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what is the internet & how it work?



The internet : is a network of networks and is a global computer network, it is offspring of the ARPANET project. This idea of connecting computers of different designs and over distant locations started in the 1960s with the U.S. Department of Defense and project called ARPANET (Advanced Research Projects Agency Network). The purpose of the project was to create of communication. (**cyberspace**).



How it work

Architecture: The Internet backbone, the main high-speed routes through which data travels, are maintained by network service providers (NSPs) such as AT&T, NCI, Sprint, BBN, and UUNET.

interoperability is allowed connected computers to exchange data regardless of model, brand, or operating system. Interoperability is made possible by the use of The TCP/IP (Transmission Control Protocol), manages the assembling of a message or file into smaller packets that are transmitted over the Internet and then received by a TCP layer on the destination computer that reassembles the packets into the original message. the Internet Protocol (IP), handles the address part of each packet so that it gets to the right destination.



Accessing the Internet: Going Online

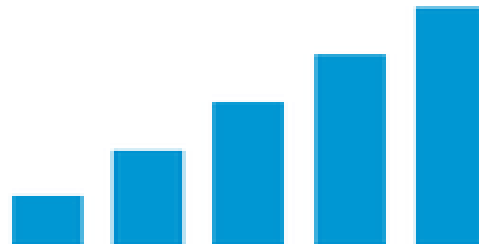
1. Internet access providers

are companies or businesses that provide access to via Internet, for a fixed monthly charge. And its functions:

- Providing and maintaining a connection to the Internet
- Supporting the hardware and software needed to service that connection
- Protecting their site and network from external threats such as viruses, hacker, and other illegal activities
- Providing 24-hour customer service and technical support.

- ❖ **An Internet service provider (ISP)** is a company that traditionally provided access to the Internet and no additional services.
- ❖ **An online service provider** offers special services(osp)
- ❖ **A wireless Internet service provider** to access into portable devices, such as notebooks and smartphones.

through a wireless router located in close proximity and connected to your provider



Connection Options

Type	Price Range per Month	Speed of Access	Advantages	Disadvantages
Dial-up	1	Slow: 56 kilobits per second	Low user cost	Slow speed
DSL	2	Average: 1.5 (mbps) Maximum: 7 Mbps	Speed Reliability	availability High user cost
CABLE	3	3 mbps to +30 mbps	Speed Reliability	availability High user cost
SATELITE	4	700kbps to 1.5 mbps	Availability speed	High user cost Reliability
FIBER OPTICAL SERVICE	5	15mbps to 50+mbps	Speed	availability High user cost



The Internet & the Web What's the Difference?



the Internet is a network of hardware (computers, cables, and routers) through which any computer can directly access other computers and exchange data.



The World Wide Web (www) is a portion of the Internet that contains billions of documents. So, the Internet is the physical connection of millions of networks, whereas the Web uses the Internet as its transport mechanism to distribute its collection of documents, **called Web pages**. The Web uses the Internet architecture in the same way cars and trucks use an interstate to move goods and people





web content

- ❖ The documents of the Web, transported over the Internet, are called **Web pages**. Each page is a document or information resource created using the established standards and made viewable to a user



through a program called a browser. The information on the page is in HTML or XHTML format and can include text, graphics, sound, animation, video, and hypertext links to other Web pages



Web browser is a program on your computer

that displays a Web document by interpreting the HTML or XHTML format.



Web site is a collection of related Web pages. A Web site typically contains a **home page** (also called an index page), which is a default page that's displayed automatically when you enter the site



Extensible Markup Language (XML)

Finding Information on the Web.

Web Addresses:

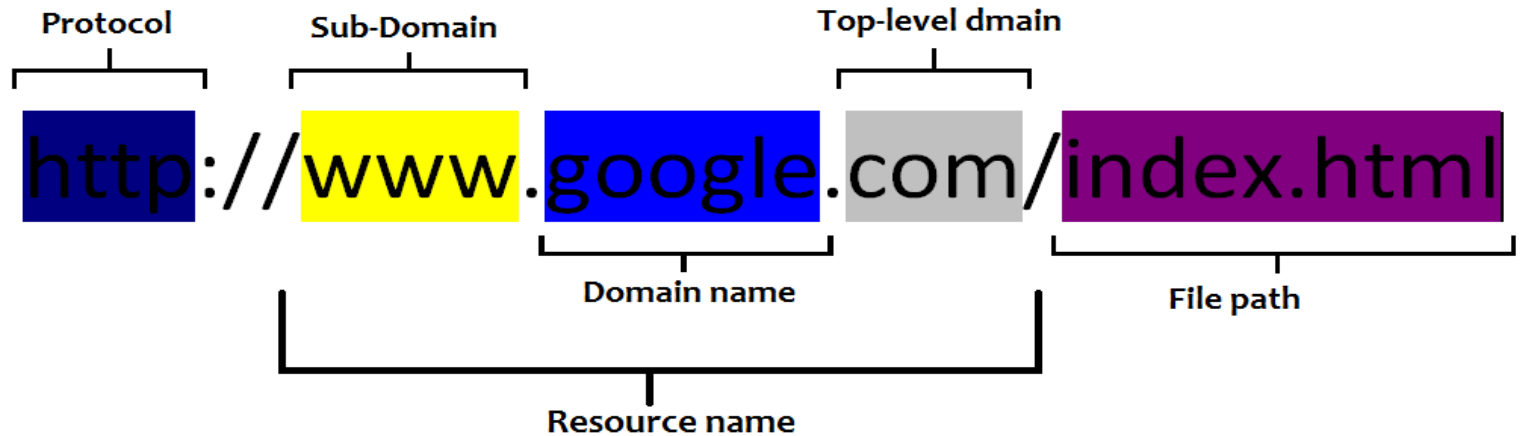
To locate a resource on the Web, you have to know how to find the Web server on which it resides. Every host, computer, server, device, & application that communicates over the Internet is assigned an **Internet Protocol address**

IP addresses are either static or dynamic. A static IP address never changes. It's the type used by most major Web sites. A dynamic IP address is automatically assigned to a computer when you log on to a network.

most of us find easier to use the **URL** than IP address A URL (**Uniform Resource Locator**) is a string of characters that precisely identifies an Internet resource's type and location.



URL has four parts



Protocol: The first part of a URL specifies the Hypertext Transfer Protocol (HTTP). The protocol name is followed by a colon and two forward slash marks (`//`). protocol designation when you're typing the URL of a Web page, because the browser assumes that you are browsing an unsecured hypertext Web page

Domain Name: The second part of a URL. specifies the Web site's domain name, which correlates to the Web server's IP address. The domain name has two parts: a **hostname** and a **top-level domain name**.

domain name registration Explains from which country such as uk.

top-level domain is the extension such as(`.com`) the type of group or institution to which the site belongs.



operator	example	result
and	Cd and DVD	Returns the same result as using the plus sign (+)
or	Cd or DVD	Web page that include either or both
not	CD AND DVD NOT EBAY	Returns the same results as using the minus sign (-)
Parenthesis ()	(CD OR MP3) AND Radiohead	pages that included any combination of CD, MP3, or RECORD and the word RADIOHEAD
Inclusion +	CD + Radiohead	contain all search terms listed
exclusion -	CD + Radiohead -Bay	contain all included search, but not the excluded term
Wildcards *	CD*	Web pages that include variations of the search term or additional words
Quotation " "	"Radiohead JustPush Play CD"	Web pages that contain the exact phrase in



Rules of Netiquette:

must be using the web it correctly and not causing harm to others courtesy is as important in the online world as it is in reality

- ❖ **Keep the message short.**
- ❖ **Avoid sarcasm or the use of phrases or words that could offend the reader.**
- ❖ **Read the message before sending or posting it, correcting spelling and grammar mistakes.**
- ❖ **Do not type in all capital letters as it means that you are yelling.**
- ❖ **Avoid sending a flame.**



Safe Surfing:

By taking some simple precautions you can make your Internet experience an enjoyable and safe activity



❖ Never give out identifying information.

❖ Never respond to suggestive messages.

❖ Never open e-mail from an unknown source.

❖ Never allow a child to make arrangements for a face-to-face meeting alone

❖ Remember individuals online may not be who they seem.

❖ Set reasonable rules and guidelines for computer use by children.

❖ Make using the computer a family activity





Additional online hazards to avoid include malware identity theft threats to you and your family .



Malware refers to software programs designed and written to damage a computer system. Examples of malware events range from deleting files on a hard drive You can keep your system free of malware by installing antivirus and antispymware utilities on your computer.



the risk of having your identity stolen.

Cyber stalkers, cyber bullies, spyware and undesirable Web sites.



Evaluating the Web Pages:

- ❖ if Is the author affiliated with a recognized institution, such as a university or a well-known company.
- ❖ author reference his or her sources? If so, do they appear to be from recognized and respected publications
- ❖ Is it written in a form and level that suits the target population
- ❖ What is the purpose of this page? Is the author trying to sell something or promote a biased idea?
- ❖ Do you see any misspellings or grammatical errors that would indicate a poor educational back ground?
- ❖ The information should be up to date.
- ❖ The interface
- ❖ The security
- ❖ Easy search





Internet Services:

the Internet service is best understood as a set of standards (protocols) that define how two types of programs a client, such as a Web browser that runs on the user's computer, and a server—can communicate with each other through the Internet. By using the service's protocols, the client requests information from a server program that is located on some other computer on the Internet.

The most popular Internet service **is e-mail (electronic mail)** is a software application that enables you to send and receive messages via networks. E-mail has become an indispensable tool for businesses and individuals due to its speed, convenience, and its ability to be saved and retrieved.

An e-mail attachment can be any type of computer file—document, photo, audio, or video—that is included with an e-mail message.

To send an e-mail, you need to know the recipient's **e-mail address**.

The components of an e-mail address are the **username** or another identifier, **the name of the domain** that is hosting the e-mail service, and the **top-level domain** that identifies the provider's type of institution.





Internet Relay Chat: (IRC): is an Internet service that enables you to join chat groups, called channel and participate in real-time, the conversations based on text .



Instant messaging (IM) systems alert you when a friend or business associate who is online (connected to the Internet). You can then contact this person and exchange messages and attachments, including multimedia files . **Is faster than email.**



Social Networking: Helping People Connect

is a way to build expanding online communities. On a social networking site like Facebook.



e-commerce & the type of it

A large portion of Internet traffic and Web sites are associated with e-commerce. is the use of networks or the Internet to carry out the business of any type.

When a business uses the Internet to provide another business with the materials, services, and/or supplies it needs to conduct its operations, they are engaging in **business-to-business (B2B) e-commerce**.

for example, companies in the healthcare, aerospace and defense, real estate, automotive, and construction industries, and familiar computer and software companies such as Dell IBM, and Microsoft. In addition, many traditional and online retailers have special B2B units.

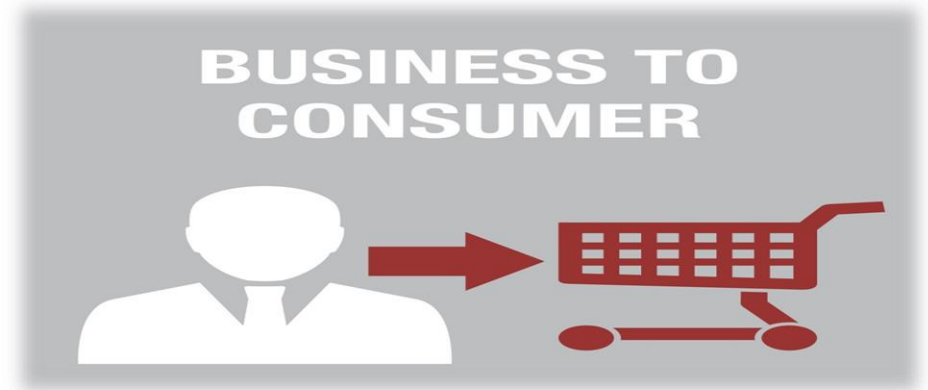
The online exchange or trade of goods, services, or information between individual consumers is **consumer-to-consumer (C2C) e-commerce**. Often C2C e-commerce involves the use of an intermediate site, such as the popular online auction destination eBay. eBay has more than 89.5 million active users.



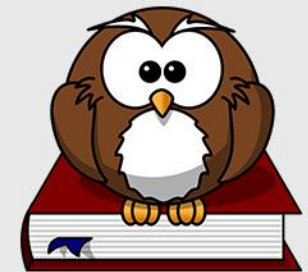


When a business uses the Internet to supply consumers with services, information, or products, they are engaging in **business-to-consumer (B2C) e-commerce**. B2C is essentially the same as shopping at a physical

store you have a need or want, and the online marketplace offers products and solutions. The primary difference is that B2C e-commerce is not place or time specific, which means that you don't have to be in any particular place at any particular time to participate (zara , Debenhams.)



VoIP (Voice over Internet Protocol) allows a user to speak to others from the Internet.



References

Catherine Laberta, July 29, 2013 computer are
your future chapter 6

[https://www.iconfinder.com/search/?q=application
&price=free](https://www.iconfinder.com/search/?q=application&price=free)

<https://goo.gl/eYDRx5>

[http://www.pmventure.com/microsoft-productivity
-tools.html](http://www.pmventure.com/microsoft-productivity-tools.html)

<http://slideplayer.com/slide/6958393/>





Thank you