UNIVERZITET METROPOLITAN BEOGRAD

NT213 - Engleski za informatičare

The World Wide Web and the Internet

Lekcija 05

PRIRUČNIK ZA STUDENTE

NT213 - Engleski za informatičare

Lekcija 05

THE WORLD WIDE WEB AND THE INTERNET

Uvod

OVERVIEW

This week in English NT213...

In this lesson you will

- use specialist vocabulary, listen to and talk about world wide web and the Internet
- practice using collocations
- use various structures to express temporal relations:
  - revise and practice expressing temporal relations using time clauses with when, once, until, till, as, before, after
  - learn and practice reduced time clauses with after and before
- read a specialist text and answer comprehension questions
- write a process essay/report
- use specialist vocabulary and read about email protocols.

Poglavlje 1

Vocabulary: World Wide Web

WORLD WIDE WEB

World Wide Web: URL, hypertext, links, web page, HTML, browser, URL, search engine.

The World Wide Web (WWW) is an information space where documents and other web resources are identified by URLs, interlinked by hypertext links, and can be accessed via the Internet. The World Wide Web was invented by English scientist Tim Berners-Lee in 1989. He wrote the first web browser in 1990 while employed at CERN in Switzerland. It has become known simply as the Web*.

The World Wide Web was central to the development of the Information Age and is the primary tool billions of people use to interact on the Internet. Web pages are primarily text documents formatted and annotated with Hypertext Markup Language (HTML). In addition to formatted text, web pages may contain images, video, and software components that are rendered in the user's web browser as coherent pages of multimedia content. Embedded hyperlinks permit users to navigate between web pages. Multiple web pages with a common theme, a common domain name, or both, may be called a website. Website content can largely be provided by the publisher, or interactive where users contribute content or the content depends upon the user or their actions. Websites may be mostly informative, primarily for entertainment, or largely for commercial, governmental, or non-governmental organizational purposes.

> Is it "Internet," with a capital "I," or just "internet"? "Web" or "web"? Few debates in the history of the English language have raged more passionately. As of 2016 the AP Stylebook, an English grammar style and usage guide created by American journalists working for or connected with the Associated Press, announced that **both Web and Internet would no longer be capitalized**. They now use web and internet.
>
> **Internet se na srpskom jeziku piše malim slovom prema Pravopisu srpskog jezika Matice srpske (2010: 66).**

You are probably familiar with most of these terms in English, but pay attention to the correct English pronunciation:
WWW /dʌbl ju: dʌbl ju: dʌbl ju:/ = the World Wide Web /th;ə ˌwɜ:ld waɪd 'web/
web page /'web peɪdʒ/
web address – domain name
hyperlink /haipə:link/
browser /brauzə:/

search engine
URL /ju: a: el/ = Uniform Resource Locator
domain name extension /ɪk'stenʃn/
protocol /'prəʊtəkɒl/ - protokol (definiše pravila po kojima uređaji međusobno komuniciraju)

Vocabulary note
backslash (\) – opadajuća ili obnuta kosa crta
forward Slash (/) – kosa crta

A TYPICAL WEB PAGE

Typical Web Page consists of: URL (hypertext transfer protocol, directory path, dot, forward slash, colon); toolbar, navigation icons, hyperlinks.

At the top of the page is the URL address. URL means Uniform Resource Locator — the address of a file on the Internet. A typical URL looks like this: http://www.bbc.co.uk/radio/.

In this URL, http:// means Hypertext Transfer Protocol and tells the program to look for a web page. www means world wide web. bbc.co.uk is the domain name of the server that hosts the website — a company based in the UK; other top-level domains are .com (commercial site), .edu (education), .org (organization) or .net (network); radio is the directory path where the web page is located. The parts of the URL are separated by . (dot), / (slash) and : (colon). Some sites begin with ftp://, a file transfer protocol used to copy files from one computer to another.

The toolbar shows all the navigation icons, which let you go back one page or go forward one page. You can also go to the home page or stop the current transfer when the circuits are busy. Tab buttons let you view different sites at the same time, and the built-in search box helps you look for information. If the feed button lights up, it means the site offers RSS feeds, so you can automatically receive updates. When a web page won't load, you can refresh the current page, meaning the page reloads (downloads again). If you want to mark a website address so that you can easily revisit the page at a later time, you can add it to your favourites (favorites in American English), or bookmark it. When you want to visit it again you simply click show favourites. On the web page itself, most sites feature clickable image links and clickable hypertext links. Together, these are known as hyperlinks and take you to other web pages when clicked.

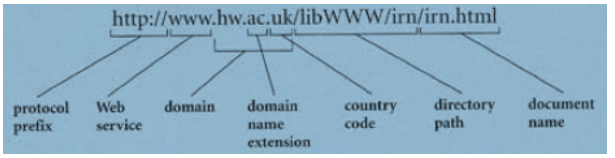
URL

The syntax of URL: protocol prefix, Web service, domain, domain name extension, country code, directory path, document name.

URL , the Web address, is a reference to a web resource that specifies its location on a computer network and a mechanism for retrieving it. Most web browsers display the URL of a web page above the page in an address bar. A typical URL could have the form http://www.example.com/index.html, which indicates a protocol (http), a hostname (www.example.com), and a file name (index.html). Web addresses and extensions are standardized.
What does the web address mean?

What information can you get from the letters in the address?

The given example is the address of Heriot-Watt University Library Edinburgh. Study the given address and in the extensions (= letters in the address) identify its parts 1-7.



Slika 1.1 Uniform Resorce Locator [Izvor: Oxford English for Information Technology, p. 88]

Which part of the address tells you:
1. the university is in the UK?
2. this is a webpage?
3. the type of transmission standard your browser must use to access the data?
4. this points to the computer where the webpage is stored?
5. this is where the webpage is stored in the computer?
6. this is a university?
7. this uses the Web service?
Key

1. uk country code
2. www Web service
3. http protocol prefix
4. hw.ac.uk domain name
5. libWWW/irn directory path
6. ac domain name extension
7. irn.html document name

This example indicates the following:
http:// is known as the protocol prefix and indicates that the hypertext transfer protocol (an agreed communications standard for webpages) should be used to transfer the webpage across the Internet.
m/w indicates that this is a World Wide Web document i.e. a webpage.
hw.ac.uk is the domain name and indicates the network domain in which the webpage is stored.
ac is the domain name extension and indicates the type of domain e.g. ac or edu is an educational domain, co or com is a company.
uk is the country code indicating that this webpage is stored on a computer in the United Kingdom.

libWWW/irn gives the path of the directory (or folder) where the webpage is stored on the server.
irn.html is the name of the webpage file. The extension used in webpage filenames is either htm or html to indicate that the file is written using HTML (hypertext markup anguage).

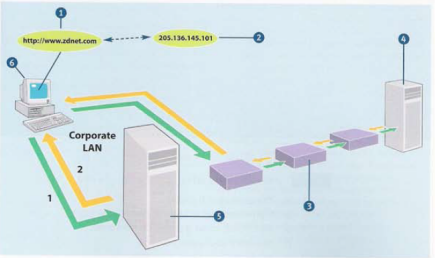
LISTENING: HOW YOUR BROWSER FINDS THE PAGE YOU WANT

Practicing listening skills

Study the diagram that explains how the browser finds the webpage you want. In simple terms, try to explain the process and identify the items in the diagram 1-6 with their labels a-f. The process has several stages.

- a router
- b DNS server
- c Remote Web server
- d Browser PC
- e URL
- f Internet Protocol address

Vocabulary (pronunciation)
router /ˈruːtə/ and /ˈraʊtər/
protocol /ˈprəʊtəkɒl/



Slika 1.2 How your browser finds the page you want [Izvor: Oxford English for Information Technology, p. 89]

Listen to the recording which explains the diagrammed process of finding webpages. The process has four stages.

While listening, take short notes about each stage, as shown in the instruction. You can listen to the recording several times.

Finally, you can refer to the recording script on the next page.

Ova lekcija sadrži audio materijal. Ukoliko želite da pogledate ovaj audio morate da otvorite LAMS lekciju.

Key
1b
2f

3a
4c
5e
6d

DOMAIN NAME EXTENSIONS

Domain name extensions are: .com commercial, .org organization, .net network, .edu education etc.

Domain name extensions are also standardized. Usually they are rather informative. Study the given extensions and the domains of human activity they refer to (meaning).
.aero aviation industry
.biz businesses
.com (.co in UK) commercial
.coop cooperatives
.edu (.ac in UK) educational and research
.gov government
.info general use
.int international organisation
.mil military agency
.museum museums
.name individuals
.net gateway or host
.org non-profit organisation
.pro professionals

Which addresses do you know in our country that have some of these extensions? For example:

- Education: http://www.metropolitan.ac.rs/
- Government: http://www.srbija.gov.rs/

If you or your company have a web address, what is it? How was it determined?

Here are some more possible extensions. Match the extensions 1-7 with their meanings a-g. Can you think of some possible domains and extensions for them?
Suggested extension
1. firm
2. store
3. web
4 . arts
5 .rec
6 .info
7. nom
Meaning
a informative
b cultural or entertainment

c personal
d firm or agency
e online retail shop
f Web-related
g recreational
Key
1d
2e
3f
4b
5g
6a
7c

Vocabulary note
DNS [di: en es] = domain name system
Retail [riteil] = prodaja na malo

RECORDING SCRIPT: HOW YOUR BROWSER FINDS THE PAGE YOU WANT

This listening script for the audio is provided here to understand better and to get insight into a describing a process by using various temporal relations.

To find the webpage you want, you have to click on a webpage hyperlink or enter a URI, a Uniform Resource Locator into a browser. The URI is the address of the page. When you do that, the browser sends the URI to a DNS server.

The DNS server is the Domain Name Server. It uses a look-up table to find the IP address of the Web server referred to in the URL. The IP address is a unique, 32-bit set of numbers. Erm, every computer on the Web has its own IP address.

Once the DNS server has found the IP address, it sends it back to the browser.

The browser then uses this IP address to send a request to the Web server. The request is sent as a series of separate data packets which include both the IP address of the Web server and the IP address of the browser computer. These data packets are first sent to a router computer, which uses the IP address of the Web server to determine the best available route for each packet.

The packets are passed from router to router until they reach the Web server. They may travel by different routes before reaching the server. As the individual packets reach the Web server, they’re put back together again.

The Web server now services the request by sending the requested webpage back to the browser computer. Again it travels as a series of separate data packets from router to

route,. This time the router uses the IP address of the browser computer to work out the best available path for each packet. As the packets arrive at the browser computer, they're combined to form the you requested and are displayed in your browser.

PRACTICE: WWW

Match the beginnings from column A to the endings from column B.

Column A

1.The WWW consists of sets of linked documents known as webpages

2. The extension used in webpage filenames is either htm or html

3. When a user clicks on a hyperlink,

4. Because a video signal contains so much data,

5. As well as keyword searches

6. When the packets arrive at the browser computer,

Column B

a. the browser program contacts a server computer known as DNS server.

b. they are combined and the requested webpage is displayed in the browser.

c. to indicate that the file is written using HTML.

d. which can be viewed using a program called a browser.

e. search engines can be used for field searches.

f. it is difficult to download it from an Internet server in real-time.

Key

1d, 2c, 3a, 6a, 4f, 5e

PRACTICE: HOW TO NAVIGATE

Navigate = to move around a website or computer screen, or between websites or screens

Complete these instructions about how to navigate with the given words.

- client
- search engine
- web page
- web server
- surf

- website
- web browser
- URL

1. Start up your computer and connect to the Internet.
2. Open your ....
3. Type the ..... to access a website.
4. Your web browser sends the request to the correct ....
5. The server looks for the document and sends it to the ..... computer.
6. Your web browser displays the selected .... on the screen.
7. From the home page of the ..... you can ..... to the other pages by clicking on the hyperlinks.
8. If you want to find more websites, use a ....

Key

1. -
2. web browser
3. URL
4. web server
5. client
6. web page
7. website, surf
8. search engine

PRACTICE: WEBSITES

There are several types of websites: commercial website, news website, personal website...

Complete this article about websites with the following words.
design internet maintained navigation provides sells used webmasters

There are several types of websites on the (1) _____, many offering different things. For example, a commercial website (2) _____ products or services. These types of website are (3) _____ for promoting a business or service and are the most common type of website. When you (4) _____ a commercial website, it is important to make sure that your visitors can move around easily in your site. Poor (5) _____ makes it difficult for people to find what they are looking for and they will leave. A news website (6) _____ information about current events and opinions. This kind of website should also encourage feedback from its visitors. In fact, many blogs are just a news site that covers current events and the views of the (7) _____ and visitors. A personal website is a website (8) _____ by an individual for personal use. Though similar to a blog, a personal website is usually much larger and contains the personal interests, hobbies, etc. of the person controlling the website.

Key

1. Internet
2. sells
3. used
4. design
5. navigation
6. provides
7. webmasters
8. maintained

Poglavlje 2

Collocations

DEFINITION

A collocation is a word combination that often goes together.

Verbs and nouns often go together in English to make set phrases, for example *access the Internet*. These word combinations are called collocations, and they are very common. You need to learn them in order to sound natural in English.

Learning collocations instead of individual words can help you remember which verb to use with which noun. For example, in computing, we say "*attach a file*", not "enclose a file". Here are some more examples: *perform operations*, *do research*, *make calls*, *send texts*, *display data*, *store information*, *complete exercises*, *carry out transactions*.

New collocations are particularly common in ICT. Notice the combinations that are worth learning when you read texts in English.

Collocations with *feature*
adjective
basic, central, critical...
verb + feature
brim with, have, include...
feature + verb
distinguish something, characterize something, include something
Teamwork is a key feature *of the training programme.*
I've added some new features *to my website.*
new safety/security features
There are a number of special features *included on the disc.*
The main bonus feature *on the DVD is a lengthy interview with the director.*
The most distinctive feature *of this track is the trumpet sound.*
The one redeeming feature *(= good thing about it) of the plan was its low cost.*

SOME TYPES OF COLLOCATIONS

Types of collocations: verb+noun, verbs with particles, adjective+noun, adverb+adjective.

Here are some common types of collocation:
Verb + noun: *surf the Web*, *download music*
The easiest way to *connect to the Internet* is by using a DSL modem.

A DSL modem can *transmit data* at high speed.
Your ISP will probably give you a CD with instructions on how to *install the software* on your PC.
Once you are online, you can *access the Web* or *send and receive emails*.
You may like to *burn CDs*, i.e. copy your favourite songs or important files onto CDs.
Verbs with particles: *hack into a computer*, *log onto a bank account*
Can you show me where the microphone *plugs into the computer*?
If you want to *log onto your account* you will need your user ID and password.
Computer criminals are getting better at *hacking into* other people's *computers*.
Adjective + noun: *mathematical formulas*, *up-to-date information*
High-speed networks and multimedia phones allow customers to view live TV.
To send *outgoing mail* and retrieve *incoming mail*, you need to configure the email settings.
Most teenagers use *instant messaging* to chat with friends.
Electronic commerce — from a PC, digital TV or mobile phone — offers competitive prices.
Wireless hotspots provide Wi-Fi Internet access in airports, hotels and other places.
Users can interact with a *virtual environment* through the use of VR displays and data gloves.
Typical *interactive TV* uses are voting in polls, video on demand and shopping from home.
Adverb + adjective: *highly sensitive information*, *freely available on the Web*
Don't send *highly sensitive information* via email or fax unless it is encrypted.
This movie is *freely available* on the Internet, so it can be downloaded free of charge.
Phrases
When you chat in a chat room, you are interacting in *real time* since it is immediate.
A USB device is a good example of *plug and play*; you install it and use it immediately.
To *drag and drop*, just click on the object and drag it to a different location.

The word online often collocates with other words and can function as adjective or adverb.

Adjective: They post opinions on online journals. Adverb: A podcast is an audio recording posted online.

PRACTICE: COLLOCATIONS

Practicing using collocations

I Match each verb on the left with its partner on the right to make collocations.
make faxes
send websites
press calls
browse video
record the button
download software

Key I
make calls
send faxes
press the button
browse websites

record video
download software

II Match each verb on the left with its partner on the right to make collocations. Then complete the sentences.

give money
keep texts
access databases
enter presentations
transfer records
make the Internet
do calls
store research
send information

1. Thanks to Wi-Fi, it's now easy to ..... from cafes, hotels, parks and many other public places.
2. Online banking lets you ..... between your accounts easily and securely.
3. Skype is a technology that enables users to ..... over the Internet for free.
4. In many universities, students are encouraged to ..... using PowerPoint in order to make their talks more visually attractive.
5. The Web has revolutionized the way people ..... — with sites such as Google and Wikipedia, you can find the information you need in seconds.
6. Cookies allow a website to ..... on a user's machine and later retrieve it; when you visit the website again, it remembers your preferences.
7. With the latest mobile phones, you can ..... with multimedia attachments — pictures, audio, even video.

Key 2

1 access the Internet 2 transfer money 3 make calls 4 give presentations 5 do research 6 store information 7 send texts

Poglavlje 3

Grammar: Time Clauses

VARIOUS TEMPORAL RELATIONS

When we want to talk about events and actions taking place at particular times, we can combine sentences describing temporal events by putting them together in one complex sentence.

In this lecture we revise time clauses with different linkers. We also learn reduced time clauses with *after* and *before*.

When we want to talk about events and actions taking place at particular times, we can combine sentences describing temporal events (for example, sentences 1a and 1b, 2a and 2b, 3a and 3b, etc.), by putting them together in one complex sentence which consists of the main clause and the time clause (for example (1, 2, 3...).

In such complex sentences events need not be ordered chronologically, we can use different time linkers to express various temporal relations.

Time linkers are when, after, before, until, till, once, as soon as, as .

Note: We have to pay attention to the use of different tenses in sentences with time clauses.

TEMPORAL RELATIONS USING WHEN, ONCE AND UNTIL

Temporal relations can be expressed by using when, once and until.

When

We use WHEN to show that once action happens immediately after another action, or that they happen simultaneously.

1a. *You click on a URL*.

1b. *Your browser sends it to a DNS server.*

1. *When you click on a URL, your browser sends it to a DNS server.*

Once

Compare the following sentences

1. *When you **click** on a URL, your browser sends it to a DNS server.*

*1 B. **Once** you **have clicked** on a URL, your browser sends it to a DNS server.*

The difference between 1. and 1 B. is that ONCE means the completion of the first action. Usually, in time clauses starting with ONCE, we use the present perfect tense.

Note on Serbian translation: We can translate both sentences 1 and 1B the same, but it is better to translate the 1B using Serbian perfect. The linker can be the same, *kad(a*). Also you can say 'jednom kada', but it's less appropriate in technical contexts.

Until and **till**

We use UNTIL and TILL to link sentences where we express the limit of an action

2 a. *The packets are passed from router to router.*

2 b. *The reach the Web server.*

2. The packets are passed from router to router until they reach the Web server.

Note on Serbian translation: until / till = (sve) dok

In the Serbian clause starting with 'dok' we usually use the negative form of the verb: 'dok NE stignu do veb servera'

Don't confuse this 'dok' with another Serbian 'dok' = while

TEMPORAL RELATIONS USING BEFORE AND AFTER

Temporal relations can be expressed by using before and after.

Before

We use BEFORE to show that one action happens before the other

3 a. *The packets may travel by different routes.*

3 b. *They reach the Web server.*

3. *The packets may travel by different routes before they reach the Web server.*

Reduced time clauses with before

Form: *before* + -ing participle

If the subjects of both clauses are the same (here 'the packets' = 'they), we can reduce the time clause to *–ing* participle. The time clause has no visible subject, but we understand it as having the same subject as the main clause. Sentences 3 and 3B mean the same.

3 B *The packets may travel by different routes before reaching the Web server.*

After

We can use AFTER show that one action happens after the other. The same sentences that we had before can be combined differently. The logic and the word order in sentences is the same as in Serbian.

3 a. *The packets may travel by different routes.*

3 b. *They reach the Web server.*

3 C. *After the packets travel by different routes, they reach the Web server.*

Reduced time clauses with after

Form: *after* + -ing participle

If the subjects of both clauses are the same (here 'the packets' = 'they), we can reduce the time clause to *–ing* participle. The time clause has no visible subject, but we understand it as having the same subject as the main clause. Sentences 3C and 3D mean the same.

3 D *After travelling by different routes, the packets reach the Web server.*

Note on Serbian translation:

Let's look once again at these complex sentences with *before* and *after*

3. *The packets may travel by different routes before they reach the Web server.*

3 B *The packets may travel by different routes before reaching the Web server.*

3 C. *After the packets travel by different routes, they reach the Web server.*

3 D *After travelling by different routes, the packets reach the Web server.*

In Serbian we can't reduce the time clause to the participle. For both 3 and 3B, we say ' pre nego što stignu…'

For both 3C and 3D, we say 'nakon što pređu različite puteve…'

TEMPORAL RELATIONS USING AS

Temporal relations can be expressed by using as.

As

We can use AS to link two connected actions that happen at the same time.

4 a. *The individual packets reach the Web server.*

4 b. *They are put back together again.*

4. *As the individual packets reach the Web server, they are put back together again.*

Note on punctuation:

If the time clause (no matter what the linker is) comes before the main clause in the sentence, always use a comma.

Watch this video "Using Time Clauses to make complex sentences" to review what you have just read.

Ova lekcija sadrži video materijal. Ukoliko želite da pogledate ovaj video morate da otvorite LAMS lekciju.

EXERCISE 1: LINKING SENTENCES

Practicing time clauses by linking two sentences.

Link these statements using an appropriate time clause.

1. a You use a search engine. b It provides a set of links related to your search.
2. a With POP3, email Is stored on the server. b You check your email account.
3. a You have clicked on a hyperlink. b You have to wait for the webpage to be copied to your computer.
4. a You listen to the first part of a streamed audio file. b The next part is downloading.
5. a The graphics can be displayed gradually. b The webpage is downloaded.
6. a You receive an email message. b You can forward it to another address.
7. a You click on a hyperlink. b The browser checks to see if the linked webpage is stored in the cache.
8. a You can bookmark a webpage to make It easier to find in the future. b You find a webpage you like.
9. a You type in a Web address. b You should press the Enter key.
10. a You click on the Home button. b The browser displays your starting webpage.
11. a You click the mouse pointer on the file. b It Is highlighted.
12. a You cannot save a file. b You name it.
13. a The files are transferred. b The transfer is graphically displayed.
14. a Make sure you have all the details of your set up. b You phone the help line.
15. a The OK button is clicked. b The copying process begins.
16. a The percentage of file transferred is displayed. b Your browser downloads from the Internet.
17. a The virus Is not activated. b You open the infected file.
18. a You repair a PC. b Ensure the machine is disconnected.
19. a Don't open an email attachment. b You have virus checked it.
20. a You add memory. b Change the BIOS settings.

Key

1. When you use a search engine, it provides a set of links related to your search.
2. With POP3, email is stored on the server until you check you email account.
3. Once/When you have clicked on a hyperlink, you have to wait for the webpage to be copied to your computer.
4. As you listen to the first part of a streamed audio file, the next part is downloading.
5. The graphics can be displayed gradually as the webpage is downloaded.
6. After/When you receive an email message, you can forward it to another address.
7. When you click on a hyperlink, the browser checks to see if the linked webpage is stored in the cache.
8. You can book mark a webpage to make it easier to find in the future when you find one you like.
9. After you type a Web address, you should press the Enter key.
10. When you click on the Home button, the browser displays your starting webpage.

11. When you click the mouse pointer on the file, it is highlighted.
12. You cannot save a file until you name it.
13. As the files are transferred, the transfer is graphically displayed.
14. Remove any floppies before you close down the computer.
15. Once the OK button is clicked, the copying process begins.
16. The percentage of file transferred is displayed as your browser downloads from the Internet.
17. The virus is not activated until you open the infected file.
18. Before you repair a PC, ensure the machine is disconnected.
19. Don't open an email attachment until you have virus-checked it.
20. After you add memory, change the BIOS settings.

EXERCISE II: BUFFERING

Practicing time clauses by using appropriate time linkers - when, as, once, after, until.

Fill in the gaps in this description of buffering with appropriate time linkers - when, as, once, after, until.

Streaming is a way of dealing with bandwidth problems 1 ..... you download video from the Internet. One key to successful streaming is the process of buffering. 2 ..... you download a movie, the video player stores port of the movie in memory 3 ..... playing it. Imagine the buffer as a container filled from the top as shown in Figure 1. ..... the container is full, the player sends data on for playback from the bottom. Data keeps coming in 5 ..... a clip plays. The user can view the beginning of the movie 6 ..... the rest of the clip downloads. 7 ..... connection slowdowns or interruptions occur, the amount of data in the buffer decreases but as long as some remains, playback is interrupted. Playback continues at a steady rate 8 ..... the buffer is empty.

Key

1. when
2. When
3. before
4. Once/when
5. as
6. as/before
7. When
8. until

EXERCISE III: HOW YOUR BROWSER FINDS THE PAGE YOU WANT

Time connectors (when, until, after, then).

Complete the following text with the appropriate time connector.

_____ a user clicks on a hyperlink on a webpage, the browser program contacts a server computer known as a *DNS* (Domain Name System) server to look up the *IP* (internet Protocol) address (the unique 32-bit binary number) of the remote Web server computer (the computer storing the webpages) given in the URL of the linked webpage. The DNS has a stored table of names and addresses of nodes (a network terminal or point where a computer is connected to a network) on the Internet. The request for the linked webpage is _____ sent to a computer or electronic device known as a router that uses the Internet address obtained from the DNS server to route the request (decide on the best Internet path to send the request).

The message requesting the webpage is divided up into small sections called packets and each separate data packet is passed from router to router _____ they all reach the remote Web server where they are put back together again. The remote Web server sends the requested webpage back to the browser computer that made the request in a similar way using the IP address of the browser computer to determine the best available route for each packet. _____ the packets have arrived at the browser computer, they are combined and the requested webpage is displayed in the browser.

Key

1. When
2. then
3. until
4. After/Once

Poglavlje 4

Writing: Process Essay

HOW TO WRITE PROCESS ESSAYS

The process essay is the writing assignment in which we describe how to do something or tell how something happens.

A process essay is the writing assignment in which your task is to describe how to do something or tell how something happens. That's why the process essays are usually called "how to" essays. In order to write a coherent and well-organized process essay, you should use chronological order - the arrangement of events based on the time they occurred. Chronological order is usually used to explain processes and procedures. For example:

- How to install OS.
- How to assemble a computer.
- How to shop online.
- How to set up a wireless network.
- How to find the best app for your phone etc.

SEQUENCING A PROCESS

How to use time and sequence connectors

The use of time and sequence connectors means we can show the different stages of a process. To indicate sequence or logically ordered idea, the following transition signals are used:

- after / once
- at that time
- at the same time
- before
- concurrently
- eventually
- finally
- first, second, third etc. followed by
- gradually
- initially
- meanwhile
- next
- previously

- subsequently
- then

First Then / Next Finally

First the computer is switched on. Then the OS is booted. Finally, the application is run.

As

As the laser printer drum rolls, the toner gets stuck to it and reproduces the original image.

After / Once

After you have had a program for a while, it may have to be updated. Once a CD-R has been written to, you can't alter the data.

Before

Before you can recover the files that have been deleted, you must unformat the hard disk.

When describing a technical process, we often use the present simple passive, e.g. is digitized / are converted / is set up, to explain how something is made or used. The agent is not as important as the process.

TIPS FOR WRITING

Process essay writing tips

When writing your own introduction of one or two sentences, paraphrase the question and add details.

It is essential to keep the sequence of steps in mind.

When writing a process essay, you should not skip steps or attempt to go back and explain something.

You must follow strict chronological order when giving directions.
Write about the process from the beginning, explaining what is happening throughout each stage.
Write about the process through to the end, including time connectors that lead the reader through each step of the process clearly.

Your conclusion should contain a brief summary of the thesis and main parts of the process.

Poglavlje 5

Vocabulary: Faces of the Internet

LEAD-IN

Talking about the technical side of the Internet, professionals and non-experts use many abbreviations and acronyms.

In simple terms, explain:
• What is the Internet?
• What does it do?
• What do you do with it?
• What would you do if you didn't have the access to the Net?

Do you know these abbreviations and acronyms?
LAN [el ei en] = Local area network
CMC [si: em si:] = Computer Mediated Communication
IRC [ai a: si:] = Internet relay chat
MOO [mu:] = multi-user object-oriented
ISP [aj es pi:] = Internet service provider
WWW [dʌbl ju: dʌbl ju: dʌbl ju:] = World Wide Web
TCP [ti: si: pi:] = Transmission Control Protocol
IP [ai pi:] = Internet Protocol
UDP [ju: di: pi:] = User Diagram Protocol
FTP [ef ti: pi:] = File Transfer Protocol
SMTP [es em ti: pi:] = Simple Mail Transfer Protocol
BIOS [baios] = Basic Input Output System

Note: Make sure you know how to read the acronyms and abbreviations in English and check their meaning at http://www.acronymfinder.com/

Internet se na srpskom jeziku piše malim slovom prema Pravopisu srpskog jezika Matice srpske (2010: 66).

List**en to a conversation between a customer buying a PC and a sales assistant. Why do you think the sales assistant has to explain so much about the Internet?**

Ova lekcija sadrži audio materijal. Ukoliko želite da pogledate ovaj audio morate da otvorite LAMS lekciju.

Listen again and complete the customer's 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 using cables, you can use (4) a .... 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.
Key
computer
modem
Internet Service Provider (ISP)
wireless
radio
e-mail, file-transfer, newsgroups, real-time chats, instant messaging, looking for information on the Web
pages

VOCABULARY

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

What the Internet is
The Internet is an International computer Network made up of thousands of networks linked together. All these computers communicate with one another; they 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) and every computer is given an address or IP number. This number is a way to identify the computer on the Internet.
Getting connected
To use the Internet you basically need a computer, the right connection software and a modem to connect your computer to a telephone line and then access your ISP (Internet Service Provider).

The modem (modulator-demodulator) converts the digital signals stored in the computer into analogue signals that can be transmitted over telephone lines. There are two basic types: external with a cable that is plugged into the computer via a USB port, and internal, an expansion card inside the computer. A PC card modem is a different, more versatile option for laptops and mobile phones.

At first most computers used a dial-up telephone connection that worked through the standard telephone line. Now a broadband connection, a high data transmission rate Internet connection, has become more popular: either ADSL (Asymmetric Digital Subscriber Line), which allows you to use the same telephone line for voice and fast access to the Internet, or cable, offered by most TV cable providers.

The basic equipment has changed drastically in the last few years. You no longer need a computer to use the Internet. Web TV provides email and access to the Web via a normal TV set plus a high-speed modem. More recently, 3Generation mobile phones and PDAs, personal digital assistants, also allow you to go online with wireless connections, without cables.

Telephone lines are not essential either. Satellites orbiting the earth enable your computer to send and receive Internet files. Finally, the power-line Internet, still under development, provides access via a power plug.

PRACTICE

Choose the correct alternatives to complete this newspaper article.

Sharing your broadband connection with your neighbours is either the best way of making friends or the fastest way to lose them. Thanks to new European legislation, (1) *modem / wireless / telephone technology* and a firm called MyZones, several households within 300 metres of each other can now share the cost of fast (2) *broadband / dial-up / phone* access. But the more people using your network, the slower it gets. If four people are using it at once, the surfing speed is 128k. Clive Mayhew-Begg, chief executive of MyZones, says: 'Sharing broadband is just the start of a new generation of consumer-based Internet services.' It starts on July 25 when MyZones will start selling of150 starter kits. These include a wi-fi (wireless technology) point and ADSL (3) *3G / modem /Web TV* but not the wi-fi adapters you and your neighbours will need. These will cost an extra £60 or so for each computer logged on to the wireless network.
The Mirror

Key

1 wireless

2 broadband

3 modem

Talking about the technical side of the Internet, professionals and non-experts use many abbreviations and acronyms. As professionals, you are supposed to know what they stand for and how to pronounce them, both in English and in Serbian. Don’t use Serbian abbreviations when you speak English!

COMPONENTS OF THE INTERNET

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

WWW, the World Wide Web, a collection of files or pages containing links to other documents on the Net. It's by far the most popular system. Most Internet services are now integrated on the Web.
Email, or electronic mail, for the exchange of messages and attached files.
Mailing lists (or listservs) based on programs that send messages on a certain topic to all the computers whose users have subscribed to the list.
Chat and instant messaging, for real-time conversations; you type your messages on the keyboard.

Internet telephone, a system that lets people make voice calls via the Internet.
Video conference, a system that allows the transmission of video and audio signals in real time so the participants can exchange data, talk and see one another on the screen.
File Transfer Protocol (FTP), used to transfer files between computers.
Newsgroups, where people send, read and respond to public bulletin board messages stored on a central computer.
TELNET, a program that enables a computer to function as a terminal working from a remote computer and so use online databases or library catalogues.

What Internet system from the opposite should these people use?
1 $Ilikereceiv \in gdailyupdates$ and $headl \in esom \neq wspapersonmycomputer$. '2 I'm doing some research and need computer access to the University library.'
3 'I'd like to avoid flying to Japan to attend the meeting but I want to see what's going on there.'
4 'I want to read people's opinions about environmental issues and express my views.'
5 'I have designed a web page and want to transfer the data to my reserved web space.'
6 'I'd like to check my students' draft essays on my computer and send them back with my suggestions.'
7 'I don't want to spend too much money on international phone calls but I love hearing his voice.'
8 'I live in a small village where there are no other teenagers. I wish I had the chance to meet and chat with friends.'
Key
1 mailing list 2 TELNET 3 video conference 4 newsgroups 5 FTP 6 email 7 Internet telephone 8 chat and instant messaging

HOW TO CHOOSE THE RIGHT ISP?

Depending on the type of connectivitiy, bandwidth, the services it provides...

How to decide whether you should change the one you have? Here are some decisions to make.

First of all you need to decide which type of connectivity (dial-up or broadband) you need depending on your requirements. Then the bandwidth (data transmission speed) they offer is another important factor. The services the ISP provides, such as the number of email addresses, space for web pages or blogs, span and virus protection should also be taken into account. Last but not least, the cost of special software and connection fees should have an influence on your choice. With these criteria in mind, have a look at some of the available ISPs and decide which one meets your needs best.

VOCABULARY PRACTICE: THE INTERNET

Practice vocabulary dealing with the Internet and verb tenses

Fill in the blanks with the correct form of the verb in brackets:

Most users _____ (connect) to the Internet, _____ (use) a modem, a device that converts signals _____ (enable) a computer _____ (connect) to an ordinary telephone line, through a server and router _____ (own) by a ISP. _____ (attract) users to connect through their system ISPs offer various options _____ (include): unlimited number of email addresses, with _____ (filter) of email to remove junk email, unlimited Web space for _____ (set up) our own website and virus _____ (check) facilities. Web-based mail _____(allow) users to access their email from any computer with Internet access.

Key

Most users connect to the Internet, using a modem (a device that converts signals to enable a computer to be connected to an ordinary telephone line), through a server and router owned by a ISP. To attract users to connect through their system ISPs offer various options including: unlimited number of email addresses, with filtering of email to remove junk email, unlimited Web space for setting up our own website and virus checking facilities. Web-based mail allows users to access their email from any computer with Internet access.

Poglavlje 6

Internet Service Providers

INTRODUCTION: ISP

An Internet service provider (ISP) is an organization that provides services accessing and using the Internet.

What do you think:

- How do ISPs work?
- What types of ISPs are there?
- What is a free ISP?
- What do you want your ISP to do?
- Which services do you need?

HOW TO CHOOSE AN INTERNET SERVICE PROVIDER

A number of factors should be taken into consideration when deciding which ISP to use. Here is an article by Dave Schafer who provides a good background to this.

Choosing an internet service provider (ISP) can be tough. You have to wade through confusing contract details, endless package choices, and tons of fine print—and you still might end up making the wrong choice.

If that's something you want to avoid, you've come to the right place. We'll walk you through the process of choosing an ISP from start to finish. Grab some coffee and let's dive in.

1. Find internet providers in your area.

The first step in choosing an internet provider is figuring out what's available in your area. There are two reasons you need to do this first:

Not every provider is available in every area. Coverage areas differ from provider to provider, so right out of the gate your choices will be limited to the providers that offer service in your area.

Prices, speeds, special offers, and package lineups also vary by location.

What you see advertised online is not necessarily what you can get. Always check the availability of a package in your area before you decide it's the one for you. Along the same

lines, many providers also have different pricing structures for different areas, so be prepared to possibly pay more—or less—after a move.

2. Compare plans, pricing, speeds, and more.

You'll want an internet plan gives you adequate speeds, dependable service, and a large enough data limit for the month—all at a price you can afford. After you've used the Zip Finder to narrow down your choices, compare the providers in your area to see which is the best fit. All internet providers have their own specialties, and it helps to pick one that coincides with what you need the most. Here are the biggest issues to consider:

Plans and pricing

Speeds

Installation and equipment costs

Customer satisfaction ratings

Data caps and overage fees

Some providers deliver ultrafast speeds, while others have more straightforward plans that are easier on the wallet. Many providers impose data caps that limit how much internet you can use per month—though some of them offer unlimited data. As our customer satisfaction survey makes clear, providers also vary in terms of issues like reliability and customer service. And of course, there are often promotions and discounts, including ones to cover the cost of installation.

3. Find how much internet speed you need.

Now it's time to figure out how much speed you need. You'll need an internet plan with adequate download and upload speeds to accomplish all of your everyday Wi-Fi tasks with ease. You want internet that's fast—but you don't need it to be too fast necessarily, or else you'll end up paying too much for bandwidth you won't use.

There are several questions you should ask yourself when evaluating your speed needs:

How often do you stream movies and TV?

Streaming video in 1080p needs about 5 Mbps for good performance, while 4K will require download speeds of at least 25 Mbps—if not faster.

How many people stream and download on their devices in your home on a regular basis?

The more devices and users you have on your home network, the more bandwidth it takes up. You'll want to leave yourself a little cushion to provide solid speeds for everyone to be using the Wi-Fi all at the same time.

How many smart home devices are connected to your internet?

These devices—especially Bluetooth security cameras that upload data continuously—can eat your bandwidth up real quick.

If all that math is too much to keep track of, use our How Much Speed Do You Need? tool to figure out what kind of speed requirements you have at your home or business. All you need to do is answer a few questions and we'll give you our recommendation.

Now that you know what internet speed you need, test your current connection to see how it matches up. You probably already have an idea of how satisfied you are with your current internet. But testing the connection to see what your actual speed is will give you a benchmark to compare against other providers and packages.

If you're in the middle of switching from one internet provider to another, you'll want to double-check whether you are currently under a service agreement and what the terms are. If you bail before the contract is up, it could cost you hundreds of dollars in early termination fees (ETFs). Although many providers have moved to a contract-free model in the last few years, a few still require you to pay up if you break uu.

In addition to shelling out these termination fees, you'll also be responsible for returning your old equipment, like modems and wireless routers. This is usually a simple matter of taking them to a designated drop-off point, but each provider has different instructions.

Now it's time for the exciting part. Once you know how much speed you need and which providers offer service in your area, you can make an informed decision that you'll be happy with.

You've done your research, and we've got your back every step of the way. Go ahead, enjoy your new internet.

Taken form https://www.highspeedinternet.com/resources/choosing-an-internet-service-provider

CONCLUSION: WORLD WIDE WEB AND THE INTERNET

Revision of what we talked about in this lesson

In this lesson we talked about

- www in general
- URLs
- domain name extensions
- the Internet
- ISPs

Talking about the technical side of the Internet, professionals and non-experts use many abbreviations and acronyms. As professionals, you are supposed to know what they stand for and how to pronounce them, both in English and in Serbian. Don't use Serbian abbreviations when you speak English!

We revised collocations, temporal clauses and how to express temporal relations using *when, once, until, after, before, after* and *as*. We also dealt with writing process essays and email protocols. Don't forget to send your report on ISPs in Serbia!

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