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| CHAPTER 12 | WORLD WIDE WEB |

CHAPTER 12 : WORLD WIDE WEB (THE HYPERTEXT CONCEPT)

WORLD WIDE WEB (Web)

- It is created in 1989 by **CERN** (European Organization for Nuclear Energy).
- Because of its great popularity, the web sometimes is mistakenly considered identical with the Internet.
- The Web is a huge **collection of interlinked hypertext documents**, called **webpages**, which are stored in specific computers called servers.
- Internet is a global network of computers linked together to interchange their data.
- Every Webpage and every resource in a webpage is characterized and identified by a unique address called **URL address** (Uniform Resource Locator).
- If the user knows the URL address of a webpage, he can access it with the help of appropriate software called a **web browser**.

http :// www . name . gr / filename

HTTP Protocol It is a set of rules that the web browser must obey to open a page.	**World Wide Web** It indicates that this address is referred to a webpage.	**Domain Name** It is usually the name of the owner of the web site (company or person)	**Extension** It declares the type or the area in which the webpage belongs.	The file opened e.g. image, video, music, text, pdf

http://www.ypepth.gr/help.pdf
http://www.google.com
http://www.mit.edu
http://www.in.gr/auto
http://www.yahoo.com/music

URL: http://www.internet.com

Examples of extensions:

by Type: .com .net .edu .gov .mil
by Area: .gr .us .uk .de .it .gb .eu

- Every machine connected to the Internet is identified by a unique address called **IP address** (Internet Protocol Address).
- An IP address consists of **4 numbers** separated by dots (.)
- Each number can take values inside the range of **[0...255]** and its size is 1 byte (equals 8 bits).

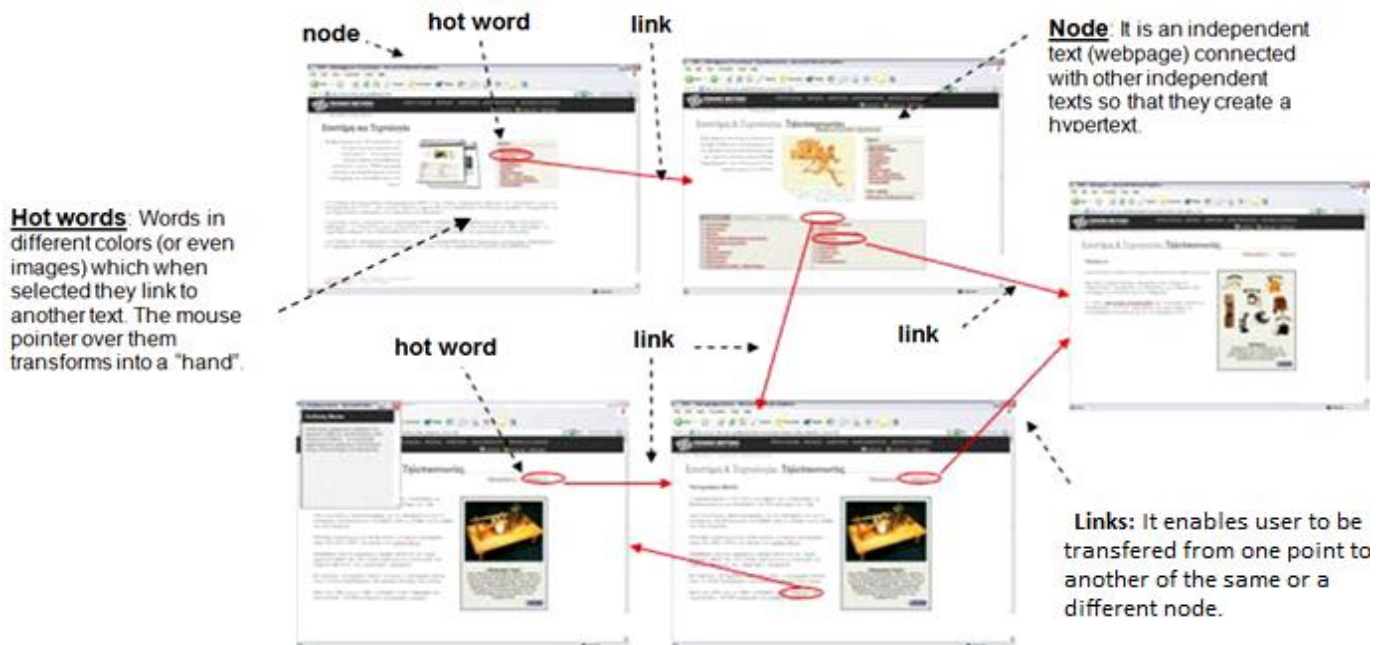| Examples	
Right IP	Wrong IP
216.27.31.117	234.0.260.125
192.168.1.100	147.3.134.256

WEB BROWSER

- It is a **software application** designed to enable users to navigate in the Web as well as retrieve and present information resources by using the appropriate URL.
- Such resources may be a web page, an image file, a video file, or any other piece of content.
- **Hyperlinks** presented in resources enable users easily to navigate between them.
- A web browser enables user to open a page containing hypertexts and hyperlinks made by specific programming languages, such as **HTML, PHP** etc.
- The most common browsers are: **Internet Explorer**, **Mozilla Firefox**, **Safari**, **Google Chrome**, **Opera**, **Netscape Navigator** etc.
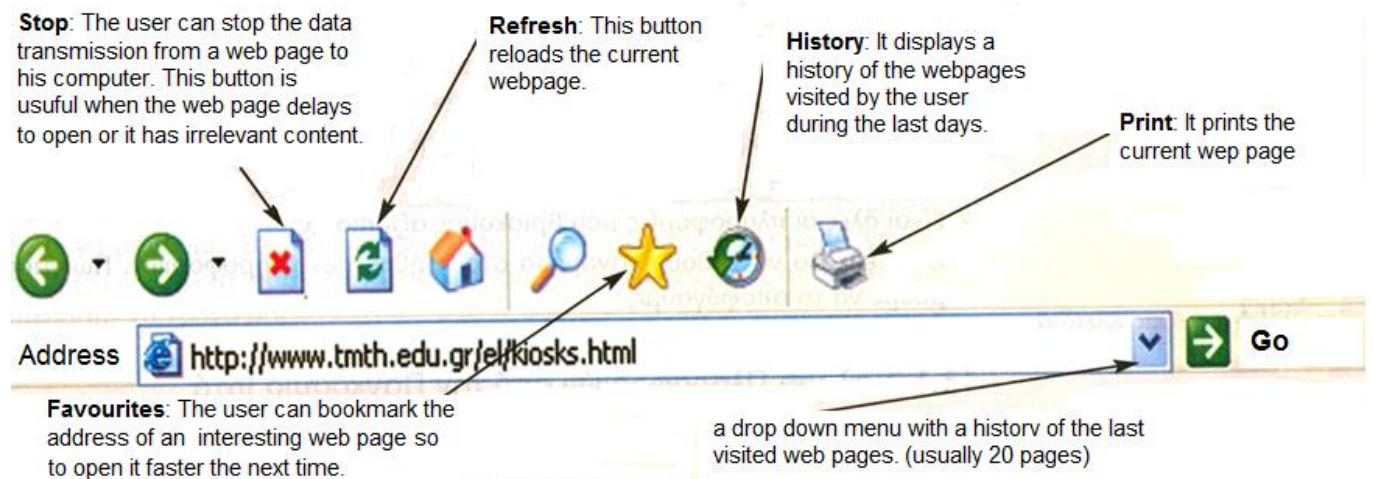
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HYPERTEXT

- It is a form of **active text** found basically on the web sites of the Internet.
- Hypertext consists of many individual texts independently linked, so that the user has the choice of different routes of reading and searching information.
- The way of navigation among hypertexts is **non linear** (that means "random" and is differentiated from the linear reading of a book).
- A hypertext includes **hot words**, **links** and **nodes.**

Node: It is an independent text (webpage) connected with other independent texts so that they create a hypertext.

Hot words: Words in different colors (or even images) which when selected they link to another text. The mouse pointer over them transforms into a "hand".

Links: It enables user to be transfered from one point to another of the same or a different node.

BASIC ICONS OF A WEB BROWSER

Stop: The user can stop the data transmission from a web page to his computer. This button is usuful when the web page delays to open or it has irrelevant content.

Refresh: This button reloads the current webpage.

History: It displays a history of the webpages visited by the user during the last days.

Print: It prints the current wep page

Favourites: The user can bookmark the address of an interesting web page so to open it faster the next time.

a drop down menu with a history of the last visited web pages. (usually 20 pages)

Back	**Forward**	**Home**
Return to the previous page visited	Undo the last operation of Back button	Return to the home page