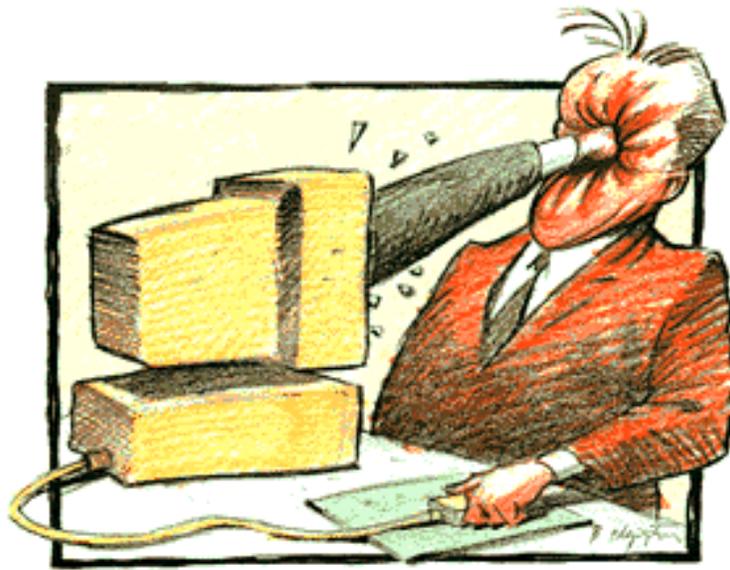[The University of North Carolina at Chapel Hill](#)
[The Fifth Estate Research Project](#)
This site last updated April 14, 1996

Internet 101
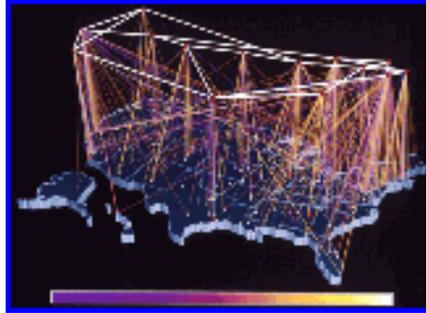

Click on the above graphic to see an excellent example of a commercial web page at
http://found.cs.nyu.edu/plympton/ The graphic has been reproduced from Bill Plympton's web-site only for academic discussion, evaluation, research and complies with the copyright law of the United States as defined and stipulated under Title 17 U. S. Code.

The exponential growth of the Internet

The following high-definition computer animation images educate general audiences about the exponential growth of networking in the US and world. A data visualization spanning a two-year period represents rapid traffic growth that exceeds ten's of billions of bytes per day. The following images have been reproduced from [Visualization Study of the NSFNET](#)by [Donna Cox and Robert Patterson (NCSA)](#)with the sole purpose of academic discussion, evaluation, research and in compliance with the copyright law of the United States as defined and stipulated under Title 17 U. S. Code.

September 1991

Inbound traffic measured in billions of bytes on the NSFNET T1 backbone.
The traffic volume range is depicted from purple (zero bytes) to white (100 billion bytes).
It represents data collected by Merit Network, Inc.

November 1993

Byte traffic into the ANS/NSFnet T3 backbone.
The colored lines represent virtual connections
from the network sites to the backbone.

December 1994

Byte traffic into the ANS/NSFnet T3 backbone.
December 1994 represents the last heavy
traffic month prior to the official NSFNET
decommisioning in **March 1995.**

Please Note: The following images (including pictures, trademarks, logos, graphics etc.) relating to Internet pioneers (from Bush to the HotJava team) have been reproduced from their respective home pages (or from related Web pages) with the sole purpose of academic use (including classroom discussion, evaluation, research). In compliance with the copyright law of the United States as defined and stipulated under Title 17 U. S. Code, each image has been linked to their respective sources to serve as hyperlinked footnotes. Change of site notifications or objections, if any, to this format and, or arrangement may please be communicated to:Dr. Deb Aikat

Linking documents: Hypertext

Vannevar Bush, science adviser to President Roosevelt, described the Memex system as a way to fight information overload.
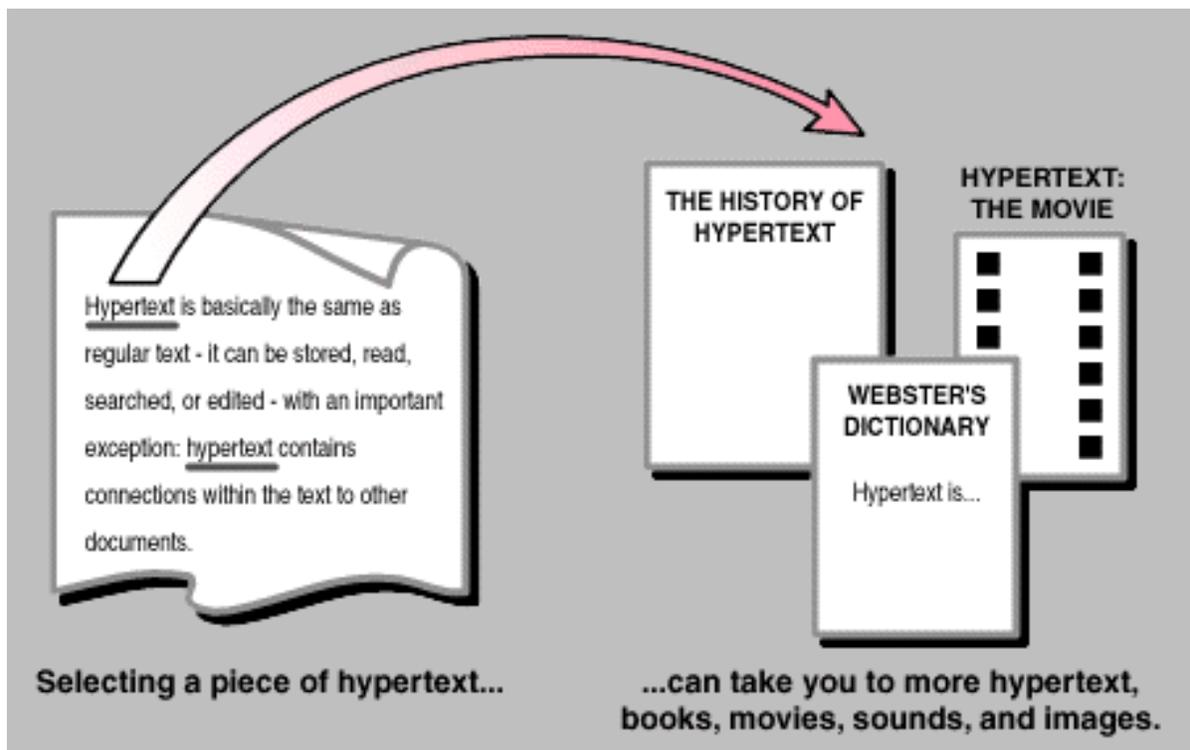

Vannevar Bush

Other Bush sites: http://www.cs.brown.edu/research/graphics/html/info/vannevar_bush.html

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The Concept of Hypertext

What is hypertext?

Selecting a piece of hypertext...

...can take you to more hypertext, books, movies, sounds, and images.
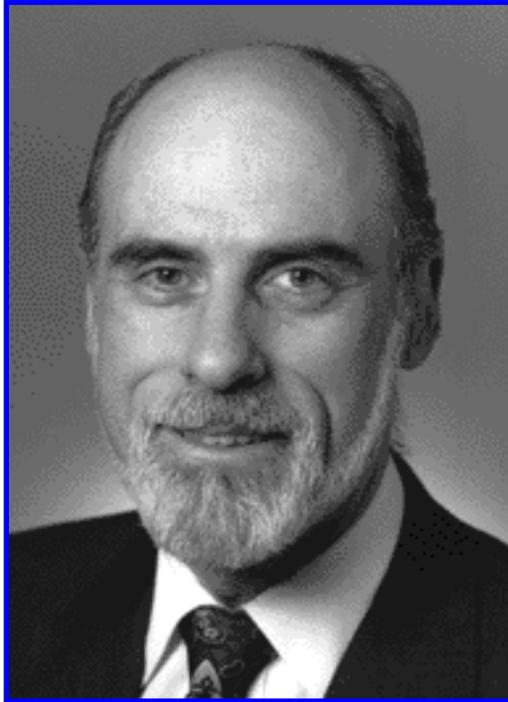

Ted H. Nelson

Ted H. Nelson, (left) is the inventor of many common ideas related to hypertext, including the words "hypertext" and "hypermedia." Nelson defined hypertext as "a body of written or pictorial material interconnected in [such] a complex way that it could not be conveniently represented on paper." The principle of hypertext is to associate information through "links" into a coherent organization. Nelson has been designing computer text systems on his own since 1960, and may thus be considered one of the inventors of word processing. Nelson book Literary Machines 91.1 reports on the Xanadu Hypertext System, a scheme for instantaneous publishing and archiving with broad implications designed for "children, researcher and heads of state."

Linking computers: The Internet

- [Vinton G. Cerf](), "the father of the Internet."

Vinton G. Cerf

World Wide Web

- ## **CERN**

The birthplace of the Web:

- Tim Berners-Lee, creator of the World Wide Web

Tim Berners-Lee

http://www.decus.org/decus/people/berners-lee.html

- Tim Berners-Lee's vita: http://www.infobahn.com.tw/web/berners.html

The development of the World Wide Web was begun in 1989 by Tim Berners-Lee and his colleagues at CERN, an international scientific organization based in Geneva, Switzerland. They created a protocol, HyperText Transfer Protocol (HTTP), which standardized communication between servers and clients. Their text-based Web browser was made available for general release in January 1992.
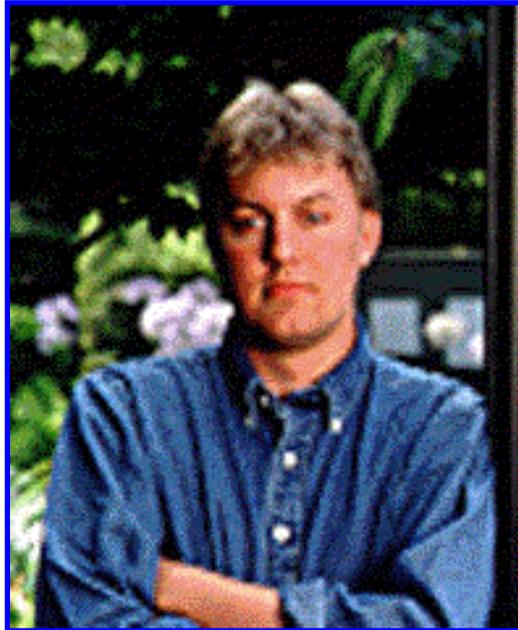

The World Wide Web gained rapid acceptance with the creation of a Web browser called Mosaic, which was developed in the United States by Marc Andreessen and others at the National Center for Supercomputing Applications at the University of Illinois and was released in September 1993.

Mosaic allowed people using the Web to use the same sort of "point-and-click" graphical manipulations that had been available in personal computers for some years.

In April 1994 Andreessen cofounded Netscape Communications Corporation, whose Netscape Navigator became the dominant Web browser soon after its release in December 1994. By the mid-1990s the World Wide Web had millions of active users.

- Marc Andreessen, creator of Mosaic at NCSA and Netscape

Marc Andreessen

- Marc's UG Resume: http://www.ncsa.uiuc.edu/SDG/Experimental/demoweb/old/marc-info.html
- Marc's early days: http://ezinfo.ucs.indiana.edu/~sheehan/marca.html
- On to Netscape,with a new executive team and lots of conference presentations:
  - http://www.informix.com/informix/usrconf/iwuc95/4.htm
  - http://www.decus.org/decus/people/andreessen.html

- Netscape Communications Corporation was founded in April 1994 by Dr. James H. Clark, founder of Silicon Graphics, a Fortune 500 computer systems company, and Marc Andreessen, creator of the NCSA Mosaic software for the Internet.

Jim Clark

Jim Clark is Chairman of Netscape Communications Corporation.

In 1995, the most dramatic initial public offering (IPO) was Netscape Communications, a designer of Internet-browsing computer software, which went public in August at $28 per share and rapidly climbed to $171, or 20 times 1997's projected revenues. The average gain for 1995's IPOs was 37.4%. Netscape gained 500%.

What is Java?

- **Java is a simple, object-oriented, distributed, interpreted, robust, secure, architecture-neutral, portable, high-performance, multithreaded, dynamic, buzzword-compliant, general-purpose programming language. Java supports programming for the**

Internet in the form of platform-independent Java applets

.

James Gosling

[James Gosling](#), of Sun Microsystems developed Java.

Back: Frank Yellin, Chuck McManis, Chris Warth, Herb Jellinek, Tim Lindholm, Arthur van Hoff, Michele Huff, Jonathan Payne. **Center:** Richard Tuck, Patrick Chan, Erik Gilbert, Eugene Kuerner, Mark Scott Johnson. **Front:** Lisa Friendly, Sami Shaio, Bob Weisblatt, James Gosling, Kim Polese, Kathy Walrath. **Not Shown:** Elizabeth Del Ben, Jim Graham, Ian Halifax, Mark Opperman, Steve Zellers, Headley Williamson, Carla Schroer, Tom Ball, Pavani Diwanji, David Connelly, Mary Campione.

- [Web TV](#)

See the [Principal Figures in the Development of the Internet and the World Wide Web](#) for a complete list of all the pioneers.

Some Web Pages

- [Wal-Mart](#)
- [The Monster Board](#)
- [Inmate Classified1](#)
- [Inmate Classified2](#)
- [Ethical Issues](#)
- [Pornography on the Web](#)

- [Fundcraft cookbook](#)
- [Heaven's Gate Mirror Sites](#)

Useful Web pages

- [IRS Web Page](#)
- [WWW Search 101 Cheat Sheet](#)
- [E-Stamp SOHO (small office, home office)](#)

Student Initiatives

- [John Caserta's homepage](#)
- [The Fifth Estate](#)

Cool Sites

- [Interesting Web Sites](#)
- [Online Research Resources](#)

  Score: 8
  > What we liked:
  - Lots of links and variety
  - Graphics
  - Organized layout
  - Portfolio

[Home Page for Amy Garawitz](#)
Score: 4.5

> What we disliked:
- Link to [Fabio](#) -'nuff said
- Hard to read text because of background
- Pretty narrow/one-dimensional

[Course Resources](#)

[The Relocation Salary Calculator](#)
Compare salaries between origin city and destination city

[CareerPath.com](#)

Search Newspaper Employment Ads From Six Major Cities

[Chicago Tribune](#)

Help wanted ads in all categories from recent issues of the Chicago Tribune

[CareerMosaic](#)

Thousands of up-to-date opportunities from hundreds of employers. If you would also like to make your resume accessible to interested employers from all corners of the globe, swing into ResumeCM and post your resume on-line.

[Born on the Web](#)

[Course Schedule of Jomc 50](#)

[Animation House](#)

Score: 9.5

What we liked:
- Cool pictures
- Easy access to other sites
- Interesting graphics
- Very attention-getting
- Accurate searches within site

[Bill Plympton](#)

Score: 9.5

What we liked:
- Cool pics
- Fun/colorful graphics
- Easy searches within sites
- Fun to look at

The buttons provide link for downloading video clips from [Visualization Study of the NSFNET](#) by [Donna Cox and Robert Patterson (NCSA)](#).

[QT Movie: Visualization Study of the NSFNET](#)
[by Cox, Donna; Patterson, Robert; NCSA](#)

[MPEG Movie Visualization Study of the NSFNET](#)
[by Cox, Donna; Patterson, Robert; NCSA](#)

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ar=center>

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