Pairwork: Student B

UNIT 2

- Portable
- Mobile Pentium III Processor 850MHz
- 100 MHz system bus
- 20GB EIDE Hard Disk
- 128MB SDRAM
- Modular 16/40X DVD Drive and 3.5" Floppy Drive
- High Performance 256-bit 32MB Graphics
- 15" SXGA (1400 x 1050) High Resolution TFT Display
- Microsoft Windows 2000

Options
- Upgrade to 256MB RAM
- 56Kbps PCMCIA Modem
- 3 Year International Next-business-day on-site service
- Spare lithium ion battery
- 10/100 Ethernet Port Replicator

UNIT 3

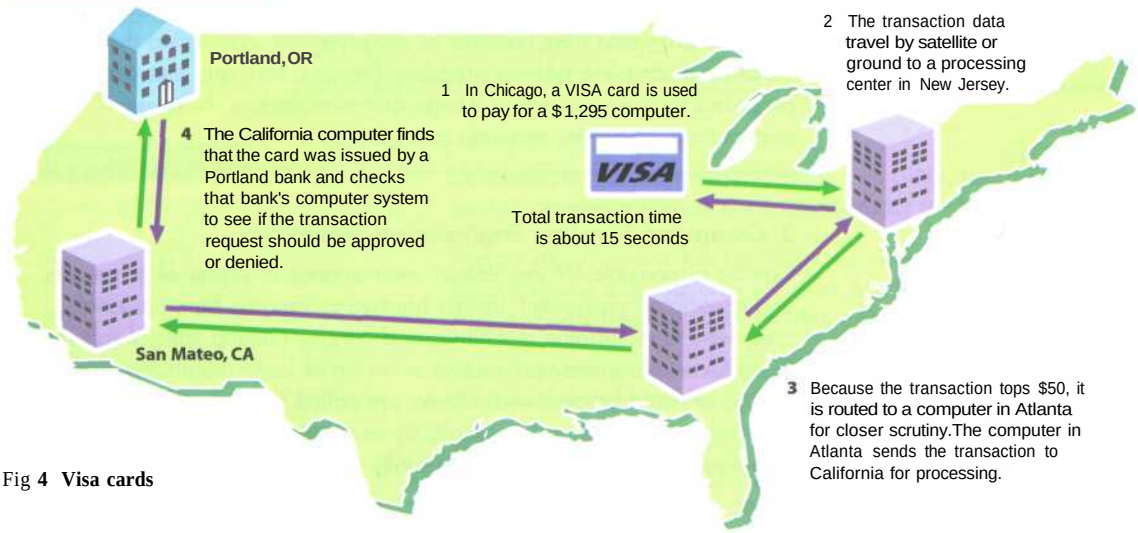


Fig **4** **Visa cards**

UNIT6

PC-DOS An operating system similar to MS-DOS that has been widely used on IBM microcomputers.

Unix An operating system used on all sizes of computers, but mostly large ones; available in many versions, such as Linux, HP-UX, Xenix, Venix, Ultrix, A/UX, AIX, Solaris, and PowerOpen.

VAX/VMS An operating system used by DEC VAX minicomputers.

Windows *3.x** Refers to the Windows 3.0 and Windows 3.1 operating environments, and to variants such as Windows for Workgroups 3.11; each of these is a graphically-oriented shell program for Microsoft's MS-DOS operating system.

Windows 9X The operating system that replaced MS-DOS and Windows 3.1, combining the functionality of both programs and much more into a single package; two versions were produced, Windows 95 and Windows 98, although various editions were made available.

Windows 2000 An operating system targeted primarily to corporate client-server applications; available in both a desktop version and a version for network administration.

*Not a full operating system

UNIT 8

reviews

Sim City 3000: World edition

PC | Maxis/Electronic Arts | ★★★★

The basic game is the same as it was when it first appeared on the Commodore 64: zone land, build roads, set taxes and let simulated citizens build the city of your dreams or nightmares. A huge amount of detail has been added since then, and the World edition integrates hundreds of new buildings, a building editor, a terrain editor, and a scenario editor.

You no longer have to build American cities, and you can quickly flip them into a European (German) or Asian (Korean/Japanese) style. You can add landmarks such as the Brandenburg Gate and the EiffelTower.

The amount of detail in the 3D buildings, cars and pedestrians is stunning. A new website is introduced also (www.simcity.com). There you can download even more buildings and swap files, buildings, city photos and scenarios with fellow fans.

If you gave up on SC2000, this will restore your faith; and if you haven't played Sim City before, this is a good place to start.

Jack Schofield

UNIT9

Explain to your partner with the help of these notes what MPEG Video is and how it operates.

MPEG = method of compressing/decompressing video signals to reduce size by up to 95%

- video sequences stored in series of frames
- intraframe (I-frame) every 1/3rd second has most important picture information
- between I-frames are predicted frames (P-frames) and bidirectional frames (B-frames)
- P- and B-frames store changes only
- P- and B-frames preserve video quality between I-frames
- Human eye can't detect information discarded

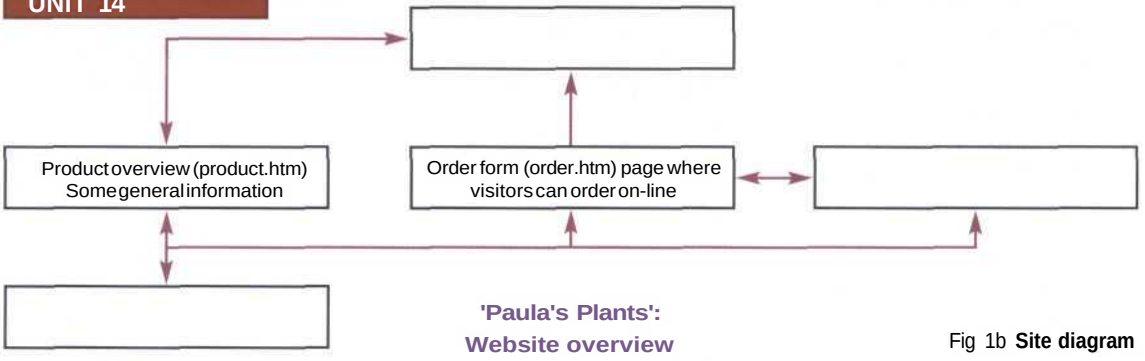
UNIT 11

Synchronous transmission

Synchronous transmission sends data in blocks of characters. Start and stop bit patterns, called synch bytes, are transmitted at the beginning and end of the blocks. These start and end bit patterns synchronise internal clocks in the sending and receiving devices so that they are in time with each other. Error check bytes are included immediately after each block of characters to ensure that the whole sequence of characters has been correctly transmitted.

This method is rarely used with microcomputers because it is more complicated and expensive than asynchronous transmission. It also requires careful timing between sending and receiving equipment. It is appropriate for computer systems that need to transmit great quantities of data quickly.

UNIT 14



'Paula's Plants': Website overview

Fig 1b **Site diagram**

UNIT 15

Problems

1 You would like to cheer up a friend.
2 You're going to rent a car in the USA and travel from Miami to New Orleans. You would like to plan a route.
3 You're going walking in the mountains this weekend. You would like to know what the chances are of rain.
4 You want to forward a video email attachment you've received to a friend and it won't go.

Travel Research

Whether you're looking for the best airline and hotel fares or researching the best travel destinations, the Web can help. Several websites also offer tips for travelling by aeroplane or with small children. Some allow you to book train tickets.

www.expedia.com
www.concierge.com
www.thetrainline.co.uk

Neon City

If you have a webpage that's looking a little dull, you might want to add some neon signs, words or tubes. Neon City produces a variety of cool neon clipart that you are free to use on your personal webpage so long as you link to the page you got the design from.

www.neoncity.co.uk

Exercise information

If your current exercise program doesn't seem to be working, consult the Web. While Web surfing doesn't qualify as exercise, you can use the Web to find information on an exercise program you'll enjoy. Some websites also help to track your progress.

www.fitnesslink.com
www.runnersworld.com

UNIT 16

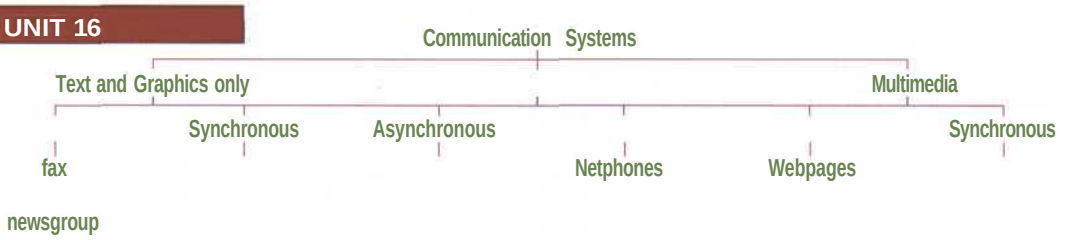


Fig 2b World of connectivity

UNIT 17

Problem B

The monitor display screen is flickering.

SYSTEM	SOLUTION	
Make and model **Compaq, CV602** **Service Number** **8JD3** **Processor** **Pentium III** **Memory** **128MB** **O.S.** **Windows 2000** **Configuration** **Windows 2000 network**	**INSTRUCTIONS** Change the monitor refresh rate setting by: • Right clicking with the mouse on the desktop • Selecting 'Properties-Settings' • Clicking on the Advanced button • Choosing the 'Monitor' tab. • Making sure that the 'Hide modes that this monitor cannot display' checkbox is ticked. • Selecting a higher refresh rate (i.e. 75Hz or more). • Rebooting the computer. • Checking that the monitor is functioning properly.	**RESULT** Monitor no longer flickering.

UNIT 18

Stealing by stealth

How a Trojan may have penetrated Microsoft's defences

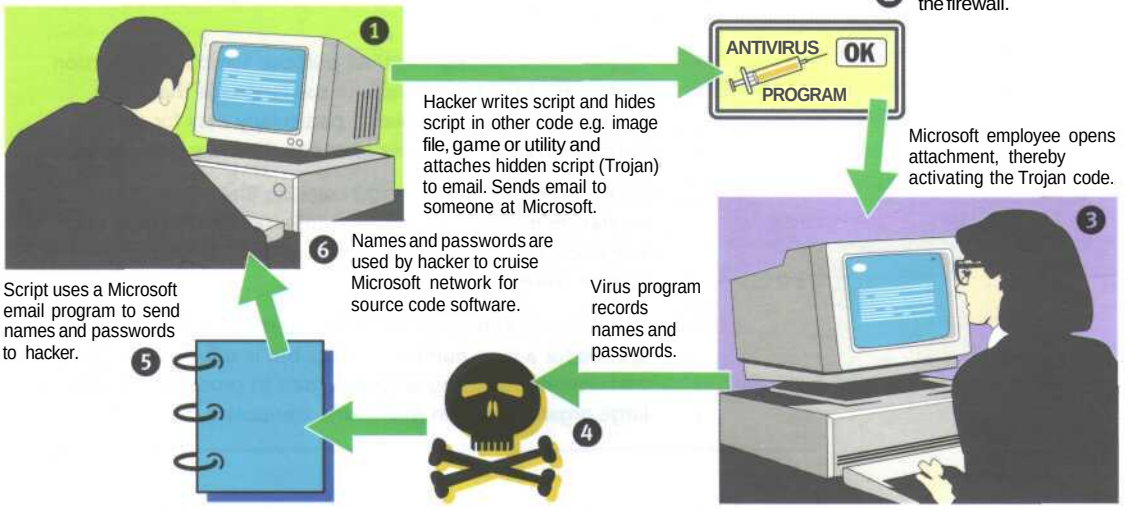


Fig 3 Stealing by stealth

UNIT 19

Differential backup

A differential backup doesn't set the archive bit to the off position after backing up the file. In a full backup 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. Thus, if you do a series of differentials, each backs up all the files created or modified since the last full backup, not just those that have changed. Normally, you keep only the most recent differential backup on hand. This minimises the size of your backup set, since it will never contain more than two copies of any file — one in the full set and one in the differential. This method is mostly used when you're backing up to disks. The downside is that it won't back up files that were created and deleted before the differential backup.

UNIT 21

XML Stands for extensible Markup Language; XML is a metalanguage for creating webpages with meaningful data that can be used by a variety of programs.

C++ C++ is an object-oriented superset of C which combines the best features of a structured high-level language and an assembly language - that is, it's relatively easy to code and uses computer resources efficiently. C was originally designed to write systems software but is now considered a general-purpose language.

Visual Basic BASIC stands for Beginners' All-purpose Symbolic Instruction Code; Visual Basic is a simple-to-use language that has a graphical interface. It makes it particularly easy for an inexperienced programmer to create database programs.

Pascal Pascal, named after the mathematician Blaise Pascal, was created primarily to fill the need for a teaching vehicle that would encourage structured programming. It is often used in college computing courses.

COBOL Stands for COmmon Business-Oriented Language; it has been around for a long number of years but is still an important transaction-processing language used to process the records of large organisations on mainframe computers.

UNIT 22

1 Computer Salesperson

Advises potential customers about available hardware and sells equipment to suit individual requirements. Discusses computing needs with the client to ensure that a suitable system can be supplied. Organises the sale and delivery and, if necessary, installation and testing. May arrange support or training, maintenance and consultation. Must have sufficient technical knowledge.

2 Applications Programmer

Writes the programs which enable a computer to carry out particular tasks. May write new programs or adapt existing programs, perhaps altering computer packages to meet the needs of an individual company. When writing a new program, follows a specification provided by a systems analyst. Devises a series of logical steps and converts these to the appropriate computer language. Checks programs for faults and does extensive testing.

3 Systems Support Person

Systems support people are analyst programmers who are responsible for maintaining, updating and modifying the software used by a company. Some specialise in software which handles the basic operation of the computers. This involves use of machine codes and specialised low-level computer languages. Most handle applications software. May sort out problems encountered by users. Solving problems may involve amending an area of code in the software, retrieving files and data lost when a system crashes and a basic knowledge of hardware.

4 Hardware Engineer

Researches, designs and develops computers, or parts of computers and the computerised element of appliances, machines and vehicles. Also involved in their manufacture, installation and testing. May specialise in different areas: research and development, design, manufacturing. Has to be aware of cost, efficiency, safety and environmental factors as well as engineering aspects.