

Network of computers based on the internet TCP/IP

Belongs to an organization, e.g. ICS faculty intranet



Accessible to members of organization that owns it.

May feature file sharing, its own internal web site, etc.

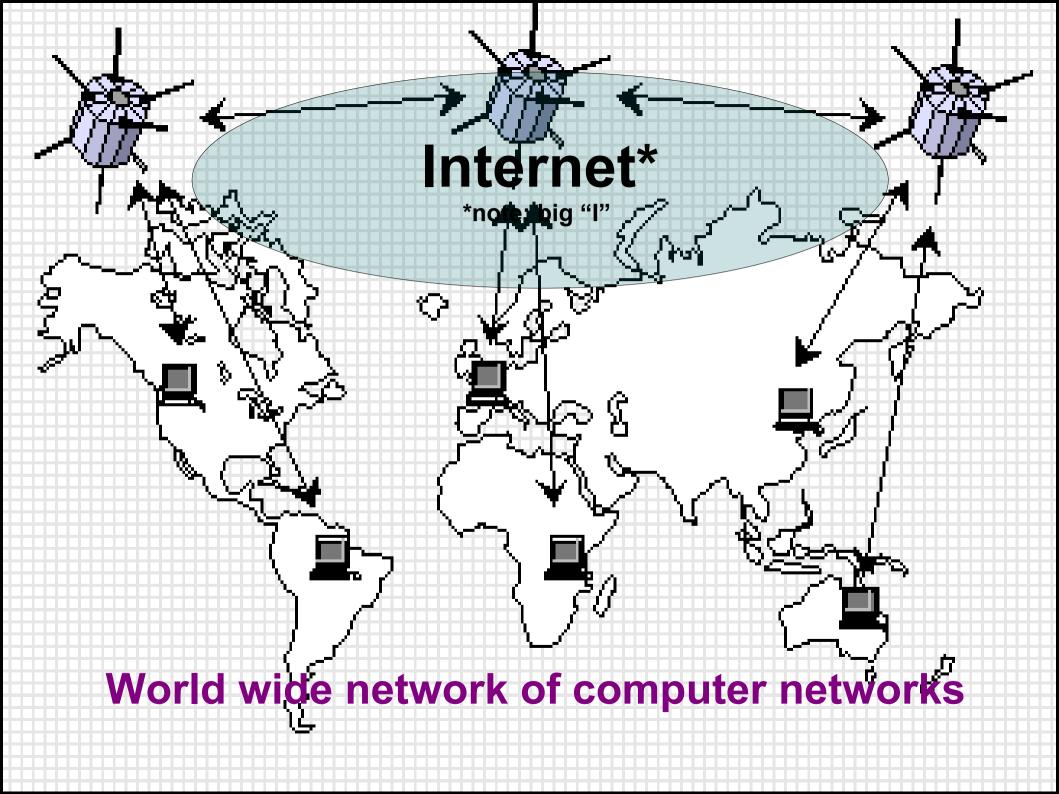
internet*

*note: small "i"



intranet

intranet



Was first known as ARPANET, as a military application (1969)

World communication achieved by using existing telecom infrastructures.

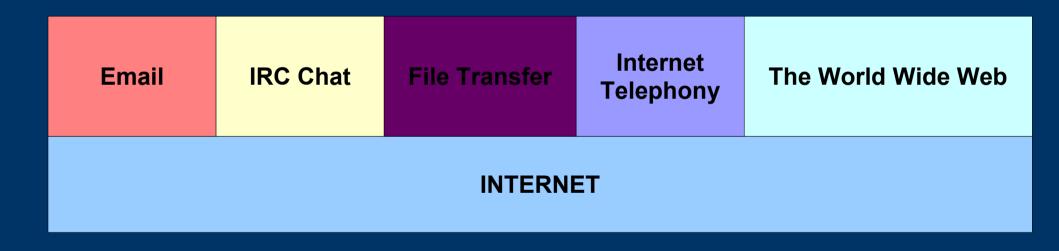
Internet* (The Net)

*note: big "l"

Network of networked computers based also on TCP/IP

Basically a network infrastructure where computers connected to it are nodes in the network.

The Internet as a Service Platform



*These are just some of the known/popular services/applications in the Internet

Internet ≠ WWW

* A great number of people think that when you say "the Web", you also mean "the Net"

The World Wide Web

INTERNET

* ...that's because it is the most popular application on the Net, much like a popular brand of a product that has become a household name.

World Wide Web, The Web, WWW What is it then? First ...

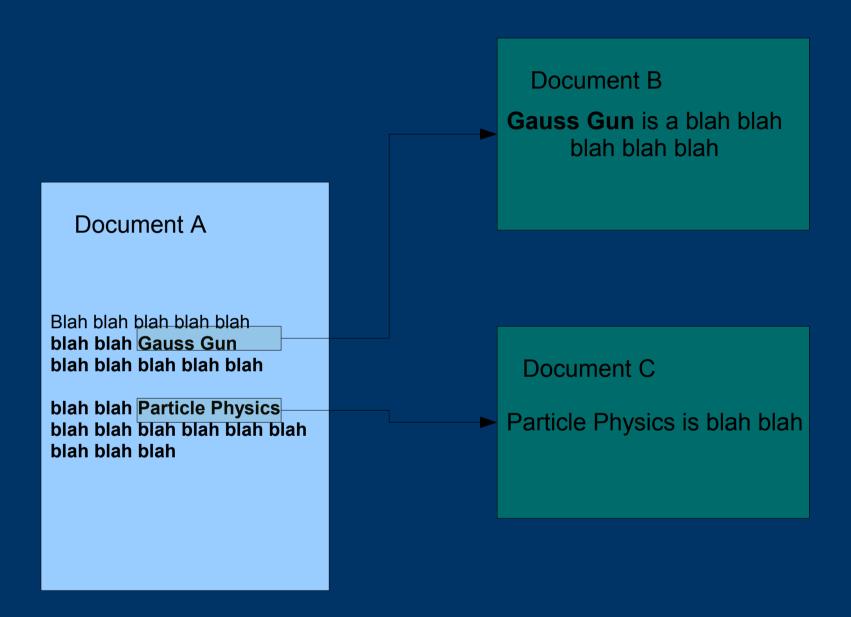
Hypertext

*A precursor 'technology'

Ted Nelson 1970

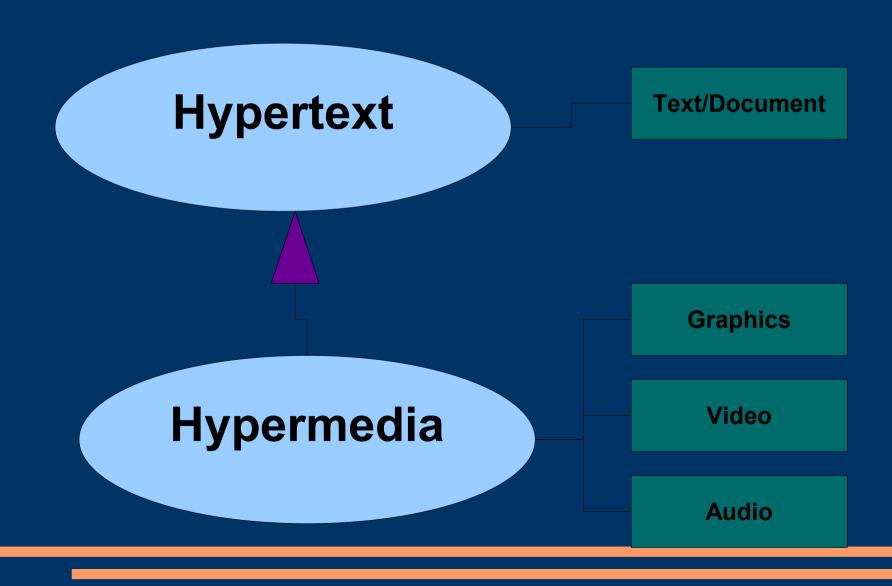
Terms in documents may be linked to other references/ documents that discuss them

The link on a term to its "references" is called a hyperlink.



Hypertext and hyperlink

World Wide Web, The Web, WWW What is it then? Second...



A popular implementation of hypertext.

Can be viewed as: a "network" of information

The Web

Can be viewed as: a database of disparate types of information

Beginnings...



Sir Timothy "Tim" John Berners Lee

- Developed/Invented the "World Wide Web" in 1989 while working at CERN
- Developed the first web browser and editor and web server.
- Founded The World Wide Web Consortium (W3C) in 1994 @MIT
- First Web page @ http://info.cern.ch

Before the Web: What is gopher?



This "was" the popular way of accessing information in the Internet before "The Web".

Distributed document search and retrieval network protocol for the Internet

Developed @ University of Minnesota, initially accessible for free then they made it <u>proprietary</u>, thus the shift to the "Web".

What is the World Wide Web Consortium (W3C)?

W3C is an international consortium of member organizations (e.g. Powerhouses like Google, IBM, Microsoft, CERN, etc.), staff and the public to develop and maintain guidelines and stantdards for the Web.

The W3C Goal:

To lead the World Wide Web to its full potential by developing protocols and guidelines that ensure long-term growth for the Web.

http://www.w3.org

The Web: at its Core

Resource Identification:
Uniform Resource
Identifier (URI)

Interaction:
Hypertext Transfer
Protocol (HTTP)

Format: HTML, XML, etc...

The Web

Terms, terms: Web Browser, Web Server

Reading Assignment: What is the Client-Server Model or Client-Server Architecture?

A Web Browser:

A "client application"/software used to access "resources" in the World Wide Web.

A WebServer or HTTP Server

The software (and/or the hardware or node) used to "host" and serve resources for the Web.

Terms, terms: Web Page, Web Site

A Web Page:

A resource/document that is written for the Web. It can contain text, images, video, audio, Flash animation, Java Applets, etc.

A Web Site: A collection of (related) web pages.

Terms, terms: Static, Dynamic WP

A "Static" Web Page:

A page that is served "as is" by a web server. E.g. When you write a document file and make it available in the Web, AND the web server just reads the content of the file and sends it to a requestor/client without special "programmatic routines" applied, then the page is Static.

A Dynamic Web Page:

A web resource/document that when accessed contains dynamically (most of the times programmatically) inserted elements.

The Basis of this Course