

12 The Internet, Email

Topic

Getting online, Internet, email, online banking

Learning objectives

Students will be able:

- to understand how the Internet works
- to give a brief description of what the Internet is
- to explain the term World Wide Web
- to list requirements for a connection to the Internet
- to list typical customer services provided by an Internet Service Provider
- to explain in detail how to use a search engine to locate information
- to acquire vocabulary and collocations related to the Internet
- To learn about the basic ideas related to security and privacy on the Internet
- to explain what electronic mail is
- to describe how email works
- to acquire vocabulary related to online banking and internet shopping

Key words

Modem, Internet Service Provider (ISP), wireless router, online, TCP/IP, IP address, broadband, ADSL, Wi-Fi, wireless access point, hotspot, power-line Internet, email, FTP (file transfer protocol), newsgroups, Telnet, chat and instant messaging, mail server, username, @, domain name, attachment, emoticon, smiley, spam, search engine, e-commerce, online banking, account, balance, interest, fraud, authentication, PIN, username, password, TAN, biometric authentication

What is the Internet?

The Internet is an International computer Network made up of thousands of networks linked together. Some of the



computers on the Internet are small PCs, while others are huge supercomputers. All these computers communicate each other, share data, resources, transfer information, etc. To do it they need to use the same language or protocol: TCP/IP (transmission Control Protocol/Internet Protocol) which is like the internet operating system. Every computer is given an IP address. This address is a way to identify the computer on the Internet and is composed of four numbers, each between 0 and 255, separated by dots.

Getting connected

To use the Internet we basically need a computer, connection software and a modem to connect your computer to a telephone line and then access your ISP (Internet Service Provider). We also need an account with an Internet Service Provider (ISP).

The modem (modulator-demodulator) converts digital signals stored in the computer to analogue signals so that data can be transmitted across the phone or cable network. There are two basic types:

- **external** – plugged into the computer via a USB port
- **internal** – an expansion card inside the computer

Today ISP offer a broadband, high-speed connection. The most common types are:

- **cable** – offered by local cable TV companies
- **ADSL** (Asymmetric Digital Subscriber Line) – works through phone lines

Other methods of Internet access include Wi-Fi, satellite, mobile phones and TV sets equipped with a modem.

Broadband access is also allowed by some electricity networks. This competing technology known as **power-line Internet**, provides low-cost access via the power plug, but is still in development.

Wi-Fi- enabled laptops and PDAs allow you to connect to the net if you are near a **wireless access point**, in locations called **hotspots** (for example a Wi-Fi café or a campus). Satellite services are used in places where terrestrial access is not available (for example at sea).

Components of the Internet

The internet consists of many systems that offer different facilities to users.

WWW, the World Wide Web is a collection of files or pages containing links to other documents on the Net. They use the HTTP protocol. You navigate through the web using a



program called a web browser.

Email – electronic mail allows users to exchange messages and attached files which can include text, pictures, audio.

Chat and instant messaging allow you to have real-time conversations online by typing messages at the keyboard.

FTP – File Transfer Protocol is used to transfer files over a TCP/IP network. Nowadays it is built into Web browsers. You can download programs, games and music files from a remote computer to your hard drive.

Telnet is a program that enables a computer to function as a terminal working from a remote computer and use online databases for example library catalogues.

Newsgroups are the public discussion areas which make up a system called the Usenet. The contents are contributed by people who post articles or respond to articles, creating chains called message threads. You need a newsreader to subscribe to newsgroups and read and post messages. The newsreader can be a part of a web browser.

A thread is a string of text based messages, from the first one that started the topic up to the latest one. The first 'emoticons' such as :) (smiling face) appeared here and even before the mobile phone was invented, people were using text shortcuts such as IMHO (In My humble Opinion) or ROLF (Roll on Floor Laughing).

Some newsgroups are 'moderated' meaning someone is controlling what can and cannot be posted in that newsgroup.

Internet telephone is a system that allows people to make phone calls via the Internet

Video conference is a system allowing the transmission of video and audio signals in real time. A video conference is a 'meeting' between two or more people who are in separate geographical locations.

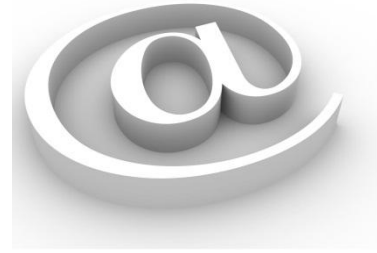
It is made possible by the use of video monitors, specialist software, fast broadband connection and satellite technology.

People in different locations are able to see and hear one another and thus hold a meeting as if they were in the same room.



Email

When you set up an account with an Internet Service Provider, you are given an **email address** and a **password**. You send an email to a **mail server** where it is stored in a **mailbox**, which holds incoming mail until the recipient downloads it. The mail you receive is stored on the mail server until you next connect and download it to your hard drive.



There are two ways of using email:

- **Mail program** installed on your computer (for example Outlook Express)
- **Web-based email** accessible from any web browsers (Gmail, Hotmail, Seznam...)

A typical email address has three parts:



An email usually has two parts:

- The **header** includes:
 - TO** – name and address of the recipient
 - CC** – carbon copy sent to another addressee
 - SUBJECT** – topic of the message
 - ATTACHMENT** – files added to the message
- The **body** – the message itself

You can make your message more impressive by using **smileys (emoticons)** – little pictures made with characters from the keyboard or downloaded images.



Spam – junk email, an unwanted message. In legal terms it means to send 'unsolicited commercial email'

This term is used because the vast majority of spam is sent in order to try and persuade you to buy something.

Many ISP email packages offer 'spam filters' that try to prevent these emails getting through to your inbox, but it is a very difficult problem to separate spam from wanted emails. Your email service may have a 'Bulk' or 'Junk' box that contain the diverted spam. It is then up to you to have a look to see if there are some real emails accidentally caught by the filters.

A **mailing list** is a collection of names and addresses used by an individual or an organization to send material to multiple recipients. The term is often extended to include the people subscribed to such a list, so the group of subscribers is referred to as "the mailing list", or simply "the list".

Online banking

performing banking transactions via the Internet. Online services can be provided by traditional banks, so called brick-and-mortar banks – using the new technologies they become “brick-and-click banks. Banks that don't have physical branches or ATMs are called virtual or Internet banks.

To use the services a user needs a computer with Internet access. Online banking can be used to pay bills, transfer money to various accounts, check account balances, trade stocks, etc.

Most online banks have the concept of two-factor **authentication**; it means that they use at least two different devices or layers of security to prevent fraud.

When anybody opens an account, he or she is given a confidential **PIN (personal identification number)**, a **password** and a **username**.

For some transactions, customers have to use a **TAN** – transaction authorisation number from a list provided by the bank, which acts as a second password.

One of the best ways of identifying the user of a bank account is **biometric authentication** – using for example a fingerprint to allow a person to log in.

Safety precautions:

- Never give your PIN to anyone
- Be aware of phishing
- Invest in some good anti-spy software

Vocabulary

	Definition	Translation
@	at sign, the sign that separates the username from the domain name in an email address	zavináč

ADSL	Asymmetric Digital Subscriber Line, a broadband communication technology that allows a single phone connection to be used for both internet service and voice calls at the same time	asymetrická digitální účastnická linka
attachment	a file that has been included as a part of an email message	příloha
broadband	high-speed transmission	širokopásmový přenos
domain name	a name identifying an internet site, consisting of two parts separated by dots	doména
email	short for electronic mail, the facility which allows users to exchange messages electronically	elektronická pošta
emoticon	a face made from punctuation characters to express emotions in email messages = smiley	emotikon, smajlík
FTP (file transfer protocol)	a standard for transferring files from one computer to another over a network	
hotspot	the geographic boundary covered by a Wi-Fi wireless access point	
chat	a real time interactive conversation on the Internet	čat
instant messaging	exchanging text messages in real time between two or more people logged into IM service	
Internet Service Provider (ISP)	the company which gives you access to the Internet	poskytovatel internetu
IP address	a number which identifies a computer on the Internet	IP adresa
mail server	the computer where your Internet Service Provider stores your emails	poštovní server
modem	a device that converts digital signals into analogue signals	modem
newsgroups	the public discussion areas on the Internet	internetové fórum
online	connected to the Internet	připojený k síti
password	a secret word which must be entered before access is given	heslo
power-line Internet	a technology that provides low-cost internet access via the power plug	přenos přes rozvody elektrické energie
search engine	a program that allows users to search a large database of web addresses and internet resources	vyhledávač

Smiley	a face made from punctuation characters to express emotions in email messages = emoticon	smajlík
spam	unsolicited junk email	nevyžádaný mail
TCP/IP	abbreviation for Transmission Control Protocol, the official standard that determines the form of the signals used for transmitting data on the Internet	
Telnet	the program that is used to log into a remote computer system, which enables you to run programs kept on them	telnet
username	the part of an email address that identifies the user	uživatelské jméno
Wi-Fi	a type of network that makes use of radio channels to connect either to a local area network (LAN) or a router linked to the Internet. Companies often have a Wi-Fi system installed inside their buildings. Then visitors and workers with laptops can instantly connect to their LAN.	bezdrátová komunikace v počítačových sítích
wireless	without the use of cables	bezdrátový
wireless access point	a device that connect wireless communication devices together to form a wireless network	bezdrátový přístupový bod
authentication	verifying the identity of a user logging onto a network	ověření, potvrzení pravosti
balance	the amount of money that remains in an account at a given date	zůstatek
biometric authentication	identification based on physical features - fingerprints, voice scan, etc.	biometrické ověření
decryption	the process of decoding secret data	dekódování
digital certificate	a file that identifies the user or a web server	digitální certifikát
e-commerce	the buying and selling products on the Internet	elektronické obchodování
encryption	the process of saving and transmitting data in encoded form	kódování, šifrování

fraud	something intended to deceive	podvod
online banking	performing money transactions and payments through a bank' website	internetové bankovníctví
password	a secret word which must be entered before access is given	heslo
phishing	getting passwords of online bank accounts or credit card numbers using fake emails	podvodné online vylákání a zneužití osobních údajů
PIN	Personal Identification Number	osobní identifikační číslo
TAN	Transaction Authorization Number	
username	the name you identify yourself when you log onto a computer system or a network	uživatelské jméno

Summary

The Internet is an International computer Network made up of thousands of networks linked together.

These computers need to use the same language or protocol: TCP/IP (transmission Control Protocol/Internet Protocol) which is like the internet operating system. Every computer is given a unique IP address.

To use the Internet we basically need a computer, connection software and a modem. We also need an account with an Internet Service Provider (ISP).

The internet consists of many systems that offer different facilities to users, for example: the World Wide Web, email, chat and instant messaging, FTP, Telnet, Newsgroups, Internet phone, video conferencing, etc.

Email – electronic mail allows users to exchange messages and attached files which can include text, pictures, audio.

There are two ways of using email:

- Mail program installed on your computer (for example Outlook Express)
- Web-based email accessible from any web browsers (Gmail, Hotmail, Seznam...)

Online banking is performing banking transactions via the Internet.

Online banking can be used to pay bills, transfer money to various accounts, check account balances, trade stocks, etc. When anybody opens an account, he or she is given a confidential PIN (personal identification number), a password and a username.

For some transactions, customers have to use a TAN – transaction authorisation number from a list provided by the bank, which acts as a second password.

Tasks

1) What Internet component should the following people use?

- a) "I have a girlfriend abroad and I love hearing her voice. I am a student and I don't have much money."
- b) "I want to borrow a certain book from the library, I can't afford wasting time and I want to make sure that the book is available just now."

- c) "I want to read people's opinions about computer-related topics and express my views."
- d) "I was invited to a meeting in Australia but I can't take part in it. However I'd really like to see what's going there."
- e) "I am an English teacher and I want my students to send me their essays and so that I can check it and send it back."
- f) "I have moved to a small village. I wish I had chance to talk to my former friends."
- g) "I have just created a web page and want to transfer data to my reserved web space."

2) Listening: Infotech p. 79: Listen and complete the notes

To connect to the Internet from home, I need:

(1) a _____ and (2) a _____.

Also need an account with an (3) _____ (a company that offers connection for a monthly fee).

If you want to connect lots of computers without using cables, you can use a (4) _____ router.

Wi-Fi uses (5) _____ waves to send data over medium-range distances.

Things you can do on the Internet:

(6) _____

'Web' or 'Internet'? The Web: huge collection of (7) _____ stored on computers all over the world. The Internet: the network which connects all the computers.

3) Find words with the following meaning in the text above:

- a) The line that describes the content of an email
- b) A series of interrelated messages on a given topic
- c) A file that has been included as a part of an email message
- d) The place where your ISP stores your emails
- e) The part of an email address that identifies the user
- f) Facial symbols used to indicate emotions and attitudes
- g) The name given to junk mail
- h) The company which gives you access to the Internet
- i) A real time interactive conversation on the Internet
- j) A number which identifies a computer on the Internet
- k) The part of the email address that identifies the server

- l) The part of email address that separates the username from the domain name
- m) A secret word which must be entered before access is given
- n) The public discussion areas on the Internet

4) Complete the conversation between an Internet Service Provider (ISP) and a customer. Type words from the box into spaces 1–16.

email Web spam IP modem wireless newsreader
 username browser internet attachments messaging file
 transfer protocol newsgroups broadband mail program

ISP Helpdesk Operator (HO): Customer support, good morning.

Customer (C): Yeah, hi. Who am I speaking to?

HO: My name's Martin. How can I help?

C: I'm having some problems with my (1) _____ connection. I can't get online.

HO: OK. I'm sure I can help. Let me just quickly check your (2) _____ address ...

C: My what? What does that mean?

HO: It's just a unique series of numbers that identifies your computer when it's online. OK, just wait a sec ... Mmm ... Is your (3) _____ plugged in and working OK?

C: Is that the same as the (4) _____ router? The thing that plugs into the phone line?

HO: Yes. Are the lights flashing?

C: Yes, they're flashing really fast.

HO: OK. Just turn the router off and on at the back. Is it working now?

C: Yes, it is. Why did that happen?

HO: It's nothing serious – sometimes you just need to reset the router. Is there anything else I can help you with?

C: Actually, yes. I'm paying all this money for one of those fast, what do you call them, (5) _____ connections, but all I'm using the computer for is checking (6) _____ and looking up information on the (7) _____. What else can I do with all this technology?

HO: Well, have you tried instant (8) _____ ? You know, having real-time chats with friends over the Internet?

C: How old do you think I am? That sounds like the kind of thing my 15-year-old son would be into, not me!

HO: OK, well how fast is your connection? If it's very fast, then you can take advantage of (9) _____ – that means downloading files from the Internet onto your hard drive. It's a feature that is built into your web (10) _____, so it's very easy to use. You can download music, films, anything you want, really.

C: That sounds expensive. How much does it cost to download a song?

HO: It depends on the site. Another thing you might want to try is (11) _____ – public discussion areas on nearly any topic. It's part of a system called Usenet.

You'll need a (12) [redacted] – that's a program that lets you view and post messages – and a (13) [redacted] and password. It's all very easy.

C: OK, that all sounds interesting. Thanks for all ...

HO: Actually, you might be interested in a new product we've launched this week. Can I ask which (14) [redacted] you use?

C: Outlook Express.

HO: OK, we have some new anti-(15) [redacted] software that helps detect junk email by looking for suspicious words in the subject line of the email. It also looks for suspicious (16) [redacted] – that's how viruses are normally sent between computers. It only costs £5.99 a month and ...

5) Complete the advice on how to prevent spam, use the following words:

mailing list spam email address newsgroups spammers

- Never replay to a [redacted] email or click on a link within an email – this will lead to more junk emails.
- Don't let your email address be displayed anywhere on the Internet, including [redacted], chat rooms or any websites.
- Never forward a spam to other people - [redacted] might be able to track their addresses too, and you could end up losing friends.
- Don't include everyone on a [redacted] unless it is really necessary.
- Treat your [redacted] like your phone number – don't give it out randomly. Try to use a different one when shopping online.

6) What language does the following conversation use? Translate it into English.

Will: How r things?

Nick: Good, thanks. u?

Will: Not bad. Need 2 talk **ASAP** 2 discuss the new website.

Nick: OK. **F2F** or on the phone?

Will: Meet **4** coffee? I need 2 get out of the house! **LOL**

Nick: **IC!** cu at the café at 3.30?

Will: Great. **BFN**.

<http://www.cambridge.org/cz/elt/teachers/zones/>

7) Translate the following abbreviations into the language of "ordinary" people.

LOL, IMHO, ASAP, ROFL, AFAIK, PEBKAC, FYI, BRB, BBS, ČKD, I H8 U, IC, L4, L8R, MYOB, RUOK?, W8, 2L8, F2F, TIA, IOW,

http://cs.wikipedia.org/wiki/Seznam_zkratek_v_online_diskus%C3%ADch

8) Listening: Infotech p. 87

E-commerce and online banking

A  Listen to two extracts from a monthly podcast called *Money Matters*. What is each speaker talking about?

Speaker 1 _____ Speaker 2 _____

B  Listen again and make notes under these headings.

Speaker 1	Speaker 2
Things people buy online	Things you can do with online banking
Steps for buying online	Biggest issue with online banking
Precautions	Precautions

C Complete the extracts with words from the box

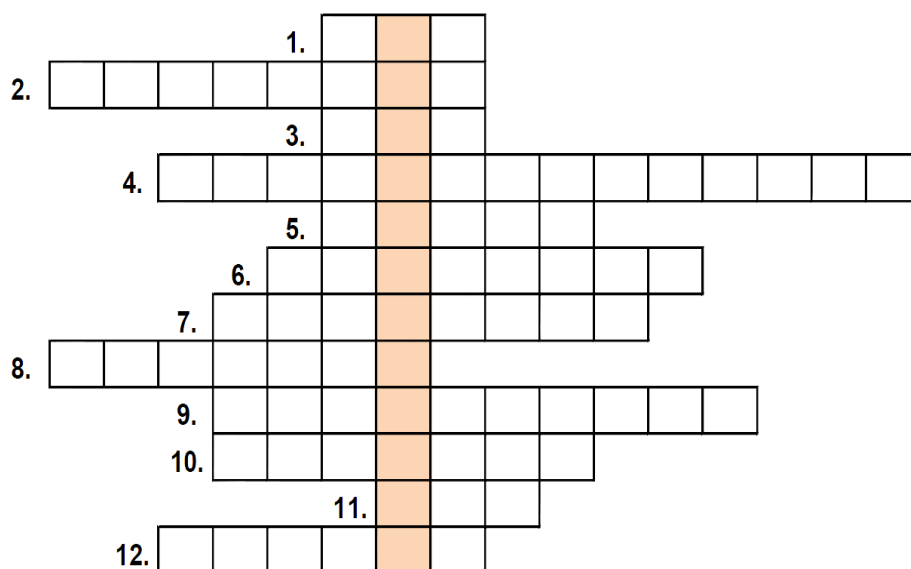
authorization fake internet auction shopping cart browse log in steal

- Occasionally I also buy things on _____ sites such as eBay, where people offer and sell things to the highest bidder.
- First you enter a site dedicated to e-commerce and _____ their products.
- Then you put the items you want to buy into a virtual _____ – a program that lets you select the products and buy with a credit card.
- You may have to _____ with a username and a password ...
- ... for some transactions, you will be required to use a TAN, a transaction _____ number.
- Be aware of *phishing* – you may receive _____ emails claiming to be from your bank and asking for personal information or account details in an attempt to _____ your identity.

9) Complete the puzzle: solution = a very important item of banking services.

- Personal Identification Number
- Getting passwords of online bank accounts or credit card numbers using fake emails
- A machine that dispenses money when a personal coded card is used
- Verifying the identity of a user logging onto a network
- Something intended to deceive
- The name you identify yourself when you log onto a computer system or a network

7. A secret word which must be entered before access is given
8. Your money in a bank is deposited on an a.....
9. The process of saving and transmitting data in encoded form
10. The amount of money that remains in an account at a given date
11. Transaction Authorization Number
12. Someone who invades a privacy of a network



10) Discuss advantages and disadvantages of World Wide Web and Email.

Follow the stages:

Stage 1: Make a list of 'pros' and 'cons'.

Stage 2: Work in groups. Discuss the pros and cons. Use expressions from the box.

EXPRESSING AN OPINION	
Myslím.	I think.
Osobně si myslím	Personally I think
Opravdu si myslím	I really think
Podle mého názoru	In my opinion
SOUHLAS	
Myslím, že ano.	I think so.
Docela souhlasím, ale	I quite agree but
Souhlasím s vámi.	I agree with you.
To je ono.	That's it.
No právě.	Well, that's the point.
Máte pravdu.	You are right.
Jsem si tím jist.	I am sure about it.
Obávám se, že ano.	I'm afraid so.

NESOUHLAS

Nesouhlasím s vámi.

I don't agree with you.

Jsem proti tomu.

I am against it.

Ne, naopak.

No, on the contrary.

Myslím, že ne.

I don't think so.

Nesmysl.

Nonsense.

Nemáte pravdu.

You are mistaken.

You are wrong.

Questions:

1. Define what internet is.
2. What is IP address?
3. What is a modem used for?
4. What are the most common types of high-speed Internet connection?
5. What is power line Internet?
6. What devices and software does a user need to connect to the Internet?
7. Which customer services are typically offered by an Internet Service Provider?
8. What is chat and instant messaging?
9. What is FTP?
10. What does the term World Wide Web refer to?
11. What is Telnet?
12. What are newsgroups?
13. What is a "thread"?
14. What is video conferencing?
15. What is an email, how does it work?
16. What parts does the email address consist of?
17. What parts does an email contain?
18. What are "smileys? What function do they have?
19. What is "spam"?
20. What is a spam filter?
21. Describe how you would use a search engine to find information on the World Wide Web.
22. What does the abbreviation TCP/IP stand for?
23. What does the abbreviation ISP stand for?
24. What does the abbreviation ADSL stand for?
25. What does the abbreviation FTP stand for?
26. What does the abbreviation http stand for?
27. What does the abbreviation URL stand for?
28. What is online banking?
29. What is an ATM?
30. What bank transactions can be carried out online?
31. What is the authentication?

- 32. What does the abbreviation PIN stand for? Explain it.
- 33. What is a password?
- 34. What is a username?
- 35. What does the abbreviation TAN stand for? Explain it.
- 36. What is the biometric authentication?

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