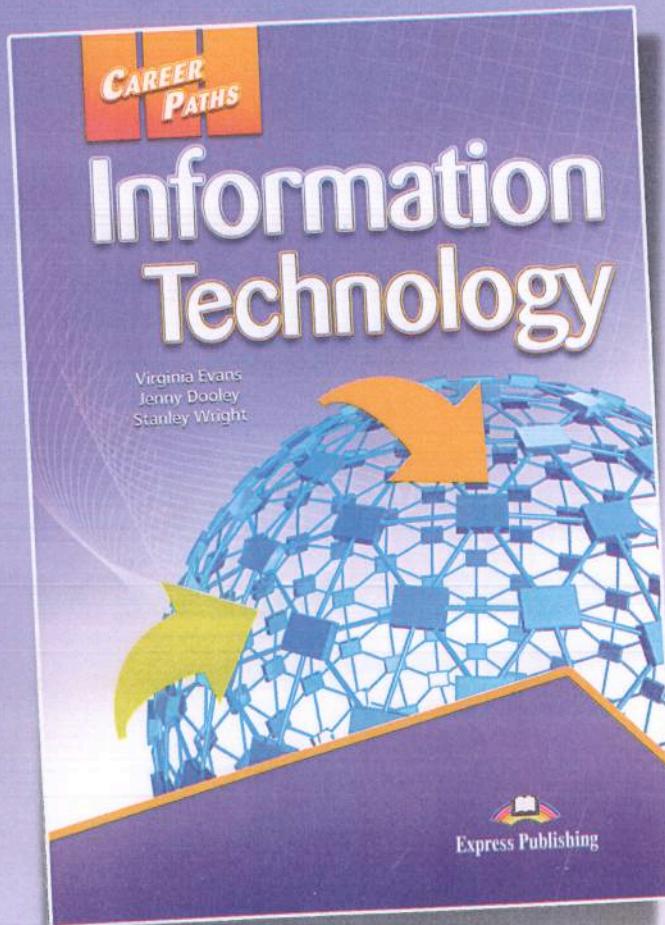


# Teacher's Book

Virginia Evans - Jenny Dooley  
Stanley Wright



Express Publishing

# Information Technology

## Teacher's Book

**Career Paths English: Information Technology** is a new educational resource for information technology professionals who want to improve their English communication skills in a work environment. Incorporating career-specific vocabulary and contexts, each unit offers step-by-step instruction that immerses students in the four key language components: reading, listening, speaking, and writing. **Career Paths English: Information Technology** addresses topics including computer components, accessories, software, Internet security, web design, and the future of the industry.

The series is organized into three levels of difficulty and offers over 400 vocabulary terms and phrases. Every unit includes a test of reading comprehension, vocabulary, and listening skills, and leads students through written and oral production.

### Included Features:

- A variety of realistic reading passages
- Career-specific dialogues
- 45 reading and listening comprehension checks
- Over 400 vocabulary terms and phrases
- Guided speaking and writing exercises
- Complete glossary of terms and phrases

The **Teacher's book** contains a full answer key and audio scripts.

The **audio CDs** contain all recorded material in American English and British English.

Books 1-3 of **Career Paths English: Information Technology** are rated for the Common European Framework of Reference for Languages at A1, A2 and B1 respectively.



Express Publishing

ISBN 978-0-85777-641-9



9 780857 776419

**CAREER  
PATHS**

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**Published by Express Publishing**

**Liberty House, Greenham Business Park, Newbury,  
Berkshire RG19 6HW**

**Tel.: (0044) 1635 817 363**

**Fax: (0044) 1635 817 463**

**e-mail: [inquiries@expresspublishing.co.uk](mailto:inquiries@expresspublishing.co.uk)**

**<http://www.expresspublishing.co.uk>**

© Express Publishing, 2011

Design and Illustration © Express Publishing, 2011

First published 2011

Second impression 2012

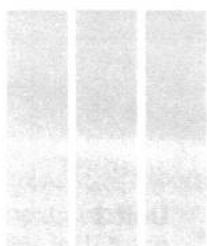
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ISBN 978-0-85777-641-9

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# Book 1 Answer Key

## Unit 1

### 1 Suggested Answers

- 1 Information Technology is the technology (hardware and software) required for the processing of data and other information. It deals with the use of electronic computers and computer software to convert, store, protect, process, transmit and securely retrieve information.
- 2 Those specialized in Information Technology are responsible for hardware and software maintenance, troubleshooting technical issues, as well as the electronic data processing. However, IT professionals perform various tasks depending on which field they are in. Programmers for example, code, test, maintain and repair software applications. Whereas, a systems analyst will provide support for the maintenance and development of a program. They are also responsible for the coding and testing of the different software applications.

2 1 F      2 F      3 T

3 1 G      3 B      5 J      7 H      9 E  
2 I      4 F      6 C      8 D      10 A

4 1 data      2 encoding      3 Quality assurance

### 5 Suggested Answer

The Quality Assurance section is responsible for providing technical support and assistance to other members of staff. For example, advice on how to solve specific problems that are computer related.

6 1 B      2 B

7 1 restructuring      4 transfer  
2 Quality Assurance      5 think about  
3 Information Security

### 8 Suggested Answer

- A: Excuse me, Mr. Thompson? I have a question about the restructuring of the IT department.  
B: Please, come in. What's your question?  
A: Well, now I'm in the Data Processing section.  
B: Yes. You are exceptionally skilled in coding.  
A: Thanks, but I have more experience with Quality Assurance.  
B: I see. You want a transfer, then?  
A: Exactly. I feel that I'm more valuable there.  
B: Let me think about it.

## 9 Suggested Answer

**Employee's Name:** Jason Scott  
**Supervisor's Name:** Mr. Thompson  
**Current Section:** Data Processing  
**Requested Section:** Quality Assurance  
**Reason for Transfer Request:** More experience in testing hardware and providing technical support

## Unit 2

### 1 Suggested Answers

- 1 Until recently, I owned a desktop which I used at home occasionally and a laptop which I carried around with me and took on business trips. However, I now have a PDA (Personal Digital Assistant) which is a handheld computer and known as a palmtop. I can use it as a portable audio player and smart phone too.
- 2 I work for an IT organization and we use a mainframe computer as it has the capability of hosting multiple operating systems. I'm in the Customer Order Processing department and we execute many programs concurrently.

2 1 C      2 D      3 D

3 1 PDA      5 handheld PC  
2 laptop      6 server  
3 desktop computer      7 supercomputer  
4 computer

4 1 B      2 A      3 C

### 5 Suggested Answer

Some employees use workstations instead of desktops because their programs are too powerful for a desktop. Workstations are faster too.

6 1 D      2 B

7 1 desktop computers      4 log on  
2 IT department      5 reserve  
3 workstation

### 8 Suggested Answer

- A: Here's your new office. That's your desk and Sue sits over there.  
B: So, everyone has their own desktop computers. Do we have laptops?  
A: Yes, that's your computer there and laptops are in the IT department.  
B: OK, but I also need a workstation.

- A: Right. You need something faster for those powerful programs. Those are in the next building.  
 B: How do I get access to one? Do I have to sign up?  
 A: No, just log on to the server. All computers connect to it. Then, click "reserve workstation".  
 B: Thanks.

## 9 Suggested Answer

- |                    |                          |
|--------------------|--------------------------|
| 1 Desktop computer | 3 connect to the server. |
| 2 Laptops          | 4 Workstations           |

## Unit 3

### 1 Suggested Answers

- 1 The key components which make up a typical desktop computer are: the case where the other parts of the computer will reside, the motherboard which determines the type of components that can be used with the system and the number of internal peripherals it can support, the processor which is the brain of the computer system, a heat sink and cooling fan used to cool the processor, a power supply which has sufficient power, a hard drive for storage, RAM and expansion cards for memory and a disk drive which reads and writes data onto a disk.
- 2 A computer technician repairs computers.

2 1 A      2 C      3 B

3 1 C      3 E      5 D  
 2 B      4 F      6 A

4 1 fan      3 case  
 2 power supply      4 disk drive

### 5 Suggested Answer

The processor should be connected to the motherboard.

6 1 F      2 T      3 T

7 1 hard drive      3 power supply      5 case  
 2 motherboard      4 unplugging

### 8 Suggested Answer

- A: Hello, is that Technology Support?  
 B: Yes, This is Ken. How can I help you?  
 A: I need help taking out an old hard drive.  
 B: Okay. Just unplug the connection to the power supply, then disconnect the motherboard cable.  
 A: Which one is the power cable?  
 B: It's the smaller black box in the corner.

- A: I'm disconnecting both. What's the next step?  
 B: Take out the two small screws. They fasten the hard drive to the case.  
 A: I see, and then it slides out. Thanks!

## 9 Suggested Answer

**Technician:** Ken

**Date:** 08/28/2012

**Caller's name:** Mrs. Katy Parish

**Problem:** The caller needs to disconnect an old hard drive.

**Suggested Actions:** Unplug the connection to the power supply and disconnect the motherboard cable. Take out the two small screws that fasten the hard drive to the case.

**Was the problem resolved?** Y/N

## Unit 4

### 1 Suggested Answers

- 1 Computers receive information from an input device; a gadget such as a mouse, a keyboard or a smaller tablet combining a touch screen. These devices that send information to a computer can be considered input peripherals.
- 2 There are a growing number of devices that can be attached to a computer. A printer, a scanner, a microphone, a fax, a projector, a digital camera, a personal media player and a set of headphones are the most common.

2 1 F      2 T      3 F

3 1 C      2 E      3 A      4 D      5 B

4 1 B      2 B      3 A      4 B      5 B

### 5 Suggested Answer

USB has become the standard connection method for computer peripherals.

6 2 touch screen      5 printer

7 1 upgrade      3 touch screens      5 printer  
 2 enter      4 peripherals

### 8 Suggested Answer

- A: Hello. Could you help me please? My firm's computer system needs an upgrade.  
 B: Certainly. What type of business is it?  
 A: It's a hotel. Here's the problem. The guest's information takes too long to enter.  
 B: Then, I suggest our new touch screens. You just move data on the screen with your fingertip.

# Book 1 Answer Key

- A: That sounds good. I want to update our restaurant's menus, too. Do you have peripherals for that?  
B: Well, I recommend a new printer. The new ones print as well as a professional service.  
A: Great. Let's talk about prices.

## 9 Suggested Answer

- 1 Was our employee helpful? Y/N  
2 Did our employee make suggestions? Y/N  
3 What products were you interested in? Peripherals that would help upgrade our firm's computer system.  
4 What peripherals did our employee recommend? Your employee recommended the new touch screens and a new printer.

## Unit 5

### 1 Suggested Answers

- 1 Computer networks are made up of a number of components. The parts of a network, especially a local area network (LAN), are usually connected by wire cables (the most common being Category 5 cable). Wireless networks do not use these, but use a router which broadcasts signals between the network (and possibly receives and transmits data to other networks - e.g. the Internet).  
2 A computer network can benefit a business in many ways. When a company has more than one computer, a network can connect all of them, allowing users to share and exchange a variety of information. Employers and staff members can access the same file, exchange ideas and organize meetings more efficiently and even share the same printer. Also, a network makes it easier to back up all the company's data, on an offsite server for example.

2 1 B    2 A    3 B

3 1 router    4 WLAN    7 cycle  
2 network    5 configuration    8 DHCP  
3 Internet    6 CAT-5 cables

4 1 C    2 B    3 A

### 5 Suggested Answer

Someone who experiences problems with an IP address, should try renewing their DHCP to reconfigure and communicate with other users again.

6 1 C    2 B

7 1 router    3 support    5 apart  
2 network    4 connects computers

## 8 Suggested Answer

- A: Can I help you find something?  
B: Yes, I need a router.  
A: Well, there are a few types. What kind of network do you have?  
B: I don't have one yet, but it's for the computers in my company.  
A: Do you want a LAN or a WLAN? Some routers don't support both types.  
B: What's the difference?  
A: A WLAN connects computers wirelessly. A LAN connects computers with CAT-5 cables.  
B: My computers are far apart. I'd need a WLAN.

## 9 Suggested Answer

**Location of network:** Customer's company  
**Type of network:** Doesn't have one yet  
**Components needed:** WLAN router

## Unit 6

### 1 Suggested Answers

- 1 The term 'User Interface' refers to a part of a software application that allows users to interact with a computer usually on a computer screen and with sets of commands, messages and clickable images.  
2 A User Interface makes computing easy because it enables a computer operator to utilize all the features of the system without too much hard work. Users can operate and control a system producing results at a greater speed too.

2 1 C    2 C    3 D

3 1 pointer    3 operating system    5 GUI  
2 icons    4 desktop    6 windows

4 1 C    2 A    3 B

## 5 Suggested Answer

Someone would click on a shortcut on the GUI to get to a program quickly.

6 1 B    2 D

7 1 desktop icons    4 I'm sorry  
2 save    5 Right-click  
3 options menu    6 Thanks

## 8 Suggested Answer

- A: Hello. Is that CCC Solutions? I'm having a problem with my desktop icons. I don't know how to save my shortcuts. I add one, but the next day the shortcut is gone.
- B: Well, you just have to save them on your desktop.
- A: Oh. How do I do that?
- B: First, add the shortcuts. Then, move the pointer to the options menu and click 'save icons and folders'.
- A: Options? I'm sorry, where's that?
- B: See the "CCC" icon in the corner? Right-click that.
- A: Got it. Thanks.

## 9 Suggested Answer

### Customer Problem:

**The shortcuts in the OS...** are not saved anywhere, after customer has added them.

### Recommendation:

**Move the pointer...** to the options menu.

**Click on...** 'save icons and folders'.

**Save the icons to...** the desktop.

**Problem solved?** Yes/No

## Unit 7

### 1 Suggested Answers

- 1 People use word processing programs when they want to type in, edit, format and layout documents, save and print text. The programs are usually used by students, writers and authors. There are also programs used in businesses that are ideal for writing reports, memos and proposals.
- 2 There are various types of word processing programs such as Microsoft Word, WordPerfect, Lotus Word Pro, iWork Pages and many other lesser-known programs.

2 1 F    2 F    3 T

- |                           |               |
|---------------------------|---------------|
| 3 1 macro                 | 5 document    |
| 2 compatibility           | 6 layout      |
| 3 word processing program | 7 font        |
| 4 format                  | 8 spell check |

4 1 B    2 C    3 B

### 5 Suggested Answer

The advertisement claims that with TypeWrite 4.0, the majority of compatibility issues are purged.

6 1 A    2 C

- |                     |              |               |
|---------------------|--------------|---------------|
| 7 1 word processing | 3 format     | 5 information |
| 2 open              | 4 compatible | 6 programs    |

## 8 Suggested Answer

- A: Technical Support, can I help you?
- B: Yes, I have a word processing problem.
- A: What seems to be wrong?
- B: I have a file from a colleague, but it won't open.
- A: What kind of file is it? And what program are you using?
- B: It's in ".tpw" format. I use Typing Suite.
- A: Oh, that's a TypeWrite file. That file isn't compatible with Typing Suite.
- B: Oh no. I need that information.
- A: Ask the colleague to send it as a ".txt" file. That opens in most programs.
- B: Great, thanks!

## 9 Suggested Answer

Dear Jason,

Thank you for sending the document, but it won't open. Your file is in the wrong format. My word processing program is Typing Suite. It isn't compatible with the program you're using which is TypeWrite. Please send me the file in a .txt format. It opens in most programs.

Regards,

Karen

## Unit 8

### 1 Suggested Answers

- 1 Email is a fast and effective way to communicate with people. Emails are cheap and one message can be sent to a number of users. With email, people can include graphics and keep them for easy reference. In business, email can be used to promote services and products worldwide. Through email marketing, newsletters can help a company to build up a mailing list of clients who are relevant to their business and keep in regular contact with them.
- 2 Using email does have some disadvantages. First and most important, is the fact that the sender could send a virus or malware through an attachment. If the recipient doesn't scan this attachment, the entire computer system could become infected. Secondly, spam and unwanted advertisements can be a nuisance and identity theft is also possible. Last but not least, emails can be misunderstood if they are written in an impersonal way.

2 1 T    2 F    3 F

3 1 E    2 C    3 D    4 B    5 A

# Book 1 Answer Key

4 1 A    2 B    3 A    4 B

## 5 Suggested Answer

When setting up the email address, employees need to include their user name along with the company's domain name.

6 1 D    2 D

7 1 email address    3 password    5 email client  
2 username            4 webmail        6 POP3

## 8 Suggested Answer

A: Thanks for calling QuickTel. How may I help you?  
B: Well, I'm a new customer, and my email address isn't receiving mail.  
A: OK. Do you have the correct username and password?  
B: Yes. Those work fine.  
A: Do you have a webmail account or an email client? There are some common mistakes with those.  
B: An email client. Does that matter?  
A: New customers often make mistakes with the POP3 settings. The correct server is (P- O- P dot QuickTel dot net) POP.QuickTel.net.  
B: Oh, that's it. I have (P- O- P dot QuickTel dot com) POP.QuickTel.com. Thanks.

## 9 Suggested Answer

- 1 Is the username correct? Y/N
- 2 Is the password correct Y/N
- 3 What program is the customer using?
- 4 Does the server name match ours? Y/N
- 5 Problem solved by: amending the POP3 settings

## Unit 9

### 1 Suggested Answers

- 1 I usually browse the web at work when I'm searching for specific information. It's a good way of keeping up to date with new technology, products and services.
- 2 I browse the Internet for particular products as I often purchase online through eBay. I constantly look for news that may be important for my company and I make my airline and train reservations after searching for the best deals.

2 1 T    2 F    3 F

3 1 C    2 A    3 D    4 E    5 B

4 1 B    2 A    3 C    4 A    5 C

## 5 Suggested Answer

Their site receives more activity/traffic from search engines.

6 1 B    2 D

7 1 meta tags                  4 site  
2 new website                5 click on  
3 search engines

## 8 Suggested Answer

A: Hey Jill! Did you receive the staff email?  
B: Yes, and I have a question, John.  
A: OK, no problem. What is it?  
B: I don't even know what meta tags are. Why are they so important?  
A: They're descriptive words on the new website. They make the site rank higher in search engines.  
B: You mean our site appears at the top of the search results?  
A: Exactly. Customers click on our hyperlink first.  
B: That's good news for our sales department.

## 9 Suggested Answer

Dear John,

Thanks for explaining what the meta tags are. I had no idea they were so important. Now, I can see why our website appears at the top of the search results. There are some pretty good descriptive words on the new website. Anyway, as long as customers keep clicking on our hyperlink first, it'll be good for business!

Regards,  
Jill

## Unit 10

### 1 Suggested Answers

- 1 People edit or touch up images for a number of reasons. If a person is not photogenic enough, that means they need to look more attractive in a picture and this can be done by editing it. Another reason is that sometimes a background, a person or an item needs to be added to or removed from a picture or photograph. Also in some cases, a picture may just need resizing or the colors blending correctly.
- 2 Nowadays, it is easy to edit pictures by downloading various editing software such as Photoshop or GIMP.

2 1 B    2 A    3 B

3 1 B    3 C    5 F  
2 D    4 A    6 E

- 4 1 resize                    3 crop  
2 graphic editing program    4 contrast

**5 Suggested Answer**

A photograph might be blurry if it has a low resolution.

- 6 1 F    2 T    3 T

- 7 1 poor exposure    3 Open    5 contrast  
2 graphic editing    4 edit menu

**8 Suggested Answer**

A: Is that Picture Perfect's support center?  
B: Yes. How can I help you?  
A: I want to put a photo on my website, but it's too dark. Is there a way to fix poor exposure?  
B: Do you have a graphic editing program?  
A: Yes, but I never use it. I just don't know how.  
B: No problem. Open the file with the program and find the contrast controls.  
A: Will I find that in the edit menu?  
B: Yes. Increase the contrast to lighten the picture.  
A: Great! Thanks.

**9 Suggested Answer**

**Customer Issue:** Picture too dark.

Does customer have a graphic editing program to edit pictures? Y/N

**Advice given:** To open the file with the program and increase the contrast to lighten the picture. This fixes the poor lighting.

**Unit 11****1 Suggested Answers**

- As a database is a collection of information that is related to a particular subject or purpose, they are very useful for keeping a music collection or tracking customer's or client's orders. Tables are created to track this information.
- All kinds of people use a spreadsheet to store data and make decisions. For example, accountants working for companies, keep track of money coming in and all payments going out. They can also calculate wages and profits using a spreadsheet and follow their sales. Teachers use them for keeping grades, engineers make calculations when designing bridges and buildings etc. and scientists use a spreadsheet to analyze results from experiments. In fact, they are so easy to use that even schoolchildren calculate their allowance and expenditure using a spreadsheet.

- 2 1 database    3 tables                    5 profits  
2 clients        4 calculations

- 3 1 D    2 B    3 A    4 E    5 C  
4 1 B    3 B    5 A  
2 A        4 C    6 C

**5 Suggested Answer**

A spreadsheet is a grid that organizes data into columns and rows. This information, especially financial, can be sorted and filtered by the user. Then all kinds of calculations can be made using formulae.

- 6 1 F    2 F    3 T

- 7 1 spreadsheet    3 data    5 formula  
2 calculate        4 cells    6 profits

**8 Suggested Answer**

B: Jeff, can you help me? I don't understand this spreadsheet program.  
A: Sure, what are you trying to do?  
B: I need to calculate our customer orders for last month.  
A: Well, is all the data in the cells correct?  
B: Yes, I'm sure it is.  
A: OK. Then just type this formula into the top cell.  
B: That's all?  
A: Yes. The formula calculates the customer orders and shows them at the bottom of the spreadsheet.

**9 Suggested Answer**

**Question:** How do I calculate our customer orders for last month?

- Make sure all the data in the cells is correct.
- Enter the formula into the top cell.
- The formula calculates the customer orders and shows them at the bottom of the spreadsheet.

**Unit 12****1 Suggested Answers**

- A good business website needs to look professional and be well-designed. It should contain high quality content and be easy to navigate. It should also be fast loading and informative.
- I like to use various websites such as Facebook and MySpace which are social networking sites. I can communicate with people with familiar interests and find old school friends. I also make use of Google Search which provides me with links to valuable information. I also visit e-commerce websites on a daily basis. I purchase a lot of products online and these sites offer numerous goods and services.

# Book 1 Answer Key

2 1 D    2 C    3 C

3 1 A    3 E    5 D  
2 C    4 B    6 F

4 1 functionality    3 web development  
2 appearance    4 CSS

## 5 Suggested Answer

Someone interested in learning about how to develop a website's performance, would attend the Web Development class which focuses on expanding functionality.

6 1 B    2 B

7 1 CSS                  4 web page  
2 cascading style sheets    5 appearance  
3 content                6 separate

## 8 Suggested Answer

B: Well, that's the end of my presentation on designing a website. Are there any questions?  
A: Um...yes. I have a question about CSS.  
B: Oh, the cascading style sheets. Go on.  
A: Why do we separate the style sheet and the content?  
B: It makes changing the web page easier. The appearance changes, but the content doesn't.  
A: So, I change the style sheet. What happens to the content?  
B: Nothing, because the two are separate.  
A: OK. I understand now. The words stay the same, but their appearance changes.

## 9 Suggested Answer

- 1 Cascading Style Sheets
- 2 It makes changing the web page easier
- 3 Nothing, because the two are separated.

## Unit 13

### 1 Suggested Answers

1 Computer software and printing technology is progressing so quickly, that publishers today can use these technological changes to their advantage. Using computer software, desktop publishing enables publishers to perform publishing tasks that would otherwise require complicated equipment and would also be time-consuming. Desktop publishers format and combine texts, create graphics, convert photographs and drawings into digital images and design page layouts. Using a keyboard, they enter and select the size, style

and spacing and store them in a computer, which then displays and arranges all this information. Newspapers, catalogs or a book page, complete with artwork and graphics, can be created on the screen exactly as it would appear in print, thus saving an enormous amount of time and human effort.

2 To work in publishing, a person needs to be able to develop high quality content and make sure it can be used in many different formats such as in print, online and with mobile technology. Experience with graphics, electronic paper and offset lithography are also useful. A publisher needs to possess communication skills and be capable of project management. They also need to show initiative, be creative and well-informed about Information Technology.

2 1 A    2 A    3 D

3 1 electronic paper, electronic pages  
2 clip art, page layout  
3 electrostatic printing, offset lithography

4 1 B    2 C    3 D    4 A

## 5 Suggested Answer

The applicant for the position of Desktop Publishing Specialist does not have to have knowledge of offset lithography or electrostatic printing methods.

6 1 T    2 F    3 T

7 1 seat                  4 publishing software  
2 graphic                5 electronic pages  
3 layouts                6 electronic paper

## 8 Suggested Answer

A: Good morning, please take a seat.  
B: Good morning. I'm John Peterson.  
A: Right! I see you have a Master's degree in graphic design. Do you have experience creating product catalogs?  
B: Yes. I work with desktop publishing software every day.  
A: What type of work do you do? I want to hear more.  
B: I combine text with graphics to create electronic pages.  
A: Interesting. Do you ever work with offset lithography?  
B: I work with it fairly often actually. I think it's fast, efficient and cheap.

**9 Suggested Answer**

**Interviewer:** Stephen Scott

**Candidate:** John Peterson

**Education level:**

College Bachelor's Degree

✓ Master's Technical Degree

**Candidate's publishing skills:** Experience with desktop publishing software/producing catalogs. Knowledge of electronic pages/offset lithography.

**Overall impression:** Candidate seems highly qualified and experienced. Appeared efficient and enthusiastic about his work.

**Unit 14****1 Suggested Answers**

- 1 Video conferencing is an interactive communication technology which allows two or more users to interact using video and audio. It brings people face-to-face virtually as users see and hear each other by using a computer, webcam, microphone and broadband Internet.
- 2 Video conferencing is mainly seen as an advantage because it saves time and money on traveling. It allows business executives and their staff to keep in touch around the world. However, video conferencing can be used in a number of ways. For instance, product training for employees and clients, giving evidence in a courtroom, presentations and castings for television production.

2 1 T    2 F    3 F

- |                    |                              |
|--------------------|------------------------------|
| 3 1 monitor        | 4 video bridge               |
| 2 dedicated system | 5 echo-cancellation          |
| 3 document sharing | 6 videoconference            |
| 4 1 bandwidth      | 3 webcam                     |
| 2 codec            | 4 multipoint videoconference |

**5 Suggested Answer**

Chuck Roberts suggests having a dedicated system as it allows interaction between users from two or more locations via video and audio. It also, lets users share work online and manage or access documents from anywhere in the world.

6 1 B    2 A

- |                                |                |
|--------------------------------|----------------|
| 7 1 dedicated                  | 5 two          |
| 2 videoconferencing            | 6 video bridge |
| 3 monitors                     |                |
| 4 multipoint videoconferences, |                |

**8 Suggested Answer**

A: Um... Hello, is that ClearWater technologies?

B: Yes ma'am. How can I help you?

A: I want to buy a dedicated system for videoconferencing. What are my options?

B: Well, we have systems with one or two TV monitors.

A: What's the difference?

B: The system with two TV monitors lets you hold multipoint videoconferences.

A: I need two TV monitors then. Does it come with a video bridge?

B: No, you order that separately.

A: OK, then I need to order one video bridge as well, please.

**9 Suggested Answer**

Request for a dedicated system for videoconferencing.

Number of TV monitors: One/Two

Number of video bridges: One/Two

Total Cost: \$2,249.99

**Unit 15****1 Suggested Answers**

- 1 I shop online mostly for accessories such as bags, scarves and jewelry. I surf the net looking for sale items. I'd never buy things like clothes and shoes because sizes can be so different on each site. I've also bought a cell phone through online shopping.
- 2 Online shopping can help businesses reach a wider target audience and provides an inexpensive platform for the purpose of launching a new product or interacting with other businesses 24 hours a day.

2 1 F    2 F    3 T

- |   |
|---|
| 3 1 digital certificate/certificate authority |
| 2 page views/traffic                          |
| 3 banner/FAQs                                 |

- |                |                    |
|----------------|--------------------|
| 4 1 E-commerce | 3 brick and mortar |
| 2 affiliate    | 4 shopping cart    |

**5 Suggested Answer**

If a consumer clicks onto a page view, increasing views, but doesn't buy anything, TFC Gaming will earn a smaller percentage than if a consumer had purchased something.

6 1 D    2 C

## Book 1 Answer Key

- 7 1 affiliate      3 page views 5 total profit  
2 percentages    4 traffic

### 8 Suggested Answer

A: Hi Philip. This is Katie from TFC Gaming.  
B: Good afternoon Katie. What can I do for you?  
A: Well, we're definitely interested in being an affiliate. However, I have a few questions.  
B: OK. What do you want to know?  
A: Regarding the percentages. What do we earn for just an increase in page views?  
B: That's (point five percent) 0.5% per hundred.  
A: I see, and what about sales from our traffic.  
B: All BargainEquipment.com affiliates get (two percent) 2% of the total profit.

### 9 Suggested Answer

**From:** Katie Carver  
**Department:** Marketing

BargainEquipment.com wants us to become an affiliate. We would earn 0.5 % (per hundred) for an increase in page views. We would also earn 2% of the total profit on any sales made via our site.

My recommendation is that you get in touch with Mark Johnson who is their Marketing Director and ask him for further information.

## Unit 1

**Employee (W):** Excuse me, Mr. Hopkins? I have a question about the restructuring.

**Hopkins (M):** Please, come in. What's your question?

**Employee:** Well, I'm now in the Quality Assurance section.

**Hopkins:** Yes. You have a great understanding of hardware.

**Employee:** Thanks, but I have more experience with Information Security.

**Hopkins:** I see. You want a transfer, then?

**Employee:** Exactly, I feel that I'm more valuable there.

**Hopkins:** Let me think about it.

## Unit 2

**IT Professional (M):** Here's your new office. Jon works in here, too.

**New Employee (W):** So, everyone has their own desktop computers. Do we have laptops?

**IT Professional:** Yes. That's your computer there. Laptops are in the IT department.

**New Employee:** Okay, but I also need a workstation.

**IT Professional:** Right, you work on some powerful programs. Those are next door.

**New Employee:** Do I sign up to use them? I mean, how do I get access to one?

**IT Professional:** Just log on to the server. All computers connect to it. Then, click "reserve workstation".

**New Employee:** Thanks!

## Unit 3

**Ivan (M):** Technology support, Ivan speaking. How can I help?

**Natalie (W):** I have an old hard drive and I need help taking it out.

**Ivan:** Okay. Unplug the connection to the power supply first. Then, disconnect the motherboard cable.

**Natalie:** Which one is the power supply?

**Ivan:** It's the smaller black box in the corner.

**Natalie:** I'm unplugging both. What's next?

**Ivan:** Next, take out those two small screws. They fasten the hard drive to the case.

**Natalie:** I see, and then it slides out. Thanks!

## Unit 4

**Steve (M):** Computers International, can I help you?

**Beth (W):** Yes. My firm's computer system needs an upgrade.

**Steve:** What type of business is it?

**Beth:** A restaurant. Here's the problem. Customer's orders take too long to enter.

**Steve:** Then, I suggest our new touch screens. You just move data on the screen with your fingertip.

**Beth:** That sounds good. I want to create menus, too. Do you have peripherals for that?

**Steve:** Well, I recommend a new printer. The new ones print as well as a professional service.

**Beth:** Great. Let's talk about prices.

## Unit 5

**IT Professional (M):** Hi. Can I help you find something?

**Customer (W):** Oh, please. I need a router.

**IT Professional:** Well, there are a few types. What kind of network do you have?

**Customer:** I don't have one yet, but it's for the computers in my home.

**IT Professional:** Do you want a LAN or a WLAN? Some routers don't support both types.

**Customer:** What's the difference?

**IT Professional:** A WLAN connects computers wirelessly. A LAN connects computers with CAT-5 cables.

**Customer:** My computers are far apart. I'd need a WLAN.

## Unit 6

**Support Technician (W):** Hello, CCC Solutions. What do you need help with today?

**Customer (M):** Well, it's my desktop icons. I add a shortcut one day, and it's gone the next.

**Support Technician:** Oh, no problem. Just save them to the desktop.

**Customer:** Okay. How do I do that?

**Support Technician:** First, add the shortcuts. Then, move the pointer to the options menu and click 'save icons and folders'.

**Customer:** Options? I'm sorry, where is that?

**Support Technician:** See the "CCC" icon in the corner? Right-click that.

**Customer:** Got it. Thanks!

# Audioscripts

## Unit 7

**IT Professional (W):** Technical Support, can I help you?  
**User (M):** Yes, I have a word processing problem.  
**IT Professional:** Okay. What seems to be wrong?  
**User:** I have a file from a client, but it won't open.  
**IT Professional:** What kind of file is it? And what program are you using?  
**User:** It's in ".tpw" format. I use Typing Suite.  
**IT Professional:** Oh, that's a TypeWrite file. It isn't compatible with Typing Suite.  
**User:** Oh no. I need that information.  
**IT Professional:** Have the client send it as a ".txt" file. That opens in most programs.  
**User:** Great, thanks!

## Unit 8

**Employee (W):** Thanks for calling QuickTel. How may I help you?  
**Customer (M):** Well, I'm a new customer, and my email address isn't receiving mail.  
**Employee:** Okay. Do you have the correct username and password?  
**Customer:** Yes. Those work fine.  
**Employee:** Okay, do you have a webmail account or an email client? There are some common mistakes with those.  
**Customer:** An email client. Does that matter?  
**Employee:** New customers often make mistakes with the POP3 settings. The correct server is (P- O - P dot Quicktel dot net) POP.QuickTel.net.  
**Customer:** Oh, that's it. I have (P - O - P dot QuickTel dot com) POP.QuickTel.com. Thanks.

## Unit 9

**Bob (M):** Hi Susan! Did you receive the staff email?  
**Susan (W):** Yes, and I have a question, Bob.  
**Bob:** Okay, no problem. What is it?  
**Susan:** I don't even know what meta tags are. Why are they important?  
**Bob:** They're descriptive words on the new website. They make the site rank higher in search engines.  
**Susan:** You mean our site appears at the top of the search results?  
**Bob:** Exactly. Customers click on our hyperlink first.  
**Susan:** That's good news for our sales department.

## Unit 10

**IT Worker (W):** Thanks for calling Picture Perfect's support center. How can I help you?  
**Customer (M):** I want to put a picture on my website, but it's too dark. Is there a way to fix poor exposure?  
**IT Worker:** Do you have a graphic editing program?  
**Customer:** Yes, but I never use it. I just don't know how.  
**IT Worker:** No problem. Open the file with the program and find the contrast controls.  
**Customer:** Is that in the edit menu?  
**IT Worker:** It is. Increase the contrast to lighten the picture.  
**Customer:** Great! Thanks.

## Unit 11

**Sam (M):** Rachel, I need help. I don't understand this spreadsheet program.  
**Rachel (W):** Sure. What are you trying to do?  
**Sam:** I need to calculate our estimated profits for next month. But I don't know how to do that.  
**Rachel:** Well, is all the data in the cells correct?  
**Sam:** Yes, I'm sure it is.  
**Rachel:** Okay. Then just type this formula into the top cell.  
**Sam:** Really? That's all?  
**Rachel:** Yes. The formula calculates the estimated profits and shows them at the bottom of the spreadsheet.

## Unit 12

**Instructor (M):** So, that's how we change the website's style. Does anyone have any questions?  
**Employee (W):** Yes. I have one. It's about CSS.  
**Instructor:** Oh, the cascading style sheets. What do you want to know?  
**Employee:** Why do we separate the style sheet and the content?  
**Instructor:** It makes changing the web page easier. The appearance changes, but the content doesn't.  
**Employee:** So, I change the style sheet. What happens to the content?  
**Instructor:** Nothing, because the two are separate.  
**Employee:** Okay. I understand now. The words stay the same, but their appearance changes.

**Unit 13**

**Ben (M):** Good morning, please take a seat.

**Jamie (F):** Hello, it's nice meeting you.

**Ben:** Right! I see you have a degree in graphic communications. Do you have experience creating layouts?

**Jamie:** Yes. I work with desktop publishing software every day.

**Ben:** What type of work do you do? I want to hear more.

**Jamie:** I combine text with graphics to create electronic pages.

**Ben:** Interesting. Do you ever work with electronic paper?

**Jamie:** Fairly often actually. I think it's the future of publishing.

**Unit 14**

**Sales Representative (W):** ClearWater Technologies. How can I help you?

**IT professional (M):** I want to purchase a dedicated system for videoconferencing. What are my options?

**Sales Representative:** Well, we have systems with one or two TV monitors.

**IT professional:** What's the difference?

**Sales Representative:** The system with two TV monitors lets you hold multipoint videoconferences.

**IT professional:** I need two TV monitors then. Does it come with a video bridge?

**Sales Representative:** No, you order that separately.

**IT professional:** Okay, then I need to order one video bridge as well, please.

**Unit 15**

**Amanda (W):** Hi Mark. This is Amanda from TFC Gaming.

**Mark (M):** Hi Amanda. Glad to hear from you.

**Amanda:** Well, we're definitely interested in being an affiliate. But we have some questions.

**Mark:** Of course. What do you want to know?

**Amanda:** About the percentages. What do we earn for just an increase in page views?

**Mark:** That's (point five percent) 0.5% per hundred.

**Amanda:** I see, and for sales from our traffic?

**Mark:** All BargainEquipment.com affiliates get (two percent) 2% of the total profit.

# Book 2 Answer Key

## Unit 1

### 1 Suggested Answers

- 1 Even today, many new computers come with only a bare minimum of memory installed. For some businesses, upgrading their computer memories has made a world of difference in terms of production. Additional memory allows a computer to work with more information at the same time. This means that users who need to multitask can run several programs and browse multiple Internet pages at a much faster rate. Companies have become much more efficient as a result of increasing computer memory and upgrading helps lengthen the life of a PC, making it a good investment too.
- 2 People should add more computer memory when they are likely to spend hours on the Internet and their system is slow. They should add more memory when they need to install more programs and files. If someone has to switch from one program to another, a memory upgrade will allow the user to do it frequently and quickly. Younger users need to add more memory when they want a powerful, virtual reality gaming experience. By adding more memory, players can enjoy more life-like 3D images.

2 1 C    2 A    3 B

3 1 C    3 B    5 D    7 E  
2 F    4 G    6 A

4 1 bit size              3 hard drive        5 RAM  
2 bus speed              4 MB

### 5 Suggested Answer

When a computer's virtual memory is made bigger, data is temporarily stored on a paging file on the computer's hard drive.

6 1 F    2 F    3 T

7 1 there's your problem    4 how exactly  
2 virtual memory            5 Just click  
3 hard drive                6 by at least

### 8 Suggested Answer

- B: Good morning. How can I help you?  
A: Well, the ClearPic program I installed keeps freezing.  
B: Does your computer have at least 500 MB of memory?  
A: No, it doesn't.

B: Well, it definitely needs it, so you can store more data.

- A: How can I fix that?  
B: By increasing your computer's virtual memory. That way, the paging file size will be increased and there will be more space.  
A: Great! So how do I increase the memory?  
B: Click on the "My Computer" icon under "Properties" and just increase the maximum memory by half.  
A: Ok. Thanks for your help.

### 9 Suggested Answer

**Customer Issue:** ClearPic program keeps freezing  
**Does computer have enough memory?** No

**Advice given:** Increase computer's virtual memory  
**How to do this:** 1 Click on the "My Computer" icon  
2 Increase the maximum memory by half

## Unit 2

### 1 Suggested Answers

- 1 With the evolution of the Internet, computer programming has affected business in a big way. Programmers can develop and adapt programs to perform a broad range of functions and tasks. This has resulted in business owners benefiting from all sorts of information exchange across the globe.
- 2 Computer programming is becoming more and more important as humans interact with machines. In the future, even more people, of all ages will use programming as a tool to help them communicate, as reading and writing become a thing of the past. Nowadays, users are already creating active and interactive web content and learning how to improve software that supports them in their tasks. It is also possible that computer programming will be taught more widely in schools so that students will be prepared for the new world of technology.

2 1 D    2 B    3 B

3 1 computer language    4 BASIC    7 C  
2 Java                    5 C#        8 CPU  
3 Assembler             6 C++       9 compiler

4 1 A    2 B    3 A

### 5 Suggested Answer

Some of the older computers won't be able to convert to machine code very well if they don't update their linkers and compilers.

6 1 F    2 T    3 F

- |     |                            |                        |
|-----|----------------------------|------------------------|
| 7 1 | translate between programs | 4 CPU needs            |
| 2   | C++                        | 5 fraction of the time |
| 3   | programmers                | 6 take a look          |

### 8 Suggested Answer

- A: Well, without someone trained to use Assembler, I don't think we can work efficiently.
- B: Yes, but I don't think we can afford more programmers. What about you training to use it?
- A: Sure, but I might get behind with other programs I'm working on.
- B: Well, we can have other programmers do some of your workload.
- A: Fine. What do you think about our CPU needs?
- B: How pressing would you say those needs are?
- A: Well, we could finish our projects in the nick of time if we had some updated CPUs.
- B: OK. let me take a look at the budget and we'll see.

### 9 Suggested Answer

To: Mr Jameson  
 From: Fiona Feller  
 Subject: Updated resources

Dear Mr Jameson,  
 As the head of the computer programming department, I'd like to bring it to your attention that the department needs more computer programmers. We need people trained in Assembler as we cannot efficiently translate between programs. Also, if we had updated CPUs, we could finish our projects in a fraction of the time. If you are available during the week, I'd like to discuss these proposals for updated resources.

Thanks,  
 Fiona Feller

## Unit 3

### 1 Suggested Answers

- 1 People can access the Internet by wireless means, such as a laptop, a mobile, a games console or an MP3 player. There are wireless access points in public places such as airports, libraries and most hotels. Nowadays, almost every school in developed countries provides students with access to the Internet. People can also connect to the Internet by satellite and Dial-up, which is a form of Internet access that uses the facilities of the public telephone network. A T1 line is similar: a copper or fiber optic telephone line

that can be leased from ISPs. It can carry more data than a traditional one. Cable is another option, where an internet connection operates over cable TV lines.

- 2 The best type of internet connection for a business is a T1 line which provides service up to 60 times faster than a traditional modem and transmits 1.544 megabits per second. Businesses using a T1 line with more than 8 phone lines can reduce telecom charges and are provided with high-speed Internet access at the same time. The business is charged with one T1 line instead of the 8 phone lines, thus saving the company money. T3 lines are even more popular with larger businesses as they are equal to having 28 T1 lines and can transfer up to 44.736 megabits per second.

2 1 B    2 B    3 C

3 1 D    2 A    3 B    4 C    5 E

- |     |         |                      |       |
|-----|---------|----------------------|-------|
| 4 1 | hotspot | 4 Upgrade            | 7 T-3 |
| 2   | DSL     | 5 antivirus software |       |
| 3   | ISP     | 6 wireless router    |       |

### 5 Suggested Answer

WebSurf Internet will put an end to the dial-up service.

6 1 F    2 T    3 F

- |     |           |                      |
|-----|-----------|----------------------|
| 7 1 | broadband | 4 tech support       |
| 2   | T-3       | 5 antivirus software |
| 3   | bandwidth | 6 hotspots           |

### 8 Suggested Answer

- A: Good morning. I noticed that my bill increased after switching from Mindeye to Websurf.
- B: What service do you have?
- A: Just broadband Internet.
- B: Mmm, well, That's why there has been an increase. We're installing new T-3 lines.
- A: How does that affect my billing?
- B: T-3 lines are expensive, so we've had to increase the rates. However, it allows for greater bandwidth.
- A: I'm not sure that justifies the price hike.
- B: Well, it does have other benefits too. There's Live tech support and you get free antivirus software. Also, you can log into any of our hotspots at no extra cost.
- A: I see. Then it might be worth the higher bill.

# Book 2 Answer Key

## 9 Suggested Answer

What was your call concerning?

A bill increase after switching from Mindeye to WebSurf. Was our Customer Rep able to help you with your problem? How?

Yes, your Customer Rep explained the cause of the bill increase (installation of new T-3 lines) and went on to give me details of the benefits.

## Unit 4

### 1 Suggested Answers

1 As computer technology changes, so do the types of computer storage devices. The most common storage devices are floppy disks, hard disks, zip disks, CD-RWs and CD-Rs. Although these devices are considered out of date, people are still using them to transfer files. Nowadays, more efficient devices are sold on the market such as USB flash drives and Smart Cards.

2 The most common use of flash drives is to transport and store personal files such as documents, pictures and videos. Digital audio files can be transported from one computer to another and played on a compatible media player. In addition, many car stereo head units are equipped with a USB port. Flash drives are used in arcade games to store songs or to transfer high scores, screenshots etc. throughout sessions.

2 1 A    2 C    3 B

3 1 array     5 data compression  
2 memory storage density                                 6 CD-RW  
3 CD-R     7 RAID  
4 zip drive

4 1 A    2 B    3 B

## 5 Suggested Answer

GenTech Systems use magnetic tape to backup the main data.

6 1 T    2 F    3 F

7 1 data loss     4 come up with  
2 smaller devices     5 detailed proposal  
3 Too bad     6 As soon as possible

## 8 Suggested Answer

A: Good morning Simon. I just wanted to tell you that a few of the requests you sent in have been approved.

B: That's great. Which ones?

A: Well, we're getting a group of hard drives arranged in an array so that we don't have any more data loss.

B: OK. What about some of the smaller devices?

A: No, they weren't approved because management thought they seemed too expensive.

B: I see. What about the main data backup?

A: Yes, we were interested in the savings you mentioned. We just need you to come up with a more detailed proposal.

B: Sure. When would you like that?

A: As soon as possible.

## 9 Suggested Answer

**From:** Simon Rogers  
**To:** IT Employees

I am pleased to inform you that a few of our requests for new equipment have been approved. We are getting a group of hard drives arranged in an array as management didn't like hearing about the data loss. Also, if I can come up with a more detailed proposal regarding the main data backup, management is very interested.

Look forward to hearing your comments and any further suggestions.

## Unit 5

### 1 Suggested Answers

1 Traditional film is becoming obsolete, thanks to digital technology. Now, you don't need to purchase film or waste time getting it developed. This eliminates the cost of expensive processing equipment and dark rooms. With a digital camera, you can review images that are captured and edit them instantly. These images can be enhanced with added information such as added text or a date using the camera itself. You can then transfer them straight to a computer's hard drive. Digital photography, allows you to link printing presses to computers. Documents can be personalized and colour prints are a far superior quality. As modern digital cameras have huge storage capabilities, old Polaroids and negatives can be done away with. Many websites allow users to store copies of their photos which can easily be accessed from a computer. These are a few of the changes digital technology has made in the photography industry.

2 Most businesses nowadays use scanners, printers and digital cameras. Office based businesses use printers because they are good for printing a mass volume of documents. Insurance companies use digital cameras to keep a visual inventory for



insurance claims purposes. Digital cameras can in fact be used in business for many purposes, such as creating virtual reality tours to present on the Web, producing business cards and recording events or meetings. They are excellent for constantly monitoring activity in a business environment.

2 1 B    2 B    3 D

3 1 D    3 G    5 C    7 E    9 B  
2 A    4 I    6 H    8 F

4 1 digital zoom    2 optical zoom    3 CCD

#### 5 Suggested Answer

The all-in-one packages for printers incorporate scanning and fax.

6 1 C    2 D

7 1 optical zoom	4 sounds great
2 more professional	5 laser printers
3 megapixels	6 DPI

#### 8 Suggested Answer

A: You look like you need some help.  
 B: Yes, I'd like to update my equipment and have something more professional.  
 A: What have you been using?  
 B: The SuperShot 350.  
 A: Well, may I recommend the SnapPro series? This one has 30 times optical zoom and 5 times digital.  
 B: How many megapixels does it have?  
 A: 15, which gives you incredible detail.  
 B: OK, I'd also like to start printing my own pictures.  
 A: We have some great deals on inkjets and laser printers.  
 B: Well, I'm leaning towards a laser printer as they print better.  
 A: So, the PrintBeam EX is a good choice. It's a two-in-one laser printer and scanner. It prints at 2400 DPI.  
 B: Great. Thanks for your help.

#### 9 Suggested Answer

##### Re: Compumart Sale

It's well worth visiting the Compumart Sale. There are bargains galore in all the departments and the staff are friendly and helpful.

I purchased a digital camera from the SnapPro series at a very reasonable price. I use it to create my own photos and graphics for my Web site. It has 30 times optical zoom and 15 megapixels. The images are incredible. I also enquired about a printer and ended

up buying the PrintBeam EX. It prints at 2400 DPI. I recommend anyone who is interested in buying new equipment, etc to take a trip to the store. There is a huge variety and the staff goes out of their way to explain each product.

#### Unit 6

##### 1 Suggested Answers

- An MP3 player is used to create playlists, podcasts and other audio files. They are popular for downloading music, voice recordings, listening to audiobooks and also the radio. People frequently use them when commuting to work, travelling and keeping pace at the gym.
- My MP3 player often freezes when I load a new music library. Sometimes it does it when I want a particular song and I click through too quickly.

2 1 T    2 T    3 F

3 1 I    3 D    5 H    7 B    9 G  
2 A    4 E    6 F    8 C

4 1 upload    2 freeze    3 driver

##### 5 Suggested Answer

The Model X.2 player is not being recalled because Georgia Electronics have created a driver to correct the problem which occurs.

6 1 C    2 B

7 1 got a problem	4 AAC
2 experiencing a recall	5 upload
3 completely froze	

##### 8 Suggested Answer

A: Oh, good morning. I've got a problem with my MP3 player, could you help?  
 B: Certainly, we're experiencing a recall on some models. Which one do you have?  
 A: I have the N.5250.  
 B: OK, tell me about the problem you're having.  
 A: Well, at first, the sound quality started getting worse. Then, it completely froze. I tried restarting it but that didn't work.  
 B: Sounds like a problem caused by AAC files. Don't worry, we have a driver to fix that.  
 A: Great! How do I get it?  
 B: Just download it from our website and upload it to your player.  
 A: Thanks a lot, you've been very helpful.

## Book 2 Answer Key

### 9 Suggested Answer

Dear Sir or Madam,

I recently bought a N.5250 MP3 player at one of your stores. Unfortunately, after only using it for two days, I am experiencing problems with it. The sound quality is gradually getting worse and every now and then, it freezes up. It is very annoying when this happens and I'm afraid that the more files I store, the more often this problem will occur.

I would appreciate it, if someone from your company could advise me on what to do. I should be able to listen to music without the interruption of my MP3 player freezing.

Sincerely,

Timothy Roberts

### Unit 7

#### 1 Suggested Answers

- 1 Cell phones have improved the way large and small corporations do business. They have allowed people to take their work out of the office but stay connected to their colleagues and workplace. Hi-tech cell phones allow users to check and send email, browse the Internet and have immediate contact with clients around the world. Business plans and appointments can be rearranged on the move, giving more schedule flexibility.
- 2 Nowadays, top of the line cell phones are embedded with advanced technology such as high resolution cameras, music players, fast Internet access, office tools, text messages, 3D video games, maps and touch screens. They are quite capable of replacing a computer or mini laptop and are preferable due to their size and weight. Bluetooth technology enables links over a short distance between cell phones, mobile computers and other portable hand devices.

- 2 1 **Voice activation:** place a call with a simple command
- 2 **3G network access:** connect to the Internet quickly; download apps
- 3 **Bluetooth technology:** communicate with other devices through your phone

3 1 F      3 A      5 B      7 E  
2 D      4 G      6 C

4 1 touchscreen      3 cell phone      5 caller ID  
2 ringtone      4 app

### 5 Suggested Answer

To access different features on The Lightning cell phone, you would tap your finger on the touchscreen display.

6 1 T      2 F      3 F

7 1 how to solve      4 purchase history  
2 app      5 touchscreen  
3 address book

#### 8 Suggested Answer

- A: Hi Jerry! I think I know how to solve your tracking problem.  
B: Really? How?  
A: Well, it's a new app I have. It helps me to keep track of all my clients and their purchases.  
B: How so?  
A: I use it to keep a list of them in an address book.  
B: Isn't that just the same as the address book on my phone?  
A: No, this app lets me view my client's purchase history.  
B: That's good. How does it work?  
A: I just tap the client's name on the touch screen and I get all his details.  
B: That sounds great!

### 9 Suggested Answer

**Description of App:** Cell Phone Tracking Application  
**Potential Uses:** Business professionals can keep track of their time, expenses, contacts, invoices, schedules and even have a list of their clients' personal details and records.

### Unit 8

#### 1 Suggested Answers

- 1 There are various ways for businesses to communicate with one another.  
A common method today is by using a PDA (personal digital assistant) which functions as a personal information manager. It can access the Internet and function as a phone and portable media player. Smartphones allow much more advanced computing ability and connectivity. They have made it possible for businesses to communicate freely worldwide. On the Internet, people can use email or webcams to interface, synchronise and exchange info easily. Businesses still communicate by fax and by letter too.
- 2 Electronic communication has many benefits as it is used for the transfer of data, images and signals. Cell phones for example allow interaction



## Book 2 Answer Key

- A: What are the posts for?  
B: They update customers on the latest news and inform them about any new software that's available.  
A: Great! Anything else?  
B: There's also a forum for people to discuss the Centro computer.  
A: What's the customer feedback been like?  
B: Overall very positive. However, there have been a few complaints about the price.

### 9 Suggested Answer

**Handle:** TouchSmart

**Description:** All-in-one Desktop PC: touch screen, state of the art design, memory of 4GB, hard drive capacity of 500 GB, display: 23" LED full HD, Duo processor T6600, stereo

**New post:** Centro is considering adding new multi touch applications and faster downloadable software by early fall. Stay connected for more news and updates.

## Unit 10

### 1 Suggested Answers

1 GPS which stands for Global Positioning Service is fast becoming the world's most reliable navigation system. Routing unfamiliar territories is the primary reason for using it and why travelers like it. GPS works in all weather conditions and can determine exact geographic locations. Cab drivers, truckers and delivery men rely on it to reach their destinations and can save on time and fuel expenses. Commuters traveling to work use their GPS to avoid daily traffic jams or pile ups as it finds alternative routes for them. Photographers also attach GPS to their digital cameras to record where and when a picture was taken.

2 GPS can aid businesses in a number of ways. Firstly, firms that run a large vehicle fleet can adopt a GPS vehicle tracking system to improve efficiency and reduce fuel waste. Managers see an increase in staff productivity as employees avoid making any unauthorized stops during working hours. Companies also avoid delays as with the aid of GPS, deliveries are made on time thus offering better quality of service.

2 1 B    2 A    3 A

3 1 F    3 D    5 B    7 C  
2 A    4 G    6 E

4 1 waypoints    3 navigation    5 acquisition time  
2 position    4 GPS

### 5 Suggested Answer

Cartography is the term used to describe the activity of making maps.

6 1 F    2 T    3 T

7 1	navigation system	4 positions
2	meant for	5 waypoints
3	accurate	6 check that out

### 8 Suggested Answer

- A: Good morning. I'm looking into buying GPS devices for my company.  
B: OK. What kind of company is it?  
A: It's a cab service and I want my drivers equipped with a navigation system. What product would you recommend?  
B: Well, The MapSources Traveler Elite is our most accurate system.  
A: Does it record positions? The cab drivers have to remember a lot of locations.  
B: Yes, it does. You'll be able to save up to 500 waypoints.  
A: That seems just what I'm looking for.

### 9 Suggested Answer

Sandra.

I called MapSource today about buying a GPS navigation system. The Customer Service Representative suggested The MapSources Traveler Elite. He said it was their most accurate consumer GPS. It records up to 500 waypoints, so it would pinpoint enough locations.

Could you talk to a few of the drivers and see what they think?

Thanks,  
Colin

## Unit 11

### 1 Suggested Answers

1 Online banking allows people to perform various services with the click of a mouse. By logging on to a bank's website, a customer can access their accounts 24 hours a day, 7 days a week. Paying bills and transferring funds can be done immediately, eliminating the need to stand in a long line in a bank to handle transactions. There's no need to wait for a bank statement in the post either, customers can view all transactions just by logging in to their account. All in all, online banking saves time and helps customers organize their banking on a daily basis. Last but not least, electronic banking is an environmentally friendly

option as an average household can save a lot of paper.

- 2 If people choose to do their banking via the Internet, there are risks to be aware of. Identity theft is a growing problem and online customers need to be highly protective of their personal account information whenever making transactions. Another risk is missing payment deadlines which results in penalty fees. As the bank's website may be temporarily down, there may not be enough time to send out a payment unless it has been scheduled for a specified date.

2 1 C    2 A    3 C

3 1 C    2 A    3 B

4 1 D    2 A    3 E    4 B    5 C

#### 5 Suggested Answer

A customer can pay their bills online by enrolling in a bill pay program.

6 1 T    2 T    3 F

- |                        |                     |
|------------------------|---------------------|
| 7 1 here it is         | 4 What about        |
| 2 put a temporary hold | 5 I'd appreciate it |
| 3 bill pay             |                     |

#### 8 Suggested Answer

B: Good morning! North Bank, Gregory speaking.  
A: Um... Hello. I just looked at my account online and saw a withdrawal I didn't make.  
B: Can you give me your account number?  
A: Yes. It's 14786.  
B: OK. Which withdrawal are you talking about?  
A: The one on the 1st of February at the ATM in Florida. I've never been there.  
B: I see. I'll put a temporary hold on your account. Then no one can use your funds.  
A: But I need it. I've got a few scheduled payments to make on my bill pay.  
B: That's no problem. I'll process those before placing the hold.  
A: What about that withdrawal?  
B: Our Fraud Prevention Department can investigate and issue a refund. Should I transfer you?  
A: I'd appreciate it, thanks.

#### 9 Suggested Answer

**Account number:** 14786

**Security concern:** Unauthorized Cash Withdrawal

**Reason for concern:** Unauthorized use of funds

**Customer questions:** Concern over payments scheduled on bill pay and how unauthorized cash withdrawal will be dealt with.

**Resolution:** Placing temporary hold on account while Fraud Prevention Department investigates issue.

### Unit 12

#### 1 Suggested Answers

1 Millions of people spend a significant amount of time on the Internet as it is a leading source for up-to-date news, educational material and international weather and sports reports. People can get all kinds of free information on common interests, vacation ideas and, movie and music details. There are also sites giving hands-on advice, expert knowledge and offering financial services. In fact, users can find just about anything online.

2 Information technology can combine business and education in various ways, for example by tailoring individual classes or curriculum to individual needs. Distance learning courses for example are widely used in universities. These online courses allow easier and faster learning of equal quality to those in a traditional classroom. Message board forums, e-mail and recorded videos provide students with the support they need for an online education. Businesses can carry out research through search engines and employees can train in a virtual learning environment.

2 1 T    2 T    3 F

- |                         |                    |
|-------------------------|--------------------|
| 3 1 license restriction | 5 boolean operator |
| 2 ebook                 | 6 index            |
| 3 VPN                   | 7 site license     |
| 4 EZproxy               |                    |

4 1 C    2 C    3 B    4 A

#### 5 Suggested Answer

Users with a site license access ThinkTank from home through an EZproxy server.

6 1 B    2 D

- |                   |                  |
|-------------------|------------------|
| 7 1 laptops       | 4 VPN            |
| 2 remote access   | 5 should be fine |
| 3 pop-up blockers | 6 Thanks so much |

# Book 2 Answer Key

## 8 Suggested Answer

A: Good morning. Can you help me? We have a problem at the college with our subscription to the online library. The staff here can't access anything although the students can.  
B: Are they using their own computers?  
A: Yes, they have laptops and use remote access.  
B: Have you installed anything new on the computers?  
A: Actually yes. We've just got new pop-up blockers.  
B: Ah. Well, those are preventing the VPN from making a connection in a new window.  
A: How do I fix the problem?  
B: Just turn off the pop-up blocker and everything should be fine.  
A: OK. Thanks for your help.

## 9 Suggested Answer

From: Brighton State College

Hello,  
I'm a librarian at the college and we are having a problem with our subscription. It seems that none of the library staff can access anything on our computers, although the students can. They all have their own laptops and it works fine for them on remote access. We have just recently installed new pop-up blockers but don't know whether that has caused a problem? Please could you advise me on how to fix the problem?

Regards,  
Sue Yates

## Unit 13

### 1 Suggested Answers

1 In just a decade or two, people will be part of a robotic nation. Robots are already used for space exploration, to investigate hazardous and unsafe environments, such as earthquake rescue missions and to explore and gather information under the ocean waters. They are also used in the military and in the manufacturing industry. Industrial robots do jobs that are difficult and dangerous. They lift heavy objects, paint and do assembly work. At home, robots can take over the housework and even play football with family members. In some supermarkets, robots stock shelves and help customers. In the not too distant future, stores and restaurants will be staffed by robots and there will be others that can remind people to take their medicines.

2 Although robots have replaced certain employees such as supervisors and manual workers, tens of thousands of software engineering positions have been opened up. Businesses can increase their profits as robots are capable of producing a much better product in a shorter amount of time. Robots can carry out intricate jobs accurately and consistently. They are fast and need less supervision than a human. They perform the same job day after day with precision. All in all, robots have changed the workplace as we know it.

2 1 serial robot                          4 actuators  
2 end-effector                            5 dynamic model  
3 enabling device                        6 equality

3 1 E                                    3 A                            5 G                            7 H                            9 F  
2 I                                    4 D                            6 C                            8 B

4 1 enabling device                      3 dynamic model  
2 equality constraint

### 5 Suggested Answer

The main role of the autonomous, serial robot will be to place products in boxes and fasten them.

6 1 A                                    2 D

7 1 serial robot                        4 dynamic model  
2 actuators                             5 How about  
3 enabling device

### 8 Suggested Answer

A: So, what's wrong with your serial robot?  
B: Its actuators aren't responding. Do you have any advice?  
A: Well, in my experience, the enabling device is often the problem.  
B: I checked that. The enabling device turns on properly. The actuators don't respond though when you move the penchant.  
A: Well, are all your mathematical calculations correct?  
B: Yes, they are. I checked the dynamic model twice.  
A: How about your equality constraints? What's the value of those?  
B: I set them to seven.

### 9 Suggested Answer

Is the enabling device functioning properly? Y/N  
If no, - . If yes, move to next question.  
Are the mathematical calculations correct? Y/N  
If no, - . If yes, move to next question.  
Are the equality constraints correct? N/Y  
If no, set the value equal to number of joints on the robot.

## Unit 14

### 1 Suggested Answers

- 1 E-books are becoming more popular with people as you can read one virtually anywhere. It's fast and easy to download one on a computer and they can also be read on an e-book reader; a device that is designed primarily for the purpose of reading digital books and periodicals. An e-book reader can store countless e-books on a variety of subjects and its good news for businesses too, as they can save money on employee manuals and training materials.
- 2 E-books are growing in popularity and e-publishing is becoming a favorable alternative form of publication. New writers are turning to writing e-books and are finding it is much cheaper. E-books can be written and made available in a matter of weeks while traditional publishing of a manuscript can take over a year. As an e-book is basically a computer file, websites promote the book instead of a book store.

2 1 D      2 B      3 B

3 1 F      3 D      5 G      7 B  
2 C      4 E      6 A

- 4 1 black and white      4 download  
2 reflow      5 bitmapped graphics  
3 sub-pixel rendering

### 5 Suggested Answer

You can view Ebooks on the company's handheld ergonomic eReader and on web browsers.

6 1 F      2 T      3 F

- 7 1 so good      4 takes care of  
2 zoom in      5 available publications  
3 active matrix display      6 recent uploads

### 8 Suggested Answer

- A: Good afternoon. I have some questions about your eReader. Is the print very small?  
B: Actually, you can zoom in to make the text any size you want. Also, our new readers have an active matrix display.  
A: I'm sorry. What's that?  
B: It's the screen. It just means that the picture is very clear.  
A: OK. Are there any children's books available too?  
B: Sure. There's a complete list of available publications on our website.

A: Great are they illustrated?

B: Actually, they are. We've added bitmapped graphics to recent uploads.

### 9 Suggested Answer

Representative's name: Jeffery Collins

Customer's name: Sarah Turner

Customer's concerns: Can't read small print/If children's books are available?/If children's books are illustrated?

## Unit 15

### 1 Suggested Answers

- 1 The capabilities of today's computers are still far from a human's capabilities. However, although the human brain has the capacity of learning things faster than a computer, it is slower than a computer in many functions. That's why in the future, advanced robots may just surpass human intelligence. Intelligence technology is progressing to the point that even today, some robots are quite smart and sophisticated. Asimo, a humanoid robot is capable of interpreting the postures and gestures of humans and moving independently in response. It can greet people, follow them and even recognize pre-registered faces. With nanotechnology and artificial intelligence moving forward in leaps and bounds, robots one day may have a mind of their own.
- 2 Artificial intelligence, is widely used in business for complex problem solving and decision support techniques. It helps enterprises to reduce latency in making business decisions, minimizes fraud and enhances revenue opportunities. It is a branch of science which deals with helping machines to find solutions to complex problems in a more human-like fashion. Artificial intelligence, helps businesses, banks and hospitals etc. in dealing with huge amounts of information and detects buying patterns and customer habits.

2 1 F      2 T      3 F

3 1 C      3 D      5 B  
2 F      4 A      6 E

- 4 1 computer vision      4 artificial intelligence  
2 model based reasoning      5 agent  
3 case based reasoning      6 machine learning

### 5 Suggested Answer

Pattern recognition has made computer vision possible.

6 1 F      2 F      3 T

## Book 2 Answer Key

- 7 1 get a chance      4 perfect  
2 cognitive scientists      5 What do you mean  
3 didn't get

### 8 Suggested Answer

A: Brad, did you get a chance to read this month's Programmer?  
B: Yes, I saw your article on AI. So cognitive scientists are getting into programming?  
A: Yes, and I think it'll help. Most programming is too rigid.  
B: Because of algorithms? I didn't get that part.  
A: Basically, an algorithm needs a perfect answer.  
B: What do you need by, 'needs a perfect answer'?  
A: They have a limited number of solutions. If one of those solutions isn't right, the algorithm doesn't work.

### 9 Suggested Answer

Artificial intelligence is the science of making intelligent machines or computer programs. Nowadays, scientists are exploring the possibility of using computers and robots to understand human intelligence. The ultimate goal of some scientists is to make computer programs using artificial intelligence to solve problems in the world as well as humans can do.

## Unit 1

**Employee (M):** Good morning. How can I help you?  
**Customer (W):** Hi. I installed ClearPic and I'm trying to run it. But the program keeps freezing.  
**Employee:** How much memory is available on your computer?  
**Customer:** It has 256 MB of RAM.  
**Employee:** Well, there's your problem. To run ClearPic you really want to have at least 500 MB of memory.  
**Customer:** So how can I fix that?  
**Employee:** One easy way is to increase your computer's virtual memory.  
**Customer:** What will that do?  
**Employee:** It increases the paging file size. That way, your computer's hard drive can store more data.  
**Customer:** I see. So how exactly do I increase the memory?  
**Employee:** Just click on the "My Computer" icon. Under "Properties," increase the maximum memory amount by at least half.  
**Customer:** Okay. Thanks for your help!

## Unit 2

**Manager (M):** Sarah, could I see you in my office, please?  
**Programmer (W):** Sure.  
**Manager:** I got your email, but I don't think we can afford more programmers.  
**Programmer:** Well, without someone who knows Assembler we can't efficiently translate between programs.  
**Manager:** I know, but I think the best way to address that problem is to have you trained in it.  
**Programmer:** I'm up for that. But I'm worried that I'll get behind on the C++ programs I'm writing.  
**Manager:** We can shift some of your workload to other programmers, then.  
**Programmer:** Okay. What do you think about our CPU needs?  
**Manager:** How pressing would you say those needs are?  
**Programmer:** If we had some updated CPUs, we could finish our projects in a fraction of the time.  
**Manager:** All right. Let me take a look at the budget and see what I can do.  
**Programmer:** Thanks, Mr. Daniels. I appreciate it.

## Unit 3

**Representative (W):** Welcome to WebSurf. This is Yvonne. How may I help you?  
**Customer (M):** Hi, I used to be a Mindeye customer. I noticed that my bill increased after the switch to WebSurf.  
**Representative:** What service do you have?  
**Customer:** Just broadband internet.

**Representative:** Oh, that's it then. We're in the process of installing new T-3 lines.  
**Customer:** But how does that affect my billing?  
**Representative:** T-3 lines are expensive, so we've increased rates. But it allows for greater bandwidth.  
**Customer:** I'm not sure that justifies the price hike.  
**Representative:** Well, it also supports other WebSurf benefits. Live tech support, for instance.  
**Customer:** I guess I've used that a few times already.  
**Representative:** You also get free antivirus software. And you can log into any of our hotspots at no additional charge.  
**Customer:** Oh really? That might be worth the higher bill.

## Unit 4

**Manager (W):** Harold, could I see you for a few minutes?  
**Employee (M):** Sure, Mrs. Smith. What's going on?  
**Manager:** A few of the requests you sent in have been approved.  
**Employee:** That's great! So what did we get?  
**Manager:** Management didn't like hearing about the data loss, so we're getting the array.  
**Employee:** Yes, that was pretty bad. What about some of the smaller devices?  
**Manager:** They weren't approved. It just seemed too expensive.  
**Employee:** Too bad, but I guess you've got to save money somehow. How about the main data backup?  
**Manager:** We're interested in the savings you mentioned. Could you come up with a more detailed proposal?  
**Employee:** Absolutely. When would you like that?  
**Manager:** As soon as possible.  
**Employee:** Sounds good. I'll have something for you tomorrow.

## Unit 5

**Salesman (M):** You look like you need some help.  
**Photographer (W):** Yeah. I'm an amateur photographer and I need better equipment.  
**Salesman:** May I recommend the SuperShot 350? It has 15 times optical zoom and 2 times digital zoom.  
**Photographer:** That's pretty much what I have now. I'm looking for something a bit more professional.  
**Salesman:** Okay ... how about the SnapPro series? This one has 30 times optical zoom and 5 times digital.  
**Photographer:** How many megapixels does it have?  
**Salesman:** Fifteen, which gives you incredible detail.  
**Photographer:** That sounds great. Now, I'd also like to start printing my own pictures.  
**Salesman:** Well, we have some great deals on inkjet and laser printers.  
**Photographer:** I'm leaning towards a laser printer. Inkjets just can't print as well.

# Audioscripts

**Salesman:** Okay, the PrintBeam EX is a two-in-one laser printer and scanner. It prints at 2400 DPI.  
**Photographer:** That's perfect. Thanks so much.

## Unit 6

**Representative (W):** Georgia Electronics customer service, this is Kim. How can I help you?  
**Consumer (M):** Well, I've got a problem with my MP3 player.  
**Representative:** Yes, we're experiencing a recall on some models. Which model do you have?  
**Consumer:** I have the X.2.  
**Representative:** All right. Tell me about the problem you're having.  
**Consumer:** At first, the sound quality started getting worse. Then it completely froze on me. I thought restarting it would fix it, but nothing works.  
**Representative:** Okay, that's a problem caused by AAC files. Luckily, we have a driver to fix that.  
**Consumer:** Oh good. How do I get it?  
**Representative:** Just download it from our website and upload it to your player.  
**Consumer:** Okay. It uploads like other files?  
**Representative:** Yes, just connect through the dock. The driver takes up less than a gigabyte, so you won't lose much storage space.

## Unit 7

**Employee 1 (M):** Hey, Amy. I think I know how to solve your tracking problem.  
**Employee 2 (W):** Really? How?  
**Employee 1:** It's a new app. It helps me keep track of clients and their purchases.  
**Employee 2:** How does it do that?  
**Employee 1:** Well, it lets me keep a list of all my clients in an address book.  
**Employee 2:** How's that different from the address book on my phone?  
**Employee 1:** This one lets me view any client's purchase history.  
**Employee 2:** That's helpful. How does it work?  
**Employee 1:** I just tap the name on the touchscreen, and it says that our client Mr. Smith purchased fifty boxes of paper yesterday.  
**Employee 2:** Wow, that's neat.  
**Employee 1:** Yeah. And with my access to a 3G network, I can track a shipment while speaking with a customer.  
**Employee 2:** Well, I'll definitely download that app soon!

## Unit 8

**Representative (W):** Hi Robert. I just got done talking with Clark Andrews via instant messaging.  
**Manager (M):** Did you explain the problem scanning the EPCs?  
**Service Representative:** Yes. He said it was okay to just send products with UPCs.  
**Manager:** That's a relief. He's an important client.  
**Service Representative:** I said we'd update him with text messages as things progress.  
**Manager:** Well, I need to talk to people who handle our EPCs. Can you make sure his order gets taken care of?  
**Service Representative:** Sure. I'll tell shipping to scan it this morning.  
**Manager:** Text him when it's scanned and again when it ships.  
**Service Representative:** Will do. I have one more question.  
**Manager:** What do you need?  
**Service Representative:** Emails with attachments keep going to my spam folder. How do we fix that?  
**Manager:** Give IT a call. I had that problem, too.

## Unit 9

**Employee 1 (M):** Hey, Angela. How's the Centro computer campaign coming along?  
**Employee 2 (W):** Great. We're focusing on advertising on a social networking site.  
**Employee 1:** What have you done?  
**Employee 2:** Well, we created a profile and handle related to the Centro.  
**Employee 1:** What's in the profile?  
**Employee 2:** There's a brief description of the computer and its features. And we'll be putting up regular posts on a news feed.  
**Employee 1:** What are the posts for?  
**Employee 2:** They update customers on the latest Centro news. For instance, this post informs customers of new software that's available for the computer.  
**Employee 1:** Great! Anything else?  
**Employee 2:** We've got a forum for people to discuss the Centro.  
**Employee 1:** What's the feedback from customers been like?  
**Employee 2:** There have been several complaints about the price. But overall the responses are very positive.

## Unit 10

**Representative (W):** This is MapSources. How may I help you?

**Customer (M):** I'm looking into buying some GPS devices for my company.

**Representative:** I can help you with that. What product were you considering?

**Customer:** Well, your ad talks about the MapSources Pro series.

**Representative:** Yes, those are our most powerful products. What kind of company is it?

**Customer:** It's a cab service. I want to equip my drivers with the best navigation system.

**Representative:** The Pro series is actually meant for civilian airplanes and more high-risk situations. It's probably more than you need.

**Customer:** What product would you recommend, then?

**Representative:** The MapSources Traveler Elite is our most accurate consumer GPS.

**Customer:** My drivers have to remember a lot of locations. Does it record positions?

**Representative:** It does. You can save up to 500 waypoints.

**Customer:** Okay, I'll check that out. Thanks for your help.

## Unit 11

**Teller (W):** Safe Bank, Sally speaking. How may I help you?

**Account holder (M):** Hi. I was just online looking at my account and saw a withdrawal I didn't make.

**Teller:** Let's check that out. What's your account number?

**Account holder:** It's 12675.

**Teller:** OK, here it is. Which withdrawal are we looking at?

**Account holder:** The one at the ATM in Florida, on 1st February. I've never been there.

**Teller:** I see. I'll put a temporary hold on your account. That way no one can use your funds.

**Account holder:** But, I need it. My bill pay – I've got a few payments scheduled.

**Teller:** No problem sir. I'll process those before placing the hold.

**Account holder:** What about that withdrawal?

**Teller:** Our Fraud Prevention department can investigate and issue a refund. Should I transfer you?

**Account holder:** I'd appreciate it, thanks.

## Unit 12

**Representative (M):** ThinkTank customer service. How can I help you today?

**Librarian (W):** Hi, I'm a librarian at Brighton State College. We have a problem with our subscription.

**Representative:** What's the issue?

**Librarian:** Well, it's odd. Library staff can't access anything on university computers. But students can.

**Representative:** Are the students using their own computers?

**Librarian:** Yes, they have laptops. It works fine when students use remote access.

**Representative:** Have you installed anything new on the computers?

**Librarian:** Actually, yes. We just got new pop-up blockers.

**Representative:** Ah, that makes sense. The pop-up blockers are preventing the VPN from creating a connection in a new window.

**Librarian:** How do I fix the problem?

**Representative:** Just turn off the pop-up blocker and everything should be fine.

**Librarian:** Okay. Thanks so much for your help.

## Unit 13

**Engineer 1 (M):** So, Lisa. What's wrong with your serial robot?

**Engineer 2 (W):** Its actuators aren't responding. Do you have any advice?

**Engineer 1:** Well, in my experience, the enabling device is often the problem.

**Engineer 2:** I checked that. The enabling device turns on properly. But the actuators don't respond when you move the pendant.

**Engineer 1:** Okay. And all your mathematical calculations are correct?

**Engineer 2:** They are. I checked the dynamic model twice.

**Engineer 1:** How about your equality constraints? What's the value of those?

**Engineer 2:** I set them to seven.

**Engineer 1:** Are there seven joints on the robot?

**Engineer 2:** No, there are six. Why?

**Engineer 1:** I believe you need to set the value equal to the number of joints on the robot.

**Engineer 2:** I can't believe I made such a simple mistake. Thanks for your help!

# Audioscripts

## Unit 14

**Representative (W):** Word Wise Publishing. How can I help you?

**Customer (M):** I have some questions about your eReader.

**Representative:** Okay, I can certainly answer those.

What would you like to know?

**Customer:** Well, first, my eyes aren't so good. Is the print very small?

**Representative:** Actually, you can zoom in to make the text any size you want. Also, our new readers have active matrix display.

**Customer:** I'm sorry. What's an active matrix display?

**Representative:** It's the screen. It just means that the picture is very clear.

**Customer:** Okay. That takes care of my first question.

Now, do you have children's books available, too?

**Representative:** Absolutely. The complete list of available publications is on our website.

**Customer:** Great. Are they illustrated?

**Representative:** Actually, they are. We've added bitmapped graphics to recent uploads.

**Customer:** Oh, my kids will appreciate that. Thanks so much.

## Unit 15

**Programmer 1 (M):** Jane, did you get a chance to read this month's Programmer?

**Programmer 2 (W):** Yes, I saw your article on AI. So cognitive scientists are getting into programming?

**Programmer 1:** Yes, and I think it'll help. Most programming is too rigid.

**Programmer 2:** Because of algorithms? I didn't get that part.

**Programmer 1:** Basically, an algorithm needs a perfect answer.

**Programmer 2:** What do you mean by "needs a perfect answer"?

**Programmer 1:** They have a limited number of solutions. If one of those solutions isn't right, the algorithm doesn't work like a math problem.

**Programmer 2:** But a heuristic is different?

**Programmer 1:** Exactly. It can have lots of solutions. It looks for a good answer, not the perfect one.

**Programmer 2:** Okay. So heuristics would use case based reasoning.

**Programmer 1:** Right. A computer could see what has worked in the past, and then try something similar.

**Programmer 2:** Sounds intelligent to me!

**Unit 1****1 Suggested Answers**

- 1 Usually, people take into consideration what they will use their computer for when choosing an operating system. For example, some users need word processing, networking, Internet and email while others may want to do more demanding work like photo-editing, graphic design and multimedia. Perhaps one operating system offers more features or greater hardware and software compatibility. Also it may be simpler and faster to install. People may take into account whether their operating system will need regular updates and new versions running to stop it from crashing. Last but not least, consumers may think about its appearance or design and ease of use.
- 2 Using a particular operating system for a company can be very beneficial. For example, many major design firms use Macs® for their work. They claim that this operating system is excellent for color calibration support, wide availability of necessary software and graphic design applications. It is also used by publishers worldwide for these reasons.

2 1 T    2 F    3 F

3 1 G    3 E    5 C    7 A  
2 D    4 F    6 B4 1 Mac®                  4 PC  
2 prepress                5 typography  
3 color matching**5 Suggested Answer**

PC's video subsystems are more powerful. This is what makes a PC more popular with game designers.

6 1 D    2 A

7 1 We're switching to PCs  
2 get another Mac®  
3 can customise PCs  
4 color matching  
5 slower processing speeds**8 Suggested Answer**

- A: Mr. Jackson has decided to update our computers. We're switching to PCs.
- B: Really? PCs? I'm glad we're updating, but I'd rather get another Mac®.
- A: You would? Not me. You can't customize a Mac®.
- B: Well, you can customize PCs, but Macs® do some things so much better.

A: What do you mean?

B: The color matching and typography are more sophisticated on a Mac® than on a PC. We need that in publishing.

A: Okay, I'll give you that. But Macs® have slower processing speeds, don't they?

B: Maybe a little, but that's mostly with video, and we barely use it.

**9 Suggested Answer****To:** Mr. Julian Jackson (Management)**From:** Mr. Ken Barlow (IT)**Subject:** Purchasing an operating system

Dear Mr. Jackson,

Here is my recommendation for new computers for the company. After some research and inquiries, I propose purchasing PCs as I feel this will suit the firm's needs. As designers in the video game industry, I believe PCs will be extremely beneficial for a number of reasons. Firstly, we can customize a PC to our own needs and have a variety of OS options from Microsoft and other sources. Secondly, PCs are noted for their fast processing speeds and their video subsystems are more powerful than Mac's®. Although a Mac® has superior typography and color matching it has slower processing speeds and is more expensive.

Sincerely,  
Ken Barlow

**Unit 2****1 Suggested Answers**

- 1 There are some key differences between Linux® and other operating systems. Firstly, with Linux®, users can have access and alter the source code to the kernel. This brings about faster improvements and fixes any bugs immediately. The source code is also freely available to everyone, unlike with Windows for example. Secondly, users are free to modify the software, use and even republish or sell it as long as the code is available. Also, with a Linux® GPL - licenced operating system, people can download a single copy of an application and install it on ✓ as many machines as they like. In fact, it comes preinstalled with many hundreds of apps saving installation time. Linux® is very flexible, it can boot from any hard disc in a computer unlike other operating systems.
- 2 Many owners of small businesses are finding that the lack of software license fees and reduced hardware costs with Linux® means they are saving

# Book 3 Answer Key

- a considerable amount of money. Also, by using this system, maintenance is minimized as PCs don't need to be upgraded as often. Linux® is extremely versatile, so businesses can adapt it to their own company's needs. It works as a central server and with any hardware too.
- Finally, there's also a huge online community via forums etc where business owners can find peer support.

2 1 A    2 D    3 D

3 1 B    3 F    5 E    7 C  
2 A    4 G    6 D

4 1 command line    4 free software license  
2 Linux® distribution    5 Microsoft Office®  
3 TCP/IP protocol    6 Linux®

## 5 Suggested Answer

The IT employee believes there are communication errors and virus threats. He also thinks the company spends too much money upgrading their software each year.

6 1 F    2 F    3 T

7 1 works with    5 that Samba®  
2 That's the thing    program  
3 losing Microsoft Office®    6 reconfigure the  
4 actually compatible    TCP/IP protocols

## 8 Suggested Answer

- A: Hi Jerry. Have you got a minute? I want to talk about that Linux® idea. I assume we still have to buy antivirus software that works with Linux®?
- B: That's the thing - even the security software is free.
- A: I see. I'm still not comfortable losing Microsoft Office®.
- B: We don't have to. OpenOffice® is actually compatible with Office® and other programs.
- A: My other concern is printer trouble. I don't want to install Linux® and have our equipment suddenly stop working.
- B: That's why we'll get that Samba® program. The print server will act as if nothing changed.
- A: That sounds too easy. Surely there's something else to it.
- B: Actually, I'll have to reconfigure the TCP/IP protocols, but that's a small task.

## 9 Suggested Answer

To: All staff employees  
From: Mr. Philip Scope  
Subject: Switching to Linux®

After receiving a number of complaints from the IT department regarding the office's computers, I have decided the company would be better off switching to Linux®. Our old operating system, as many of you know, was rife with communication errors and virus threats. I have also taken into consideration the high cost of upgrading our software each year. Linux® is free, open source and many of its programs have a free software license. We will also be able to get Linux® distributions from vendors that have entire software packages that we can use. With Linux®, we will be using a graphical interface and probably we will install a program called Samba® which will still allow us to interact with Windows® - based clients. So, I believe this switch will mean that we won't have to worry about printer problems over the network once the TCP/IP protocol is reconfigured.

Looking forward to receiving any comments you have to make on the new operating system.

Philip Scope

## Unit 3

### 1 Suggested Answers

- Projecting a professional image for your business's website is paramount for its success. Its content including color scheme, design and layout should suit the audience it's aimed at. There should be an attractive logo with details of the company on the homepage along with a clear sitemap to help users navigate the entire website for appropriate information. The firm's goals and objectives should be laid out on this main page too. Usually, every website has a product or service page. This should be clearly laid out in a simple format and include any graphics or product photographs. To encourage more visitors to visit your site, it's best to have a bookmark link on all the pages of the site. Although it's tempting to use lots of colorful graphics and animation, it really is more professional to make it almost monochromatic and use one color to put emphasis on main points of interest.
- Companies use websites to communicate with clients as it is a fast and convenient way for them to build a rapport with existing and potential customers. They can also provide up to date information on new products and services and post reviews too. Some busy employers use their

# Book 3 Answer Key

business website to inform employees about latest developments within the company. They may also use the site for recruitment.

2 1 B 2 B 3 D

3 1 B 3 F 5 I 7 A 9 E  
2 G 4 D 6 C 8 H

4 1 applet 2 reliability 3 MPEG

## 5 Suggested Answer

A CBT Section will allow the employer to keep his employees up-to-date with new training requirements.

6 1 T 2 F 3 F

7 1 coming along 4 high enough quality  
2 media player 5 allow everyone to view  
3 Flash® 6 go online

## 8 Suggested Answer

A: Bill, how is the website coming along?  
B: Well, for the most part, it's coming along fine.  
A: So, are you close to finishing then?  
B: Actually, we're having a little trouble with it.  
A: Why's that?  
B: Well, the media player you requested won't work on all the computers. I'd suggest using Flash® player instead.  
A: I just don't think Flash® player has a high enough quality. I want my potential clients to be able to see everything clearly.  
B: I understand, but using Flash® player will allow everyone to view the media you've given us.  
A: I'll think about it, but everything else is finished?  
B: Yes. Actually, the rest of the site could go online today.

## 9 Suggested Answer

As my company specializes in multimedia presentations for CD-ROM business cards, I want to be able to communicate with clients in marketing, business advertising and promotions. I want a very professional appearance with no unnecessary graphics and small applications filling up the pages. It's important that a helpful FAQs section is included and a multimedia section too, with a media player showcasing our company's products. I will send a DVD with the footage and images I'd like to present. This can then be converted to an MPEG. Also, I'd like to avoid using a Flash® because I don't think the representation will be clear enough.

## Unit 4

### 1 Suggested Answers

1 Online advertising is popular because it gives businesses a cost effective way of promoting their products and services. Using contextual ads on search engine pages, banners and through different advertising networks including e-mail spam, allows companies to deliver marketing messages to attract potential customers. They can customize the content on the site and instantly post it around the world. Businesses can in fact, track how many visitors have seen their ad, clicked on it and actually purchased. Consumers, too, can find out about new products and the latest services that are available.

2 I never click on ads because I find it annoying when they pop up and cover an article that I'm trying to read. Some ads make noises or play music if the cursor accidentally crosses them, so for that reason, I have activated an adblocker.

Or

I may click on an advertisement once or twice a day if it's creative and catches my eye. Other times, I check out online advertisements when I'm looking for something in particular. Then, I click on the ones returned during a search. I've purchased a few products from first noticing them pop up in advertisements while online. It's one way to stay ahead on new goods and services on the market.

2 1 T 2 T 3 F

3 1 CPM 6 click-through rate  
2 ad products 7 click tracking  
3 frequency capping 8 animated GIFs  
4 geo targeting 9 hang  
5 CPC

4 1 commission 3 campaign  
2 above the fold

### 5 Suggested Answer

Geo targeting is used to display advertisements specific to a visitor's geographical location. This means that an advertiser is assured his advertisement is reaching the correct target.

6 1 C 2 A

7 1 the first 4 location of  
option is CPM 5 scroll down to  
2 cost-effective 6 commissions  
3 what the rate see them

# Book 3 Answer Key

## 8 Suggested Answer

- A: Good afternoon. I wonder if you can help me. I have some questions about the billing options on my contract. Could you explain them?
- B: Well, the first option is CPM, where you pay a certain rate for every 1,000 people who view the banner.
- A: And that's the most cost-effective?
- B: Yes, that's correct.
- A: So how do you determine what the rate is going to be?
- B: Well, there are actually two things that affect that. The location of the banner is one of them.
- A: OK. Could you explain that?
- B: Sure. Banners that are above the fold are more expensive. That's just because people don't have to scroll down to see them.
- A: I see. The contract also mentions something about commissions.

## 9 Suggested Answer

Well, with StudioNet Advertising, we offer two general types of banners: traditional banners and animated GIF banners. The latter elicit a higher click-through rate according to our studies and are therefore more expensive. There are also two billing options for our campaign; the CPM option which is the most popular requires you pay an agreed-upon rate for every 1,000 people who view your advertisement. The second option, the CPC, requires you pay the agreed-upon rate for each person who clicks your ad. Clients must take into account that any commissions charged to us by the website will affect the rate, as will the location of the banner which, if placed above the fold will be more expensive.

Finally, StudioNet Advertising guarantees the use of geo targeting for displaying ads to relevant audiences and the use of frequency capping for preventing overexposure to advertisements. We also guarantee that our products will never hang pages, preventing them from loading and tainting a client's reputation.

## Unit 5

### 1 Suggested Answers

- 1 Companies use automation to integrate different technologies so as to achieve efficiency and cost savings. For example, workflow automation allows a business to streamline operations thus increasing production and effectiveness. It can ensure completion of transactions and track the competence of processes. For companies in today's business environment, automation, is the best option for improving profitability. In general,

companies are turning to automation to reduce the need for human work in the production of goods and services. This however, does not necessarily mean staff reductions since new positions are created to support the new process automation.

- 2 As the world gets more technologically advanced, automation is becoming more and more popular in every aspect of our lives. Apart from benefiting the work place, automation is working its way into our homes. The process of home automation uses technology to do chores that would normally be done manually. From turning on garden sprinklers to adjusting light or temperature in a room, an automated home can save time and make activities much easier. Current technology means that automation can now carry out hard physical work, sometimes in dangerous environments. It can also perform tasks that are beyond human capabilities of size, weight and speed.

2 1 B      2 D      3 A

3 1 C      3 G      5 D      7 F  
2 B      4 A      6 E

4 1 oscilloscope      4 redundancy  
2 integrated circuit      5 embedded system  
3 latency time

### 5 Suggested Answer

World Industries claim that their software is protected against problems that could lower production.

6 1 ✓      2 ✓      3 -      4 -

7 1 jump right in      4 Any ideas  
2 Notice anything?      5 Ethernet network  
3 take a look      4 something is off

### 8 Suggested Answer

- A: Let's jump right in. Take a look at that conveyor belt moving the soda bottles forward. Notice anything?
- B: Yeah, it looks a little jerky.
- A: Let's take a look at the oscilloscope pattern.
- B: Yeah, something is definitely wrong.
- A: Very good. Do you have any ideas on how to fix it?
- B: How about checking the Ethernet network. Maybe the computer can't communicate.
- A: Good idea. Does this computer log look normal to you?
- B: Well, the Ethernet connection is fine, but something is off.

## 9 Suggested Answer

Dear Madison,

Thanks for your recent letter with all your news. I'm writing to tell you about the company I'm going to invest in. Finally, I'm going ahead with the one that uses automation. World Industries uses CAM programs with their hardware and software. This allows for complete computer integrated manufacturing and oscilloscopes monitor all the hardware too. This means that any problems on the system are picked up immediately and repaired by trained engineers. Their production line employs embedded systems and integrated circuits allowing the hardware to work together. These devices are connected through a high-speed Ethernet network. I'm convinced the equipment at the company is designed to work fast and efficiently and as a result this will increase production making it an excellent investment opportunity.

Would love to hear your opinion, as your company upgraded its automation system last year.

Yours sincerely,

Ashley

## Unit 6

### 1 Suggested Answers

- 1 Telecommuting, which is working from home or a remote workstation, has benefits for employers, employees and for the environment. Companies can make savings on premises costs, office overheads and labour while their staff can spend less time commuting to work and spend more time with their families. Telecommuting means that work opportunities are not confined to jobs within commuting distance as people can work from home utilizing telecommunications technology. As a result, there are less people traveling to and fro from work thus reducing traffic congestion and pollution.
- 2 One of the prime challenges of telecommuting is overcoming management resistance. Ingrained attitudes and habits can be difficult to overcome and employers may feel that they have less control over staff who are not working on the premises. If they are unable to physically monitor what their employees do, telecommuting does not seem like such a good alternative. Also, not all tasks are best performed in a self managing environment nor are some managers confident enough to work with home based workers. This also applies to telecommuters who are not self-disciplined or may feel isolated working from home. Another major challenge for a telecommuter, is managing to keep skill levels up to date. Technical support and training

programs are important issues for telecommuting, so both employers and personnel must have a vested interest in making it work.

2 1 D    2 C    3 D

3 1 B    3 A    5 F  
2 C    4 D    6 E

- 4 1 **Programs:** Skype™, Basecamp®
- 2 **Actions:** centralize, color-code
- 3 **Website Features:** tour, gallery

### 5 Suggested Answer

Employees will be able to check the dashboard displays to see what files are being worked on.

6 1 T    2 F    3 T

- |                               |                 |
|-------------------------------|-----------------|
| 7 1 interest in telecommuting | 4 good to know  |
| 2 anything in particular      | 5 message board |
| 3 checked out                 |                 |

### 8 Suggested Answer

- A: Thanks for seeing me Mr Smith. I'm glad you're considering my proposal.
- B: Well, I can understand the employees' interest in telecommuting. However, I have some questions.
- A: I would expect so. Is there anything in particular?
- B: Let's start with monitoring production. I'd need a way to check that people are getting work done at home.
- A: Absolutely. The Basecamp® program would take care of that.
- B: Really? I checked out the tour, but I didn't see anything about monitoring production.
- A: It's on the dashboard. It shows all the files being worked on, and who's working on them.
- B: OK. Good to know. Now what about communication?
- A: Well, there's the message board.

### 9 Suggested Answer

As most of you are aware, starting from next month I am offering employees the opportunity to telecommute. For those of you who are interested, I have invested in the Basecamp® program which is web-based software. This will centralize all our projects, communication and updates and it's quite easy to navigate too. Color-coding will identify the projects we are working on and the dashboard will display all our accessed files. Everyone will toggle between files using the project gallery and communicate via the message board or through Skype™.

# Book 3 Answer Key

In order to assess any problems with connectivity and discuss your concerns, there will be regular discussions and advice from our technical staff to ensure a successful implementation. It is my belief that telecommuting will provide benefits for both the firm and you as employees.

## Unit 7

### 1 Suggested Answers

- 1 Computer viruses infect millions of computers worldwide and are very costly for firms with a large network system. They can have a great impact on business operations and as today's viruses are developed from new technologies, they are becoming more difficult to track down. Viruses usually spread very quickly and in most cases, they will cause damage to the host system. They can affect the screen and display appearance or decrease memory space, destroy programs or steal information and data from the entire network which may be confidential. All of which have disastrous results for a business, its clients and employees.
- 2 As soon as a computer is infected by a virus, it should be removed from any networks so that the virus doesn't spread. Then, anti-virus software should be run to clean the computer. After the computer is reconnected, the user should update the anti-virus software and run it again. Users can implement a frequent backup schedule to make sure each day's information is saved. This is recommended so that the most recent backup prior to the virus can be restored.

2 1 C      2 A      3 D

3 1 E      3 F      5 A      7 B  
2 G      4 D      6 C

4 1 infect      3 replicate      5 resident virus  
2 log in      4 imbeds

### 5 Suggested Answer

Greene used their connection when they logged in, a method called 'piggybacking'.

6 1 T      2 F      3 F

7 1 hacker                          4 ruin the company  
2 make some changes                5 resident viruses  
3 destroying files                 6 implant themselves

### 8 Suggested Answer

- A: Have you seen this article in today's paper?
- B: Oh, the one about the hacker? What about it?
- A: Well, I think the IT department needs to make some changes.
- B: Why? Do you think we're vulnerable to virus attacks?
- A: Sure! The overwriting viruses he used could do substantial damage.
- B: How much damage are we talking about?
- A: Millions of dollars worth! Greene did that just by destroying files.
- B: Something like that would ruin the company.
- A: Exactly. I think these resident viruses and resident extensions are a problem too.
- B: Why's that?
- A: Well, these types of viruses implant themselves in files and disk drives.

### 9 Suggested Answer

To: Mr Ward  
From: Jennifer Martin  
Subject: Computer Security

Dear Mr. Ward,

Over the past few months, there has been a great deal of coverage through the media regarding computer viruses and piggybacking. For that reason, myself and other members of the IT department feel that some changes should be made so as not to put the company at risk.

There are several potentially dangerous viruses that we should protect ourselves against. While Anti-antivirus viruses essentially shut down any anti-virus software, resident ones imbed themselves in a file or disk drive and replicate themselves quickly, infecting multiple computers. There are also overwriting viruses which overwrite and destroy files. All these viruses can cost a company millions of dollars.

I'm looking forward to receiving your comments.

Jennifer Martin

## Unit 8

### 1 Suggested Answers

- 1 Computer identity theft, which can take a number of forms, can have a huge impact on a business and its employees. Personal information can be used to obtain loans or credit, make unauthorized purchases, connect or disconnect services and even file fraudulent tax returns in a company's name. Once a business is compromised, it may even end up on a blacklist without knowing it.

Victims of identity theft can spend thousands of dollars dealing with the consequences and restoring their correct identity.

- 2 Phishing scams occur when thieves trick people into giving out personal information by email such as online passwords and credit card details. They are only successful with people who are not cautious with this sensitive information. To avoid being taken in by such scams, Internet users need to take steps to protect their domains from being exploited. The first step is being able to recognise a phishing e-mail. Often they appear to be from online banks, money transfer companies or social networks. They are usually full of misspellings and threaten to shut down your account if you do not reply. People should never respond to an e-mail like this or follow the links connected to it. Also, users should not pass on unsolicited e-mails to people asking them to log into sites with their password etc. Last but not least, it's very important to report anything suspicious online to get phishing scams off the net immediately.

2 1 T    2 F    3 F

- |     |              |   |                |   |          |
|-----|--------------|---|----------------|---|----------|
| 3 1 | malware      | 4 | identity theft | 7 | pharming |
| 2   | Trojan horse | 5 | spyware        |   |          |
| 3   | phishing     | 6 | card scanning  |   |          |
| 4 1 | pretexting   | 3 | scanner        | 5 | cyber    |
| 2   | worm         | 4 | fraud          |   |          |

## 5 Suggested Answer

Lincolnshire Bank is contacting its customers to inform them about recent instances of identity theft and how it can occur.

6 1 B    2 C

- |     |                      |   |                      |
|-----|----------------------|---|----------------------|
| 7 1 | personal information | 4 | looked legitimate    |
| 2   | needed to confirm    | 5 | pretty sophisticated |
| 3   | suspicious           |   |                      |

## 8 Suggested Answer

- A: Good morning! I think I received a phishing scam.  
 B: Oh! Did it ask you to give away any personal information?  
 A: Yes, it said that the bank needed to confirm my account details.  
 B: Did you email them that information?  
 A: No, I thought I should call the bank first. It seemed suspicious.  
 B: Yes, we would never ask for your account details via e-mail.

A: That's what I thought, but the e-mail looked legitimate because it had the bank logo. It even linked to a site that looked official.

B: Well, some of these criminals are pretty sophisticated.

A: What should I do now?

B: You should call the Police, phishing leads to identity theft.

A: OK. I'll do that. How do I know my money is safe?

B: I'll flag your account so that all activity has to be confirmed on the phone by you.

## 9 Suggested Answer

Computer identity theft has become a growing concern in recent years especially for businesses that store huge amounts of personal information for clients and employees. Unfortunately, criminals are using advanced technology to access people's computers and steal almost all kinds of data. One way, to do this for instance, is by card scanning. This entails using a card scanner to record the data stored on credit and debit cards or even to collect passport information. Another way to gain people's records, is by e-mail. Spam or unsolicited e-mails can contain malware that can infect a computer and steal details. It is similar to Phishing online or Pretexting which is done over the phone. Both trick people into giving away information. Here at the bank, the best way for customers to protect themselves against identity theft is to have their accounts flagged so that all their activity is confirmed by phone.

## Unit 9

### 1 Suggested Answers

- 1 People choose a number of ways to keep their computers safe. Most start by frequently updating their operating system by turning on the auto-update. They install Anti-Virus and Anti-Spyware Protection to block various malwares. To protect themselves against Trojans, they use a firewall and keep their settings as strict as possible to increase the level of security. Many users are also careful when opening e-mail attachments and about which sites they visit. They don't store credit card or other personal information on their computers. However, those who do, always encrypt data making it difficult for hackers to decipher.
- 2 Due to the highly computerized environment we are now working in, companies across the globe are concerned about their security. In the past, only a computer expert could hack into a computer, unlike today where there are readily available tools to make it much easier. A company can lose millions of dollars if confidential data is stolen or destroyed by a virus. Employers are also worried

# Book 3 Answer Key

about internal threats from employees. Although it is illegal, staff members often steal customer and contract lists, proposals and product information to take to a new job. Disgruntled workers may even plant unauthorized programs destroying important documents.

2 1 A    2 C    3 B

3 1 C    3 E    5 F    7 A  
2 B    4 G    6 H    8 D

4 1 authenticate    3 attack    5 patch  
2 keylogger    4 firewall

## 5 Suggested Answer

Users should make sure their browsers block unwanted advertisements/popups.

6 1 F    2 T    3 T

7 1 your browser    4 we just got the firewall  
2 I have a virus    5 As strict as possible  
3 new antivirus software 6 There's your problem

## 8 Suggested Answer

A: Hi, what seems to be the problem?  
B: None of my programs have online access.  
A: What about your browser?  
B: The browser opens, but I can't access any websites.  
    Most importantly, I can't use the email client.  
A: That's a big problem.  
B: I know. I think I have a virus.  
A: Are you sure? The company's new antivirus software is pretty powerful.  
B: I know we just got the firewall.  
A: Oh, the firewall. How high are your settings?  
B: As strict as possible.  
A: There's your problem. You need to lower the level if you want your programs to work.

## 9 Suggested Answer

To: All Members of Staff  
From: Bill Cox (IT Department)  
Subject: Security

Good morning.  
Due to the recent breach of security, the company has decided to remind all members about what security measures should be taken to make our network safer. The bug that was in our browsers created an unwanted backdoor in the network and allowed intruders to install keyloggers that tracked our passwords. Although we

managed to remove the keyloggers, the software supplier is still going to have to fix the problem with a patch. This will become available shortly.

To protect our personal information and company records, I remind everyone to keep their firewall settings on moderate to high. It is also best to be cautious when downloading files and that you all perform a virus scan on every email attachment.

Last but not least, we advise staff to download company approved programs. (The IT department has a list of these for inspection.) Programs containing Trojans can do irreversible damage to the system. We will now monitor and audit logs, to ensure security protocol is not violated and to keep our network safe.

## Unit 10

### 1 Suggested Answers

- 1 All anti-virus software performs the same basic functions, so someone's decision may be driven by recommendations, availability, price or particular features.
- 2 Anti-virus software helps home users and businesses stay protected. However, it will not detect viruses, if users frequently forget to update their virus scanner's and virus databases. Instant scans can be slow and dominate resources while running, resulting in users disabling them before a virus is detected. All in all, anti virus software is quite effective, but only if it's kept updated and the user takes precautions like not opening unfamiliar documents and programs.

2 1 C    2 C    3 D

3 1 D    3 B    5 C    7 F    9 G  
2 H    4 I    6 E    8 A

4 1 A    2 A    3 B    4 B A

### 5 Suggested Answer

When an anti-virus software sweeps a computer system, all the viruses are isolated.

6 1 F    2 T    3 F

7 1 pharming    4 two separate things  
2 web page analysis    5 two programs into one  
3 protect my computer

### 8 Suggested Answer

A: Um, hello. I'm interested in security software.  
B: What do you think you might need?

- A: Well, I almost fell for a pharming scam last week, so I'm worried about that.
- B: Our WebAdvisor software can help you there. It performs web page analysis for all the websites you visit.
- A: OK. Will it protect my computer from viruses, too?
- B: No, it won't. You'd need Anti-Virus Plus with RapidClean for that.
- A: So I have to buy two separate things?
- B: Actually, our Defender software combines those two programs into one.

## 9 Suggested Answer

Thanks for your request regarding anti-virus software. Here at Franklin & Jones, we have the latest software available. The Anti-Virus Plus for example, will sweep your computer system to detect viruses. RapidClean is virus removal software that destroys any malicious software discovered by Anti-Virus Plus. Then there's Defender which will keep your computer completely safe from cyber criminals.

However, after discussing with you your concerns regarding pharming scams, I would recommend that you install our WebAdvisor software as it performs web page analysis for all the websites you visit. It won't protect your computer from viruses, but our Defender software will do that. It combines two programs; the Anti-Virus Plus with RapidClean. It does work out cheaper than buying them both separately and also includes our computer backup service which will stop you from losing your files if your computer crashes.

## Unit 11

### 1 Suggested Answers

- Although nowadays installing new software can be relatively easy, users can still come up against a few problems. The new installation may require a significant amount of space on the hard drive, but it isn't available. It's therefore important to make sure there's enough disk space. A user must also verify that they have administrative access. If they are not the person who set up the computer, there may be a different username and password needed to install or update software. Another problem may occur if the new software is not compatible with the operating system or other software already installed on their computer.
- There are numerous ways a business can benefit from online services. To begin with, it can help increase the availability of business communications on a global network and improve sales-force performance. What's more, companies can discover the latest in messaging and collaboration features,

plus have access to all the hosted services. Online services provide business security and secure Internet protocols. Finally, using online services can quickly enhance or expand a firm's IT capacity by adding new services without having to invest in the development of new skills or deploying new hardware and software.

- 2 1 C      2 D      3 D  
 3 1 B      3 G      5 D      7 C  
 2 E      4 F      6 A

- 4 1 pay as you go      3 elasticity      5 deployment  
 2 CDN      4 SaaS

## 5 Suggested Answer

Cloud computing is the use of the Internet for software and other services.

- 6 1 F      2 T      3 F

- 7 1 get what you mean      4 Deployment  
 2 compatibility issues      5 start with a CDN  
 3 just access the software

## 8 Suggested Answer

- A: John, I was reading this column on cloud computing. Businesses use it to get exactly what they need from the Internet.
- B: I'm not sure I get what you mean. How exactly would it help us?
- A: Remember when we installed all that software a few years back? The ones that had so many compatibility issues?
- B: Yeah, that was a real waste of money.
- A: Well, with cloud computing we can just access the software online. Then we pay for how much we use it.
- B: So, it's a pay as you go type of service? What if the software is bad?
- A: We can just cancel the service and switch to something better. Deployment is really easy.
- B: I like the sound of that. How can we set it up?
- A: I'd start with a CDN. It's a set of computers that just store data.

## 9 Suggested Answer

**Proposal for use of cloud computing:**

- **Hosted Services** - Services are delivered over the Internet. Tasks assigned to a combination of connections, software and services. Offers more elasticity and scalability than normal computing.

# Book 3 Answer Key

- **Access** - Businesses have the right to use resources from both private and public clouds. The service is fully managed by the provider (the consumer needs nothing but a personal computer and Internet access). Use the service from anywhere.
- **PaaS/IaaS/SaaS** - Computers can easily switch to a new OS with PaaS (platform as a service). They can switch to a new server with IaaS (infrastructure as a service). Also, with SaaS (software as a service), the deployment of new software is almost automatic.
- **Pay as you go** - A user can have as much or as little of a service as they want at any given time. Businesses can monitor their usage and cancel services anytime.
- **CDN** - Installing a CDN (content delivery network), which is a local form of cloud computing, will increase bandwidth and gives users faster access to online software.
- **Cost** - Provides businesses with affordable and inexpensive, customizable solutions to their individual needs.

## Unit 12

### 1 Suggested Answers

- 1 Technology is moving ahead in all fields and is certainly benefiting the health care system. Doctors can now access patient records easily and efficiently as they store medical data electronically using computerized systems. They can reduce medical errors thanks to electronic prescriptions and prevent dosage inaccuracies when dispensing drugs. Hospitals can increase their administrative efficiencies and decrease paperwork. Most importantly, as a result of technology, hospitals can detect infectious diseases that are likely to break out around the country. This is because of the ability to store, retrieve and share health care information over a large network of sophisticated computers.
- 2 In the past few years, I have noticed my dentist replace traditional methods of treatment with laser dentistry. It has certainly reduced the time I have to spend at my appointments and is quite painless. Even my digital x-rays that were once done with traditional film are now done by a machine using computer technology. My dentist then compares images on his computer where he can detect any signs of decay easily.

2 1 T    2 F    3 F

3	1	E	3	A	5	F	7	D		
2	G		4	B	6	C				
4	1	B	2	A	3	A	4	B	5	B

### 5 Suggested Answer

CPOE systems have become popular because they mean illegible handwriting and communication are no longer such a problem.

6 1 F    2 T    3 T

7	1	use some help	5	How exactly
2	CPOE	6	name and order	
3	bar coding	7	pretty simple	
4	electronic order			

### 8 Suggested Answer

B: Hello Philip. I got your message about the new electronic systems.  
A: Oh good. I could use some help understanding them.  
B: Well, we just installed a CPOE system and a bar coding system.  
A: What's the CPOE system for?  
B: It's kind of like an electronic order form. It lets you fill out prescription orders.  
A: How exactly do I use it?  
B: Well, in this box, you type in the patient's name and order. Then, just click send.  
A: Ok. That sounds pretty simple.

### 9 Suggested Answer

Good afternoon, my name is Professor Clarke and I'm here today to talk to you about health information technology. My department is involved in the development and application of electronic systems into healthcare. In an effort to give you a better understanding of this medical technology, I'd like to start by bringing everyone's attention to our findings regarding some of the new advances being made. To begin with, hand-written reports and notes with poor legibility are now a thing of the past thanks to the EHR (Electronic Health Record). Accessing patient data has never been easier and so efficient. It also enables CDSS (Clinical Decision Support System) functions. These make doctors aware of harmful drug interactions. Our research shows that because EHRs can also store data from PACS (Picture Archiving and Communications System), doctors are able to share their records with different clinics. Other developments, include the use of bar coding with optic scanners allowing doctors to match patients to their medicines, Automated Dispensing Machines which distribute drug

dosages, and micro robotic tweezers which let doctors operate in very small areas.  
All in all, technological innovations have improved health care quality and given doctors the chance to work more efficiently.

## Unit 13

### 1 Suggested Answers

- 1 There are a few essential steps to take when getting involved with web design. The first thing is to get a domain name (a name for your website) along with a web host which is basically a company which allows you to place your web pages on their computers and be seen worldwide. The next step, is to design the website itself. The easiest way to do this is to let a web designer do it for you. It is important that your website stays at the top of the search engine results so that people can find you. A web designer can also help you to improve the number of hits your website receives. From there on, you need to keep your website up to date and interesting.
- 2 Knowing when to trust a website depends on certain things. For example, who publishes the website and whether it is owned by a company or organization that you know well. If you don't recognize the site or it is referred to you through an email message from someone that you don't know, it's best to check if there is a way to contact someone by phone or mail. If not, it probably isn't a secure site. It may also not be trustworthy, if it asks for personal information like credit card numbers or bank information. Some sites display a trust logo, this means that they have agreed to follow certain practices like providing a privacy statement.

2 1 C    2 C    3 A

3 1 E    3 B    5 A    7 D  
2 G    4 F    6 C

4 1 ingress filter    3 redesign    5 egress filter  
2 trust logo    4 keyword    6 mask

### 5 Suggested Answer

When customers use natural language to navigate a site, they use full phrases in their searches.

6 1 F    2 T    3 F

- 7 1 PCI compliance
- 2 ingress and egress filters
- 3 what I thought
- 4 trust logo
- 5 What's the other idea

### 8 Suggested Answer

- A: Good morning Mrs. Adams. What can I do for you?  
 B: Hello, I'd like to improve my business's website as my customers don't believe it is secure.  
 A: Mmm. Do you know if you're in PCI compliance?  
 B: Yes, we mask customer's information when they enter it.  
 A: And you have ingress and egress filters?  
 B: We do. I remember the first designer mentioning that.  
 A: Well, that's pretty secure then.  
 B: That's what I thought, but for some reason, customers don't feel that way.  
 A: I have two suggestions. First, get a trust logo.  
 B: I've thought about that, but I never knew exactly what to do.  
 A: It's an easy process, really. You pay an annual fee to a company that verifies your PCI compliance. They allow you to use their seal on your site.  
 B: Ok, that sounds good. What's the other idea?  
 A: We redesign the entire site.

### 9 Suggested Answer

#### Proposal for the improvement of website:

- **Give clients secure access to their accounts:**  
Place a trust logo on site.  
Mask credit card numbers and personal information to ensure secure interface.  
Install ingress and egress filters.
- **Improve web interface/attract more clients:**  
Update product descriptions/photos.  
Create fun and whimsical animated GIFs.
- **Update web page with easy navigation:** Create a web portal/build and maintain root directories.  
Use natural language to navigate and search sites.

## Unit 14

### 1 Suggested Answers

- 1 Any business that has a computer network will need a system administrator. He/She keeps a computer system running at maximum performance and efficiency. Also, conducting the job properly will ensure that system users can access necessary networks at all times.

## Book 3 Answer Key

With the rapid development of Information Technology, a system administrator's job is highly important. He/She must understand how the mainframe server operates, install software and patches and maintain data files while monitoring the system.

- 2 Among a system administrator's responsibilities is to analyze specific problems and deal with them appropriately. These might include configuring and repairing computer hardware and peripherals, performing regular backups and restoring information if necessary. Last but not least, they must implement different security measures when a virus has entered the system.

2 1 B    2 B    3 D

3 1 B    3 C    5 E  
2 D    4 A    6 F

4 1 performance tuning    4 install  
2 résumé                    5 file archiving  
3 system administrator    6 duty

### 5 Suggested Answer

The administrator will be expected to delete old data from the files.

6 1 F    2 F    3 T

7 1 system administrator's    4 troubleshooting  
2 really stand out            5 pretty qualified  
3 the IT employee's         6 worked with

### 8 Suggested Answer

- A: Jessica, how many applicants did we get for the system administrator's position?  
B: Quite a few, but two candidates really stand out.  
A: Who are they?  
B: A former IT employee and a recent engineering grad.  
A: What are the IT employee's qualifications?  
B: He's very familiar with managing servers and troubleshooting. He has almost ten years of IT work experience  
A: He sounds pretty qualified. Does he have any weaknesses?  
B: Only one. He hasn't worked with Unix® at all.

### 9 Suggested Answer

(Brief Cover Letter)

(212) 243 - 1686

www.bradmajo.com

07/22/2012

Mr. Brad S. Majors  
Systems Administrator  
The Software Tech Company  
14th street  
New York, 10003

Dear Sir,

As my resume indicates, I have roughly twelve years of professional experience as a system administrator. I hold a bachelor's degree in computer science and also hold the MCSA certificate.

I have very much to offer in the way of experience. I believe I have a technical mind, good problem-solving skills and plenty of enthusiasm. From my work in a major software company, I have learnt how to describe technical information in easy-to-understand terms. I also have the ability to work with speed and accuracy.

Combine all my experience with my natural talents such as patience and good communication skills and I believe you have a well-rounded candidate for the position.

It is my sincere hope that I will be given an opportunity to discuss any further questions you have at an interview.

Thank you for your time and consideration.

Regards,  
Brad S. Majors

## Unit 15

### 1 Suggested Answers

- 1 Programming is used to create/write programs that control the behavior of a machine. Using a sequence of instructions, a computer, for example, can perform a specified task. Different programs are used for a multitude of tasks such as creating games, solving mathematical problems, burning or creating CDs and customizing MP3s. However a computer expert can develop a program for just about anything nowadays.
- 2 If a person is interested in a career in programming, it's best to start off learning the basics of programming. For example, data structures such as stacks, queues, lists, basic algorithms and error

checking. If the person has time for an internship, that would allow them to get some experience and practice in computer programming. Another good idea, is to use Google.com search engine to look for free tutorials, ebooks and forums for learning programming.

2 1 A    2 C    3 D

3 1 D    3 G    5 C    7 B  
2 F    4 E    6 A

4 **Programming Language:** XML, HTML, PHP, visual basic  
**Occupation:** web developer, programmer

## 5 Suggested Answer

The advertisement seeking a Visual Basic Expert is asking for a master (someone extremely skilled) of visual basic.

6 1 F    2 T    3 F

- 7 1 web developer  
2 Sounds easy enough  
3 handle that part  
4 Send me the link  
5 Sure thing  
6 an old programmer's work

## 8 Suggested Answer

- A: Have you seen the latest job postings? There's one asking for a web developer for a realty company.  
B: Sounds easy enough. Would I have to create content, too?  
A: No, the ad said that the client would handle that part.  
B: Send me the link when you get the chance. I'll check it out.  
A: Sure thing. I've got a couple of potential jobs, too.  
B: Oh yeah? What are they?  
A: There's one client looking to decipher an old programmer's work. He can't tell if it's C or C++.  
B: That shouldn't be too hard. You just have to read the code in the editor.

## 9 Suggested Answer

**To:** Mr. Gerald Faust  
**From:** Miss Julia Davies  
**Subject:** Visual Basic Expert

Dear Mr. Faust,

I am responding to your advertisement in Freelance Programmer for the VB Expert Programmer's position. I believe that my technical experience and education will make me a very competitive candidate for this position. I have a BS degree in Computer Programming and have proven expertise in VB, Net, SQL queries and CSS. I am capable of working in a fast-paced environment and work well in a team. Last but not least, I have successfully designed, developed and supported live use applications.

Thank you for your time and consideration. If you require any further information, please do not hesitate to contact me.

Sincerely,  
Julia Davies

# Audioscripts

## Unit 1

**Employee 1 (W):** Good morning, John. Did you hear the good news?

**Employee 2 (M):** Morning. No, I haven't heard anything. What's up?

**Employee 1:** Mr. Jackson has decided to update our computers. We're switching to PCs!

**Employee 2:** Really? PCs? I'm glad we're updating, but I'd rather get another Mac®.

**Employee 1:** You would? Not me. You can't customize a Mac®.

**Employee 2:** Sure, you can customize PCs. But Macs® do some things so much better.

**Employee 1:** What do you mean?

**Employee 2:** The color matching and typography are more sophisticated on a Mac® than on a PC. We need that in publishing.

**Employee 1:** Okay, I'll give you that. But Macs® have slower processing speeds, don't they?

**Employee 2:** Maybe a little, but that's mostly with video, and we barely use it.

**Employee 1:** So the processing speed doesn't really affect us. I still think we're better off buying PCs, though.

**Employee 2:** At this point I can't really see why.

**Employee 1:** We have more third-party software options. We don't really like the program we use on Macs®.

**Employee 2:** That's true. I hear good things about some of the PC publishing programs.

**Employee 1:** Plus, PCs are cheaper. There's no point in paying more for a computer when we don't even like the software.

**Employee 2:** True. I guess this can be an improvement.

## Unit 2

**Manager (W):** Hi Brandon. I want to talk about that Linux® idea.

**IT Worker (M):** Hi, Shirley. What can I tell you about it?

**Manager:** Well, you said it was open source. What does that mean?

**IT Worker:** Open source means that people can publicly work on a program to improve it.

**Manager:** Anyone can work on it? Doesn't that increase the chance of viruses?

**IT Worker:** Surprisingly not, actually. Open source vendors pay a lot of attention to security.

**Manager:** I assume we'd still have to buy antivirus software that works with Linux®.

**IT Worker:** That's the thing – even the security software is free.

**Manager:** I see. Still, I'm not comfortable losing Microsoft Office®.

**IT Worker:** We don't have to. OpenOffice® is actually compatible with Office® and other programs.

**Manager:** My other concern is printer trouble. I don't want to install Linux® and have our equipment suddenly stop working.

**IT Worker:** That's why we'll get that Samba® program. The print server will act as if nothing changed.

**Manager:** That sounds too easy. Surely there's something else to it.

**IT Worker:** Actually, I'll have to reconfigure the TCP/IP protocols, but that's a small task.

**Manager:** Okay, I'm definitely interested. But I need to think it over before I approve it. Thanks.

**IT Worker:** Anytime.

## Unit 3

**Employee (W):** Davidson Web Design, this is Kasey.

**Client (M):** Hi, this is Don Dartmouth. I was calling to see how the website was coming along.

**Employee:** Oh, hello, Don. For the most part, things are going really well.

**Client:** That's great! So, are you close to finishing, then?

**Employee:** Yes, we are. Everything is done except for the multimedia section.

**Client:** I see. And how is that coming along?

**Employee:** Actually, we're having a little trouble with it.

**Client:** Why's that?

**Employee:** Well, the media player you requested won't work on all computers. I'd suggest using Flash® player instead.

**Client:** I just don't think Flash® player has a high enough quality. I want my potential clients to be able to see everything clearly.

**Employee:** I understand, but using Flash® player will allow everyone to view the media you've given us.

**Client:** I'll think about it, but everything else is finished?

**Employee:** Yes. Actually, the rest of the site could go online today.

**Client:** No, we don't need to do that. Actually, I was hoping to add one more file to the CBT section.

**Employee:** Oh, that's no problem. We can update the pages whenever you need.

**Client:** Good to know. I'll send that file over now.

## Unit 4

**Employee (W):** Donovan Online Advertising. How may I help you?

**Caller (M):** Hello, I have some questions about the contract I received from your company.

**Employee:** All right. What would you like to discuss?

**Caller:** The pricing. How exactly does that work?

# Audioscripts

**Employee:** Well, the first option is CPM, meaning you pay a certain rate for every 1,000 people who view the banner.

**Caller:** And that's the most cost-effective option?

**Employee:** Yes, that's correct.

**Caller:** I see. So how do you determine what the rate is going to be?

**Employee:** There are actually two things that affect that. The location of the banner is one of them.

**Caller:** Okay. Could you explain that?

**Employee:** Sure. Banners that are above the fold are more expensive. That's just because people don't have to scroll down to see them.

**Caller:** I see. The contract also mentions something about commissions.

**Employee:** Yes, websites usually charge us a commission to host the advertisements.

**Caller:** And the cost of those commissions gets passed on to your clients?

**Employee:** That's correct. So the final price depends on the how much the commission is.

**Caller:** Got it. Thanks for your help.

## Unit 5

**Engineer 1 (W):** Jim? Hi, I'm Kathy and I'll be training you today.

**Engineer 2 (M):** Hi Kathy, good to meet you.

**Engineer 1:** Let's jump right in. Take a look at that conveyor belt moving the soda bottles forward. Notice anything?

**Engineer 2:** Yeah, it looks a little jerky.

**Engineer 1:** Let's take a look at the oscilloscope pattern.

**Engineer 2:** Yeah, something is definitely wrong.

**Engineer 1:** Very good. Any ideas on how to fix it?

**Engineer 2:** How about checking the Ethernet network. Maybe the computer can't communicate.

**Engineer 1:** Good idea, let's check it out. Does this computer log look normal to you?

**Engineer 2:** Well, the Ethernet connection is fine, but something is off.

**Engineer 1:** Are you familiar with priority inversion?

**Engineer 2:** That sounds familiar.

**Engineer 1:** It happens when an important computer task is delayed.

**Engineer 2:** Oh, I remember! The computer gets hung up trying to access other information.

**Engineer 1:** Exactly, let's check for that.

**Engineer 2:** Yep, there's the priority inversion. The computer's trying to get at data that isn't even available.

**Engineer 1:** Nice work Jim. I'll call the software IT guys to fix the glitch.

## Unit 6

**Owner (M):** Erica, thanks for coming in.

**Employee (W):** Oh, thank you, Mr. Tobin. I'm glad you're considering my proposal.

**Owner:** Well, I can understand the employees' interest in telecommuting. However, I have some questions.

**Employee:** I would expect so. Is there anything in particular?

**Owner:** Let's start with production. I'd need a way to check that people are getting work done at home.

**Employee:** Absolutely. The Basecamp® program would take care of that.

**Owner:** Really? I checked out the tour, but I didn't see anything about monitoring production.

**Employee:** It's on the dashboard. It shows all the files being worked on, and who's working on them.

**Owner:** Okay, good to know. Now, what about communication?

**Employee:** Well, there's the message board.

**Owner:** Sure, but projects can change quickly. Someone who doesn't update the board won't know.

**Employee:** Actually, the board updates in real time. As soon as you type it, we'll all see it.

**Owner:** I see. That leaves Skype™. I know it doesn't work well on some connections.

**Employee:** I'm sure all telecommuting employees would agree to get a high-speed connection.

**Owner:** Good. I think we can work something out.

**Employee:** Wonderful! Thanks, Mr. Tobin.

## Unit 7

**Employee (M):** Mrs. Jackson, can I talk to you for a few minutes?

**Manager (W):** Sure, Frank. Come on in. What's going on?

**Employee:** Have you seen this article in today's paper? The one about the hacker?

**Manager:** Yes, I have. What about it?

**Employee:** Well, I think the IT department needs to make some changes.

**Manager:** Do you think our company is vulnerable to these types of attacks?

**Employee:** Definitely. The overwriting viruses he used could do incredible damage.

**Manager:** I see. How much damage are we talking about?

**Employee:** Greene did millions of dollars' worth of damage by destroying files. That could happen to us.

**Manager:** Something like that would ruin the company.

**Employee:** Exactly. I think these resident viruses and resident extensions are a problem, too.

**Manager:** Why's that?

**Employee:** Well, these types of viruses implant themselves in files and disk drives.

# Audioscripts

**Manager:** Can you get rid of them after that?  
**Employee:** It's possible, but it's not easy. We're talking about long work stoppages and lots of money lost.  
**Manager:** I see. Look into possible solutions and let me know what you come up with.

## Unit 8

**Employee (M):** Lincolnshire Bank, this is Walter. How can I help you?  
**Customer (W):** Hi, I think I received a phishing scam.  
**Employee:** Why don't you tell me a little more about what happened?  
**Customer:** Well, I got an email that said it was from Lincolnshire Bank, but I don't think it was.  
**Employee:** Oh! Did it ask you to give away any personal information?  
**Customer:** Yeah. It said that the bank needed to confirm my account details.  
**Employee:** Did you email them that information?  
**Customer:** No, I thought I should call the bank first. It seemed suspicious.  
**Employee:** Yes, Lincolnshire Bank would never ask for your account details via email.  
**Customer:** That's what I thought. But the email looked legitimate because it had the bank logo. It even linked to a site that looked official.  
**Employee:** Well, some of these criminals are pretty sophisticated.  
**Customer:** OK, so what should I do now?  
**Employee:** You should call the police. Phishing typically leads to identity theft and fraud.  
**Customer:** OK, I'll do that. How do I know my money is safe?  
**Employee:** I'll flag your account so that all activity must be confirmed over the phone by you.  
**Customer:** All right. Thanks for your help.

## Unit 9

**Employee 1 (W):** Hey, Dave. Are you good with computers?  
**Employee 2 (M):** Sure. What's the problem?  
**Employee 1:** None of my programs have online access.  
**Employee 2:** What about your browser?  
**Employee 1:** The browser opens, but I can't access any websites. Most importantly, I can't use the email client.  
**Employee 2:** That's a big problem.  
**Employee 1:** I know. I think I have a virus.  
**Employee 2:** Are you sure? The company's new antivirus software is pretty powerful.  
**Employee 1:** I know, and we just got the firewall.  
**Employee 2:** Oh, the firewall. How high are your settings?  
**Employee 1:** As strict as possible.

**Employee 2:** There's your problem. You need to lower the level if you want your programs to work.

**Employee 1:** Why is that?  
**Employee 2:** The firewall limits access. At the highest security settings no information can come in or get out.  
**Employee 1:** Okay. What's a safe level that allows my programs to work?  
**Employee 2:** The "Moderate" level will protect the computer but still give you access.

## Unit 10

**Employee (W):** Franklin & Jones, this is Valerie. How may I help you?  
**Caller (M):** Hello, I think I need some security software, but I don't know which kind to get.  
**Employee:** All right, let's get that figured out for you. What do you think you might need?  
**Caller:** Well, I almost fell for a pharming scam last week, so I'm worried about that.  
**Employee:** Our WebAdvisor software can help you there. It performs web page analysis for all the websites you visit.  
**Caller:** Okay. Will it protect my computer from viruses, too?  
**Employee:** No, it won't. You'd need Anti-Virus Plus with RapidClean for that.  
**Caller:** So I have to buy two separate things?  
**Employee:** Actually, our Defender software combines those two programs into one.  
**Caller:** Is that expensive, then?  
**Employee:** It actually costs less than buying both separately, and it comes with an added bonus.  
**Caller:** Really? What's that?  
**Employee:** Defender includes our computer backup service, so you can't lose your files if your computer crashes.  
**Caller:** That would be great. I suppose I'd like to order Defender, then.  
**Employee:** Excellent choice, sir.  
**Caller:** Thank you, and thanks for all your help today, too.

## Unit 11

**IT Worker (W):** Excuse me, Mr. Lentz? Can I talk to you about something?  
**Manager (M):** Sure, Mary. What do you need?  
**IT Worker:** I was reading this column on cloud computing. I thought you should know about it.  
**Manager:** Cloud computing? I've heard of it, but I don't know much about it.  
**IT Worker:** Basically, businesses use it to get exactly what they need from the Internet.

# Audioscripts

**Manager:** I'm not sure I get what you mean. How exactly would it help us?

**IT Worker:** Remember when we installed all that software a few years back? The ones that had so many compatibility issues?

**Manager:** Yeah, that was a real waste of money.

**IT Worker:** Well, with cloud computing we can just access the software online. Then we pay for how much we use it.

**Manager:** So, it's a pay as you go type of service? What if the software is bad?

**IT Worker:** We can just cancel the service and switch to something better. Deployment is really easy.

**Manager:** I like the sound of that. How can we set it up?

**IT Worker:** I'd start with a CDN. It's a set of computers that just store data.

**Manager:** Why would we only store data on them?

**IT Worker:** We'd have more available bandwidth that way. And so we'd have also faster access to online software.

## Unit 12

**IT worker (M):** Hello Dr. Samson. I got your message about the new electronic systems.

**Doctor (W):** Yes, I could use some help understanding them.

**IT worker:** Well, we just installed a CPOE system and a bar coding system.

**Doctor:** What's the CPOE system for?

**IT worker:** It's kind of like an electronic order form. It lets you fill out prescription orders.

**Doctor:** How exactly do I use it?

**IT worker:** Well, in this box, you type in the patient's name and order. Then just click send.

**Doctor:** Okay. That sounds pretty simple.

**IT worker:** It is. And the system will notify you when the pharmacist fills the prescription.

**Doctor:** That's very useful! So what does the bar coding system do?

**IT worker:** It tags medicines and matches them to your patients. It reduces medication mix-ups.

**Doctor:** And how does it work?

**IT worker:** You just use this optic scanner to record a drug's ID.

**Doctor:** But how do I match it to my patient?

**IT worker:** Just scan the patient's ID bracelet. The scanner will match the two numbers and identify the drug.

**Doctor:** Great! I'm excited to try it out!

## Unit 13

**Designer (M):** Mrs. Wilson, thanks for coming in. What can I do for you today?

**Owner (W):** I'd like to improve my business's website. Customers say it doesn't look secure.

**Designer:** Mmm. Do you know if you're in PCI compliance?

**Owner:** Yes, and we mask customers' information when they enter it.

**Designer:** And you have ingress and egress filters?

**Owner:** We do. I remember the first designer mentioning that.

**Designer:** Well, that's pretty secure then.

**Owner:** That's what I thought, but for some reason, customers don't feel that way.

**Designer:** I have two suggestions. First, get a trust logo.

**Owner:** I've thought about that, but I never knew exactly what to do.

**Designer:** It's an easy process, really. You pay an annual fee to a company that verifies your PCI compliance. They allow you to use their seal on your site.

**Owner:** Okay, that sounds good. What's the other idea?

**Designer:** We redesign it. Change the appearance.

**Owner:** The whole thing? I just want to make it look secure.

**Designer:** And that's what we'll focus on. We'll keep the content, but make sure the page looks professional.

**Owner:** It sounds like a lot, but something has to change. Let's do it.

## Unit 14

**Employee 1 (M):** Mary, how many applicants did we get for the system administrator's position?

**Employee 2 (W):** Quite a few, but two candidates really stand out.

**Employee 1:** Who are they?

**Employee 2:** A former IT employee and a recent engineering grad.

**Employee 1:** What are the IT employee's qualifications?

**Employee 2:** He's very familiar with managing servers and troubleshooting. He has almost ten years of IT work experience.

**Employee 1:** He sounds pretty qualified. Does he have any weaknesses?

**Employee 2:** Only one. He hasn't worked with Unix® at all.

**Employee 1:** Well, that's a major concern. What's the engineering student like?

**Employee 2:** She's had lots of training in configuring computer systems and servers. And she is very familiar with Unix® and a few other operating systems.

**Employee 1:** Any concerns about her?

# Audioscripts

**Employee 2:** Well, she doesn't have as much work experience.

**Employee 1:** That may not be a big issue. Especially since she's so knowledgeable about the other aspects.

**Employee 2:** That's true. She may be easy to train.

**Employee 1:** OK. We'll interview them both but, I think she'll be the better choice.

**Employee 2:** You're probably right. I'll contact them tomorrow.

## Unit 15

**Programmer 1 (W):** Hi John. Have you seen the latest job postings on Freelance Programmer?

**Programmer 2 (M):** No, not yet. Is there anything good?

**Programmer 1:** There's one asking for a web developer for a realty company.

**Programmer 2:** Sounds easy enough. Would I have to create content, too?

**Programmer 1:** No, the ad said that the client would handle that part.

**Programmer 2:** Send me the link when you get the chance. I'll check it out.

**Programmer 1:** Sure thing. I've got a couple of potential jobs, too.

**Programmer 2:** Oh yeah? What are they?

**Programmer 1:** There's one client looking to decipher an old programmer's work. He can't tell if it's C or C++.

**Programmer 2:** That shouldn't be too hard. You just have to read the code in the editor.

**Programmer 1:** He wants to finish the project, too, but I'm sure I can do that.

**Programmer 2:** What's the other job?

**Programmer 1:** The client needs the GUI for a financing program. The pay is back end, though.

**Programmer 2:** Back end pay? Watch out. You may never get your money.

**Programmer 1:** True, but I could use the experience with visual basic.

**Programmer 2:** Just be careful.