English for Computer Science and Engineering

Unit 13
 Platforms: Homes for Software

<table>
<thead>
<tr>
<th>English</th>
<th>Arabic</th>
<th>French</th>
</tr>
</thead>
</table>
| specifically | مخصوصاً، به ویژه | مناسب
| particularly | معمولی | مناسب
| typical | عامی | عمومی
| native | متولد، موجود، محلی | خانوادگی
| emulate | تقلید کردن | تقلید
| compatibility | همبستگی | سازگاری
| expertise | تخصص | خبره
| specialist | تخصص دار | متخصص
| insight | سنجش، درک | بینش، بصیرت
| era | دوره | عصر
| obsolete | نهایتاً در کار نیست | منسوخ
## Platforms: Homes for Software

<table>
<thead>
<tr>
<th>English</th>
<th>English</th>
<th>Persian</th>
</tr>
</thead>
<tbody>
<tr>
<td>conform to</td>
<td>follow, match, fit</td>
<td>پیروی کردن، مطابقت داشتن</td>
</tr>
<tr>
<td>fleet</td>
<td>collection</td>
<td>ناوگان</td>
</tr>
<tr>
<td>entire</td>
<td>whole</td>
<td>تمام، کل</td>
</tr>
<tr>
<td>commit</td>
<td>perform, execute</td>
<td>مرتکب شدن</td>
</tr>
<tr>
<td>investment</td>
<td>instate</td>
<td>سرمایه گذاری</td>
</tr>
<tr>
<td>achieve</td>
<td>obtain, attain</td>
<td>دست یافتن انجام دادن</td>
</tr>
<tr>
<td>interoperability</td>
<td>ability to work together</td>
<td>قابلیت برقراری ارتباط</td>
</tr>
<tr>
<td>hassle</td>
<td>bother, inconvenience</td>
<td>مزاحمت</td>
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</tbody>
</table>
## Platforms: Tailoring PCs to the Needs of Mobile Workers

<table>
<thead>
<tr>
<th>English</th>
<th>Arabic</th>
</tr>
</thead>
<tbody>
<tr>
<td>tether</td>
<td>افسار كردن</td>
</tr>
<tr>
<td>outlet</td>
<td>روزنه، مجري خروج، پريز</td>
</tr>
<tr>
<td>staple</td>
<td>جزء اصلي</td>
</tr>
<tr>
<td>meld</td>
<td>ادغام كردن، يكي كردن</td>
</tr>
<tr>
<td>drape across</td>
<td>پارچه پوشانيدن</td>
</tr>
<tr>
<td>forearm</td>
<td>ساعد، بازو</td>
</tr>
<tr>
<td>combine</td>
<td>تركيب كردن</td>
</tr>
<tr>
<td>paramedic</td>
<td>پزشکيار، امدادگر</td>
</tr>
<tr>
<td>symptom</td>
<td>علامت</td>
</tr>
<tr>
<td>vital</td>
<td>حياتي، اساسي</td>
</tr>
</tbody>
</table>

- **tether**: restrict movement with a rope or chain
- **outlet**: way out, exit
- **staple**: essential element
- **meld**: blend, merge
- **drape across**: cover with cloth
- **forearm**: superior limb between the elbow and the wrist
- **combine**: unite, join
- **paramedic**: person trained to provide emergency medical treatment
- **symptom**: sign, indication
- **vital**: crucial, critical, necessary
<table>
<thead>
<tr>
<th><strong>Platforms: Tailoring PCs to the Needs of Mobile Workers</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>shawl</strong></td>
</tr>
<tr>
<td><strong>diagnoses</strong></td>
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<tr>
<td><strong>miniature</strong></td>
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<td><strong>medic</strong></td>
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<tr>
<td><strong>trackball</strong></td>
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<td><strong>strap</strong></td>
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<td><strong>palm</strong></td>
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<tr>
<td><strong>beam</strong></td>
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<tr>
<td><strong>شال</strong></td>
</tr>
<tr>
<td><strong>تشخيص</strong></td>
</tr>
<tr>
<td><strong>کوچک</strong></td>
</tr>
<tr>
<td><strong>طبيب، پزشک</strong></td>
</tr>
<tr>
<td><strong>توپیک (مصوب فرهنگستان)</strong></td>
</tr>
<tr>
<td><strong>تشبه، بند چرمی</strong></td>
</tr>
<tr>
<td><strong>کف دست</strong></td>
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<tr>
<td><strong>پرتو</strong></td>
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Language focus M

Cause and effect

Understanding the different ways of expressing the relationship between the causes and the effects of an action is very important when you are reading English. This cause–effect relationship is commonly used in texts about computing.

Before we look at some of the ways of expressing cause and effect, note carefully this important distinction.

We can mention the cause before the effect.

Example:

(cause)            (effect)
Dust often causes the recording condition of disks to deteriorate.

We can mention the effect before the cause.

Example:

(cause)            (effect)
Deterioration in the recording condition of disks is often due to dust.

There are many different ways of expressing cause and effect.

1 Verbs linking cause and effect:

<table>
<thead>
<tr>
<th>result</th>
<th>cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>produce</td>
<td>result in</td>
</tr>
<tr>
<td>allow</td>
<td>result from</td>
</tr>
<tr>
<td>prevent</td>
<td>bring about</td>
</tr>
<tr>
<td>enable</td>
<td></td>
</tr>
</tbody>
</table>

Examples:

1. The introduction of computer technology brought about significant changes in office routines. (cause → effect)
2. Computers can create artificial objects in their memories. This allows developers to test product design without actually creating a real prototype. (cause → effect)
3. The extensive use of computers in schools is resulting in a new generation of computer-literate students. (cause → effect)
4. The problems were caused by the volume of network traffic.* (effect ← cause)

Note: * See Language focus H for an explanation of the passive used in example 4.
2 Connectives introducing cause:

| due to  
| as the/a result of  
| since  
| because  
| in response to  
| as |

Examples:

1 Early computers developed quickly as a result of their use in military applications. (effect ← cause)
2 Teachers must rethink their roles as computer technology is creating a revolution in the classroom. (effect ← cause)
3 Because off-the-shelf programs do not always fit a company’s needs, software often has to be specially developed. (effect ← cause)

3 Connectives introducing result:

| with the result that  
| so that  
| thus  
| therefore  
| consequently  
| hence  
| for this reason  
| thereby |

Examples:

1 Computers can remove many of the routine and boring tasks, thereby leaving us with more time for interesting, creative work. (cause → effect)
2 Carpel tunnel syndrome is a serious medical condition. For this reason, computer users should be careful of their posture and take frequent breaks. (cause → effect)
3 When using an online database service, you must pay for the time you use. Consequently, you should have a good idea of what you want before you log on. (cause → effect)

4 Another way of showing causal relationship is by introducing the cause with if. Both the cause clause and the effect clause verbs are in the present tense.

Examples:

1 If your company has a LAN, you can share the use of a printer with your colleagues. (cause → effect)
2 It is easy to transport your data to another location if it is stored on a disk. (effect ← cause)

Exercise 1

Read the following sentences and underline the part which expresses the cause.

1 Because a modem can be used for inter-computer communication, many people can now do their office work on their computer at home and transfer the files to a computer at the office.
2 Many people do not explore new software because they are comfortable with what they already have.
3 When robots malfunction, it is usually due to mistakes in the programming or the design.
4 Laser printers can be quite expensive and are therefore often shared through networks.
5 Voice-recognition systems are becoming more sophisticated. Thus, keyboards may be unnecessary in the future.

Exercise 2

Read the following sentences and underline that part which expresses the effect/result.

1 Computers can remove many of the routine and boring tasks from our lives, thereby leaving us with more time for interesting and creative work.
2 Because there are many different types of printers, you must analyse your needs before making a purchase.
3 Since anyone can consult your files on a computer, it is a good idea to protect sensitive files with a password.
4 Fax boards are available to plug into your computer, so you do not have to buy a fax machine.
5 Computers have been reduced in both size and cost as a result of advances in design and technology.

Exercise 3

The sentences below have appeared in previous units. Read them again and circle the marker showing a cause-effect relationship and underline the part of the sentence that expresses the cause. The first one has been done for you.

1 By 1980, IBM decided there was a market for 250,000 PCs, so they set up a special team to develop the first IBM PC. (Unit 1)
2 Because of these and so many other different judgements, there can be no absolute. (Unit 3)
3 Global communication and computer networks will become more and more a part of professional and personal lives as the price of microcomputers and network access drops. (Unit 6)
4 One of the features of a computer virus that separates it from other kinds of computer program is that it replicates itself, so that it can spread to other computers. (Unit 7)
5 Lehigh is waiting to infect other unsuspecting computers if you boot from one of those four infected floppy's. (Unit 7)
6 As they became more proficient on the computer, some showed gains in their overall self-confidence, as well. (Unit 10)
7 Robots are better at this task, not because they are faster or cheaper than humans, but because they work in a place where humans cannot. (Unit 11)
8 This automatic accuracy is particularly valuable in this kind of industry because locating and fixing mistakes is costly. (Unit 11)
9 Artificial worlds are being built up in a computer memory so that people can walk through at will, look around, and even touch objects. (Unit 12)