Introduction to WWW

CE– TE– Web Design Lab

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WHAT IS WORLD WIDE WEB?

➢ The World Wide Web is a way of exchanging information between computers on the Internet.

➢ The World Wide Web is the network of pages of images, texts and sounds on the Internet which can be viewed using browser software .

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The World Wide Web

☐ *The **World Wide Web, or Web, consists of a worldwide collection of electronic documents (Web pages)***

☐ *A **Web site is a collection of related Web pages and associated items***

☐ *A **Web server is a computer that delivers requested Web pages to your computer***

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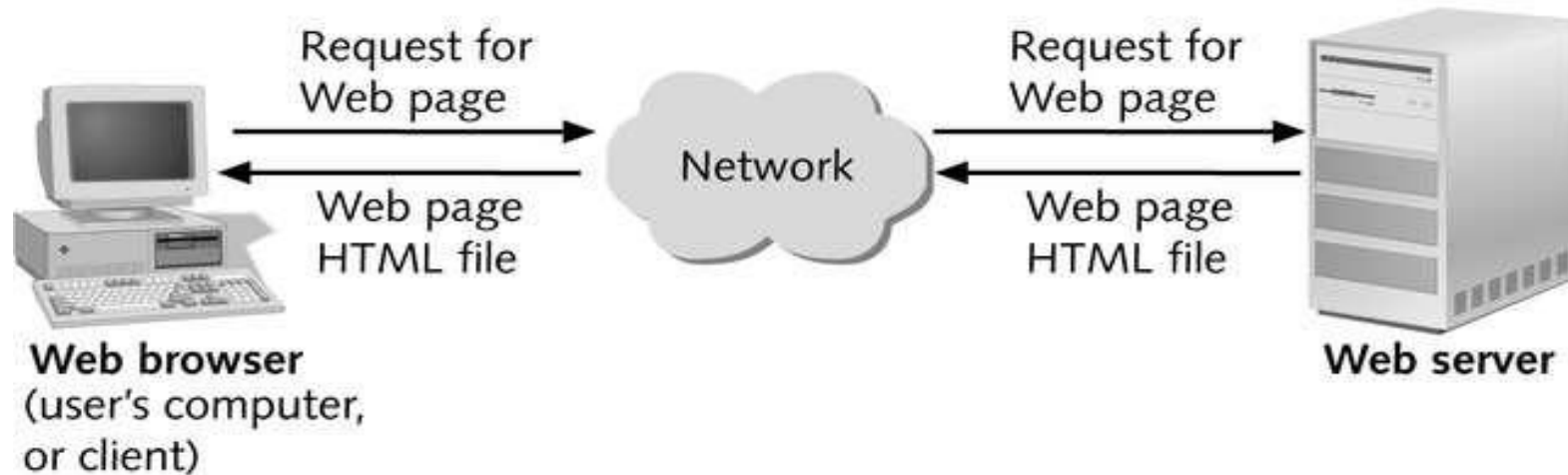RISE WITH EDUCATION

HISTORY

- In 1989, Tim Berners-Lee had suggested a way to let all users, but particularly scientists, browse each others' papers on the Internet.

- He developed HTML, URLs, and HTTP.

Basic Web Architecture

The web is a two-tiered architecture.

› A web browser displays information content,

› and a web server that transfers information to the client.

Request for Web page → Network → Request for Web page

Web page HTML file ← Network ← Web page HTML file

Web browser (user's computer, or client)

Web server

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WWW COMPONENTS

Structural Components:

- ☐ Clients/browsers – to dominant implementations
- ☐ Servers – run on sophisticated hardware
- ☐ Caches – many interesting implementations
- ☐ Internet – the global infrastructure which facilitates data transfer

Semantic Components:

- ☐ Hyper Text Transfer Protocol (HTTP)
- ☐ Hyper Text Markup Language (HTML)
- ☐ Extensible Markup Language (XML)
- ☐ Uniform Resource Identifiers (URIs)

The Fundamental concept of the World Wide Web

➢ The Hypertext concept

➢ Hypertext is text which contains links to other texts. The term was coined by Ted Nelson around 1965 .

➢ The Hypermedia concept

➢ Hypermedia is a term used for hypertext which is not constrained to be text: it can include graphics, video and sound

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➢ *WEB Browser*

- A web browser displays a web document and enables users to access web documents.

➢ *WEB Server*

- This is a program that waits patiently for the browser to request a web page. The servers looks for the requested information, retrieves it and send it to the browser or sends an error message if the file is not found.

➢ *Uniform Resource Locator (URL)*

- These are the web addresses. The resource locator is an addressing system .

Web Browsers

- The primary purpose is to bring information resources to the user.

- An application for retrieving, presenting, and traversing information resources.

Web Server

The term **web server** or **webserver** can mean one of two things:

› A computer program that accepts HTTP requests and return HTTP responses with optional data content.

› A computer that runs a computer program as described above.

How To Create A Web Page ?

The two basic steps required in making a web page.

➢ Create an HTML File
➢ Upload file to server

Creating a WEB PAGE !

Web pages are generally sets of text files coded with special notation called Hypertext Markup Language (HTML) that is interpreted by a web browser program reading the file.

Which came first Internet or WWW?

- The   internet came first.

- Internet   and   WWW are two different concepts.

- Internet is a global   computer network made up of thousand of computers & computer network.

- WWW is a system that interlinked via Internet.

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INTERNET AND WWW

➤ Internet:

- ➤ Internet is a global system of interconnected computer network.
- ➤ Massive network of networks.
- ➤ This computers communicate with each other using a common protocol (TCP/IP i.e. Transmission Control Protocol / Internet protocol
  - ➤)

➤ World Wide Web (WWW) :

- ➤ WWW is one of the services that run on internet.
- ➤ WWW is a system of interlinked hypertext documents accessed via Internet.

- ➤ Way of accessing the information .

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THE DIFFERENCE BETWEEN WORLD WIDE WEB AND INTERNET...?

➤ Many people use the terms Internet and World Wide Web, but in fact the two terms are not synonymous. The Internet and the Web are two separate but related things.

➤ The Internet is a massive network of networks. It connects millions of computers together globally, forming a network in which any computer can communicate with any other computer as long as they are both connected to the Internet.

➤ The World Wide Web, or simply Web, is a way of accessing information over the medium of the Internet.

➤ So the Web is just a portion of the Internet, albeit a large portion.

A Web browser, or browser, allows users to access Web pages and Web 2.0 programs

Internet Explorer	**Firefox**	**Opera**

Safari	**Google Chrome**

How a Web Browser Displays a Home Page

Step 1
Start the Web browser software by clicking the Web browser icon on the taskbar or typing the Web browser name in the search box on the Start menu.

Internet Explorer Web browser name in search results on Start menu

search box

Internet Explorer Web browser icon on taskbar

Step 2
Behind the scenes, the Web browser looks up its home page setting. For illustration purposes only, the screen on the right shows the home page setting is msn.com.

msn.com

Step 3
The Web browser communicates with a server maintained by your Internet access provider. The server translates the domain name of the home page to an IP address and then sends the IP address to your computer.

207.68.172.234

Step 4
The Web browser uses the IP address to contact the Web server associated with the home page and then requests the home page from the server. The Web server sends the home page to the Web browser, which formats the page for display on your screen.

HOME PAGE

> A home page is the first page that a Web site displays

> Web pages provide links to other related Web pages

> – Surfing the Web

> Downloading is the process of receiving information

> Some Web pages are designed specifically for
> micro browsers

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☐ Two types of search tools are search engines and subject directories

Search engine

Subject directory

Finds information related to a specific topic

Classifies Web pages in an organized set of categories

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WIDELY USED SEARCH TOOLS

Widely Used Search Tools

Search Tool	Web Address	Search Engine	Subject Directory
A9	a9.com	X	
AlltheWeb	alltheweb.com	X	
AltaVista	altavista.com	X	
AOL Search	search.aol.com	X	
Ask	ask.com	X	
Bing	bing.com	X	
Cuil (pronounced cool)	cuil.com	X	
Dogpile	dogpile.com	X	
Excite	excite.com	X	X
Gigablast	gigablast.com	X	X
Google	google.com	X	X
Lycos	lycos.com	X	
MSN	msn.com	X	X
Open Directory Project	dmoz.org	X	X
WebCrawler	webcrawler.com	X	
Yahoo!	yahoo.com	X	X

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A search engine is helpful in locating items such as:

Images

Videos

Audio

News

Maps

Blogs

People or Businesses

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TYPES OF WEBSITES

> *There are thirteen types of Web sites*

Portal   News   Informational   Business/Marketing

Blog   Wiki   Online Social Network   Educational

TYPES OF WEBSITES
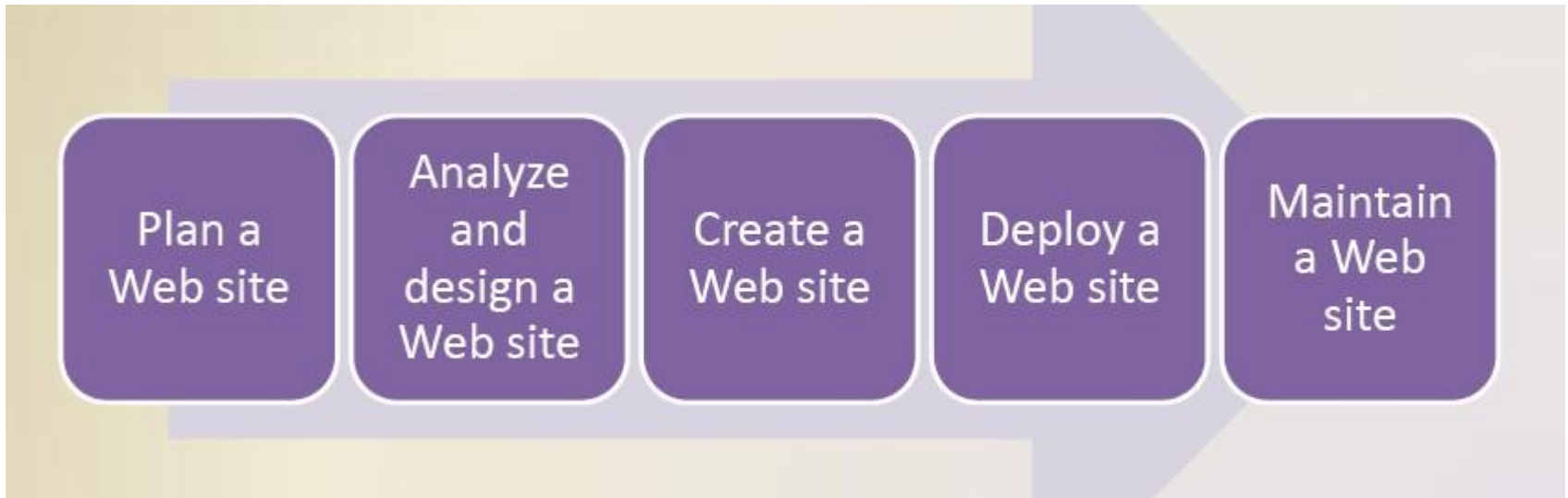

Entertainment

Advocacy

Web Application

Content Aggregator

Personal

The World Wide Web

 Web publishing is the development and maintenance of Web pages

Summary

➤ WWW is a way of exchanging information.

➤ Tim Berners Lee invents the World Wide Web (www) at

➤ Cern . WWW is constructed using HTML

➤ There are basic steps to create Web pages

➤ Internet and WWW are the two different concept. WWW is one of the services that run on internet.

Thank You!

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