

4

Basic software

Unit	page
13 The operating system (OS)	63
14 Word processing (WP)	68
15 Spreadsheets and databases	73

Sales presentation

Learning objectives

In this module, you will:

- learn about the function of the operating system.
- learn about the features of a graphical user interface, or GUI.
- practise using the correct determiners with countable and uncountable nouns.
- learn how to summarize a written text.
- learn about the basic features and applications of word processors.
- learn how to give and follow instructions.
- study the basic features and applications of spreadsheets and databases.
- practise forming and pronouncing plurals.

GUI operating systems

The term **user interface** refers to the standard procedures that the user follows in order to interact with a computer. In the late 1970s and early 80s, the way users accessed computer systems was very complex. They had to memorize and type a lot of commands just to see the contents of a disk, to copy files or to respond to a single prompt. In fact, it was only experts who used computers, so there was no need for a user-friendly interface.

In 1984, Apple produced the Macintosh, the first computer with a mouse and a **graphical user interface (GUI)**. Macs were designed with one clear aim: to facilitate interaction with the computer. A few years later, Microsoft launched Windows, another operating system based on graphics and intuitive tools. Nowadays, computers are used by all kinds of people, and as a result there is a growing emphasis on accessibility and user-friendly systems.

A **GUI** makes use of a **WIMP** environment: **w**indows, **i**cons, **m**enus and **p**ointer. The background of the screen is called the **desktop**, which contains labelled pictures called **icons**. These icons represent **files** or **folders**. Double-clicking a folder opens a window which contains **programs**, **documents**, or more nested folders. When you are in a folder, you can launch a program or document by double-clicking the icon, or you can drag it to another location. When you run a program, your PC opens a window that lets you work with different tools. All the programs have a high level of consistency, with similar toolbars, menu bars, buttons and dialog boxes. A modern OS also

provides access to networks and allows multitasking, which means you can run several programs – and do various tasks – at the same time.

The most popular operating systems are:

- The **Windows** family – designed by Microsoft and used on most PCs. The most recent version is Windows Vista.
- **Mac OS** – created by Apple and used on Macintosh computers.
- **Unix** – a multi-user system, found on mainframes and workstations in corporate installations.
- **Linux** – open-source software developed under the GNU General Public License. This means anybody can copy its source code, change it and distribute it. It is used in computers, appliances and small devices.
- **Windows Mobile** – used on most PDAs and smartphones (PDAs incorporating mobile phones).
- **Palm OS** – used on Palm handheld devices.
- **RIM** – used on BlackBerry communication devices. Developed by Research In Motion.
- The **Symbian OS** – used by some phone makers, including Nokia and Siemens.

These computer platforms differ in areas such as device installation, network connectivity or compatibility with application software.

D Translate these terms and expressions into your own language. Use a dictionary or the Internet to help you.

- 1 user interface (line 1) _____
- 2 procedures (line 2) _____
- 3 commands (line 6) _____
- 4 tools (line 16) _____
- 5 desktop (line 21) _____
- 6 nested folders (line 25) _____
- 7 launch a program (line 26) _____
- 8 source code (line 45) _____

E Label the interface features (a–j) on the screenshot of Apple's Mac OS X operating system with words in bold from this list.

- **desktop**: the background screen that displays icons and folders
- **window**: a scrollable viewing area on screen; it can contain files or folders
- **icon**: a picture representing an object; for example, a **document**, **program**, **folder** or **hard drive icon**
- **folder**: a directory that holds data, programs and other folders
- **menu bar**: a row of words that open up menus when selected
- **drop-down (pull-down) menu**: a list of options that appears below a menu item when selected
- **scroll bar**: a horizontal or vertical bar that is clicked and dragged in the desired direction
- **dock**: set of icons at the bottom of the screen that give you access to the things you use most



F **Compare the Mac OS X user interface with a Windows or Linux interface. What are the similarities and differences? Which features do you prefer from each interface?**

3 Windows Vista

A **Listen to a podcast interview with Bill Thompson, a program developer, and answer these questions.**

- 1 Why is Windows so popular? Give two reasons.
- 2 Which Windows Vista edition is aimed at high-end PC users, gamers and multimedia professionals?



Windows Vista



B Listen again and complete this fact file.

Windows Vista editions	Other features	Internet and security	Windows programs
(1) _____ is designed for users with basic needs, such as email and internet access.	The user interface has been redesigned with new icons and a new (4) _____.	Internet Explorer is more reliable and secure.	The most popular is still (8) _____, a suite that includes the (9) _____, Word; an email program; the Excel spreadsheet program; and the (10) _____ program, PowerPoint.
Home Premium is for advanced home computing and (2) _____.	It offers support for the latest technologies, from DVD creation to (5) _____.	The Security Centre includes an (6) _____ program called Windows Defender, and a firewall that protects your computer from (7) _____.	
The Business edition is ideal for (3) _____.			
The Ultimate edition is the most complete.			

4 Language work: countable and uncountable nouns

A Look at the HELP box and decide if these nouns from the fact file in 3B are countable, uncountable or either, depending on the context. Write C, U, or C and U.

user _____ email _____ computing _____
 edition _____ entertainment _____ interface _____
 icon _____ technology _____ security _____ spyware _____

HELP box

Countable and uncountable nouns

- Countable nouns are people or things that we can count. They have a singular and a plural form (e.g. **file**, **program**, **system**, **application**).
- Uncountable nouns are things that we can't count. They have no plural form (e.g. **software**, **music**, **robotics**, **multimedia**, **networking**, **storage**).
*A lot of **software** these days is open-source.*
Not: *A lot of **softwares** these days **are** open-source.*
- Some words are countable in many languages but uncountable in English, and are used with a singular verb (e.g. **advice**, **damage**, **equipment**, **furniture**, **research**, **news**, **progress**, **homework**).
*The **advice** he gave me **was** very useful.*
- Countable nouns must have a determiner (**a**, **the**, **my**, **this**, etc.) in the singular, although this is not necessary in the plural.

*I deleted **the file** yesterday.*

*I lost more than 300 **files** when my computer crashed.*

We use **a** before a consonant sound and **an** before a vowel. The definite article **the** means you know which one/ones I mean.

*An **icon** is a small graphic.*

*The **icons** on the toolbar are used to ...*

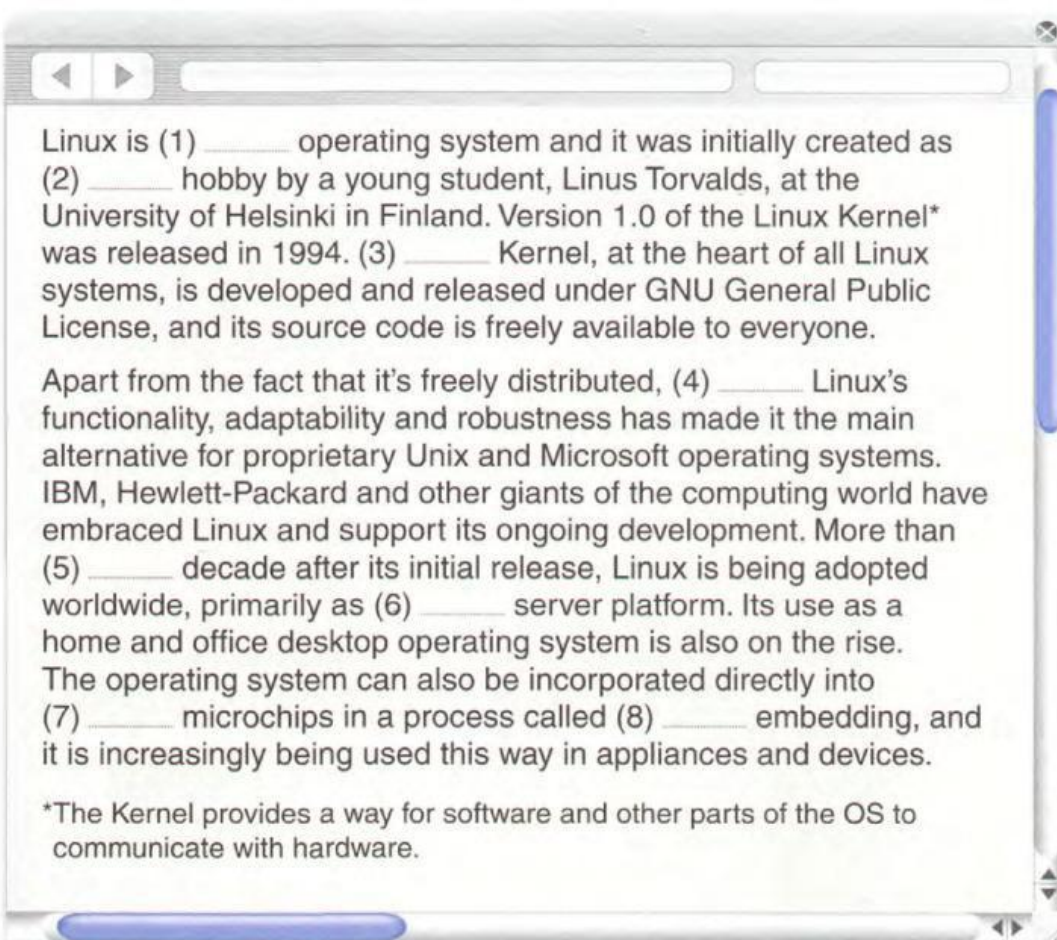
- We don't use **a/an** with uncountable nouns.
Not: *a **robotics***
- We don't use **the** in generalizations with uncountable nouns or plural countable nouns.
*I like **music**.*
Not: *I like **the music**.*
***Computer programs** are expensive.*
Not: ***The computer programs** are expensive.*
- Countable and uncountable nouns take different determiners.

Many, **few**, **a few** only go with countable nouns.

*There are **many versions** of Windows Vista.*

Much, **little**, **a little**, **a great deal of** only go with uncountable nouns.

*I have **a little time** free this afternoon if you want to meet.*

B Complete this text with *a, an, the* or nothing.


Linux is (1) _____ operating system and it was initially created as (2) _____ hobby by a young student, Linus Torvalds, at the University of Helsinki in Finland. Version 1.0 of the Linux Kernel* was released in 1994. (3) _____ Kernel, at the heart of all Linux systems, is developed and released under GNU General Public License, and its source code is freely available to everyone.

Apart from the fact that it's freely distributed, (4) _____ Linux's functionality, adaptability and robustness has made it the main alternative for proprietary Unix and Microsoft operating systems. IBM, Hewlett-Packard and other giants of the computing world have embraced Linux and support its ongoing development. More than (5) _____ decade after its initial release, Linux is being adopted worldwide, primarily as (6) _____ server platform. Its use as a home and office desktop operating system is also on the rise. The operating system can also be incorporated directly into (7) _____ microchips in a process called (8) _____ embedding, and it is increasingly being used this way in appliances and devices.

*The Kernel provides a way for software and other parts of the OS to communicate with hardware.

5 Writing a summary

Summarize the text on page 64 in 90–100 words. Follow these steps:

- 1 Read the text again.
- 2 Underline the relevant information in each paragraph.
- 3 Make notes about the main points. Leave out details such as examples.
- 4 Make sentences from the notes and link the sentences with connectors (*and, but, because, therefore, etc.*).
- 5 Write your first draft.
- 6 Improve your first draft by reducing sentences. For example:
 - Cut out unnecessary phrases
Macs were designed ~~with one clear aim~~ to facilitate interaction with the computer.
 - Omit qualifying words (adjectives or modifying adverbs)
very complex
 - Transform relative clauses into -ing participle clauses
Double-clicking a folder opens a window which contains programs, documents or ...
*Double-clicking a folder opens a window **containing** programs, documents or ...*
- 7 Write the final version of your summary. Don't forget to check the spelling and grammar.