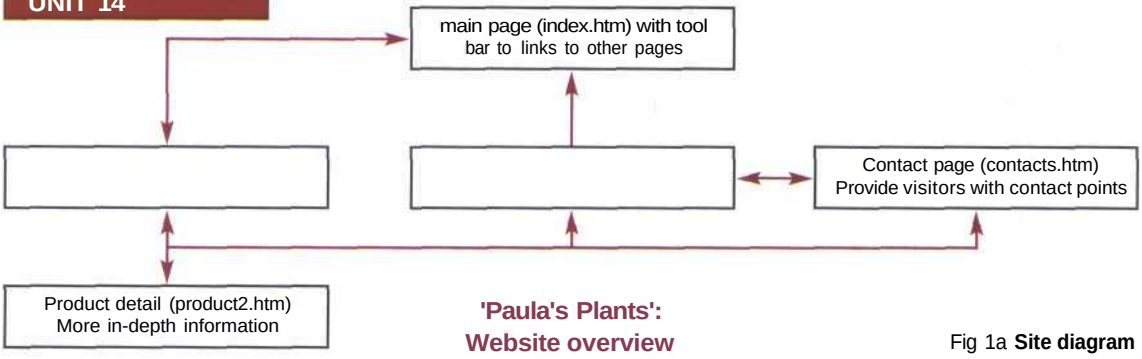
UNIT 11

Asynchronous transmission

This method, used with most microcomputers, is also called start-stop transmission. In asynchronous transmission, data is sent one byte (or character) at a time. Each string of bits making up the byte is bracketed, or marked off, with special control bits. That is, a 'start' bit represents the beginning of a character, and a 'stop' bit represents its end. As a means of checking that the whole character has been transmitted, an error check bit is generated immediately after each character.

Transmitting only one byte at a time makes this a relatively slow method. As a result, asynchronous transmission is not used when great amounts of data must be sent rapidly. Its advantage is that the data can be transmitted whenever it is convenient for the sender.

UNIT 14



'Paula's Plants': Website overview

Fig 1a **Site diagram**

UNIT 15

Problems

1 You want to brighten up your website.
2 You would like to reserve seats on the London to Edinburgh train.
3 You want some help with a project on computer security.
4 You're feeling a bit flabby and would like to take up marathon running. How can you prepare for this?

Weather Reports

Several weather-related sites can give you up-to-the-minute weather reports and precipitation radar for your city or local region or for an area in which you'll be travelling. You'11 also find extended forecasts. Some weather sites provide safety tips for dealing with severe weather.

www. weather.com

Comic Strips

Evervone needs a laugh from time to time, and few things can put a smile on your face more quickly than a classic comic strip. You can check out dozens of your favourite comics and, in some cases, even send a comic strip to a friend.

www.unitedmedia.com
www.uexpress.com

Maps

Websites can give you detailed street maps for major cities, or they can give you a map of Interstate highways. Some sites can help you find a particular address or suggest the best method of travel to your destination. You can also print maps at many websites.

www.mapblast.com

UNIT 16

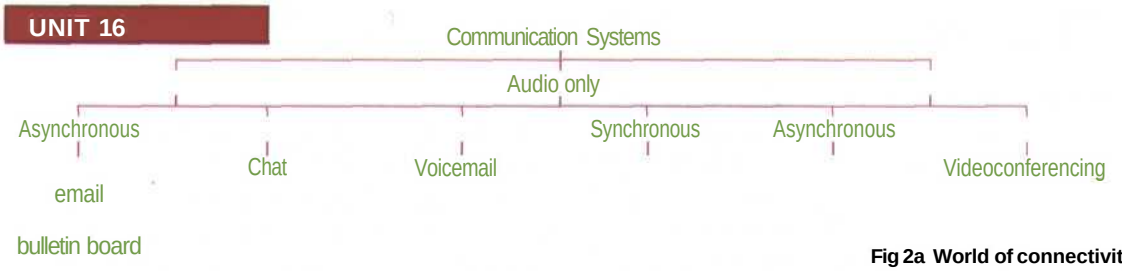


Fig 2a World of connectivity

UNIT 17

Problem A

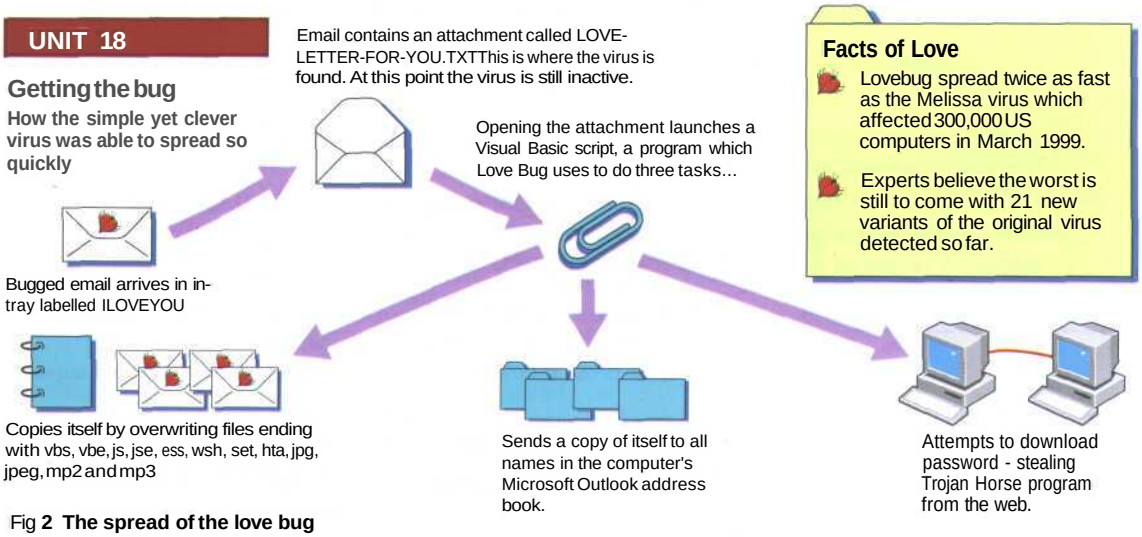
Monitor power light flashing but display screen is completely blank.

SYSTEM	SOLUTION	
Make and model Dell, GS205X **Service Number** X3457 **Processor** Pentium IV **Memory** 256MB **O.S.** Windows XP **Configuration** standalone	**INSTRUCTIONS**	**RESULT**
	Check to see if the computer system unit power light comes on when the computer is switched on.	Computer power seems to be O.K.
	Check that the monitor data cable is connected correctly to the VGA port at the rear of the computer.	Data cable is plugged in O.K.
	Check that the graphics expansion card is installed properly by: • Switching off the computer. • Disconnecting the power cable. • Opening the computer case by removing the four securing screws. • Inspecting the graphics card to see if it is seated properly in the expansion slot.	Graphics card is loose.
	Correct the fault and check the system by: • Pushing the graphics card fully into the expansion slot. • Replacing the casing. • Reconnecting the power supply. • Switching on the computer and checking that the monitor is functioning correctly.	Monitor functioning O.K.

UNIT 18

Getting the bug

How the simple yet clever virus was able to spread so quickly



Facts of Love

- Lovebug spread twice as fast as the Melissa virus which affected 300,000 US computers in March 1999.
- Experts believe the worst is still to come with 21 new variants of the original virus detected so far.

Fig **2 The spread of the love bug**

UNIT 19

Incremental backup

An incremental backup includes only files with their archive bit on. The archive bit indicates whether a file has been backed up since it was last changed. Whenever you back up a file in Windows, the operating system automatically sets the archive bit to 0 (off). 1 (on) indicates a file has not been backed up since it was last worked on. This way, as you append a series of incrementals to your full backup, each contains only those files that are new or have changed since your last backup. This keeps your backup set up to date using a minimum of time and tape.The disadvantage is that it may need many tapes to fully restore the hard disk.

UNIT 21

Java Developed by Sun Microsystems in the mid-1990s, Java is widely used for developing interactive applications for the Internet.

Ada Named after Countess Ada Lovelace (one of the first programmers); it is a superset of Pascal. Ada is a structured language developed and used by the US Department of Defense.

Logo Logo is an easy-to-use language that is primarily used to teach children how to program.

LISP Stands for LISt Processor; LISP is designed to process non-numeric data - that is, symbols such as characters or words. It is used to develop applications in the field of artificial intelligence.

FORTRAN Stands for FORmula TRANslator; FORTRAN was designed by scientists in 1954 and is oriented toward manipulating formulas for scientific, mathematical, and engineering problem-solving applications.

HTML Stands for HyperText Markup Language; HTML is a page-description language used to prepare a text for display in a browser program.

Peri Its name comes from Practical Report and Extraction Language. It first appeared in 1987 as a Unix-based tool for producing reports but is now widely used for creating interactive webpages.

Prolog Stands for PROgramming LOGic; Prolog is used to develop applications in the field of artificial intelligence. It is a popular tool for natural-language programming.

UNIT 22

1 Systems Analyst

Studies methods of working within an organisation to decide how tasks can be done efficiently by computers. Makes a detailed analysis of the employer's requirements and work patterns to prepare a report on different options for using information technology. This may involve consideration of hardware as well as software. Either uses standard computer packages or writes a specification for programmers to adapt existing software or to prepare new software. May oversee the implementation and testing of a system and acts as a link between the user and the programmer.

2 Software Engineer/Designer

Produces the programs which control the internal operations of computers. Converts the system analyst's specification to a logical series of steps. Translates these into the appropriate computer language. Often compiles programs from libraries or sub-programs, combining these to make up a complete systems program. Designs, tests and improves programs for computer-aided design and manufacture, business applications, computer networks and games.

3 Computer Services Engineering Technician

Can be responsible for installation, maintenance or repair of computers and associated equipment. Installs hardware, ranging from personal computers to mainframe machines, and tests by running special software. Some technicians carry out routine servicing of large mainframe systems, aiming to avoid breakdowns. Others are called in to identify and repair faults as quickly as possible usually by replacing faulty parts. Work can also involve upgrading machines usually on customers' premises.

4 Network Support Person or Computer Engineer: Network Support

Maintains the link between PCs and workstations connected in a network. Use telecommunications, software and electronic skills and knowledge of the networking software to locate and correct faults. This may involve work with the controlling software, on the wiring, printed circuit boards, software or microchips on a file server, or on cables either within or outside the building.