

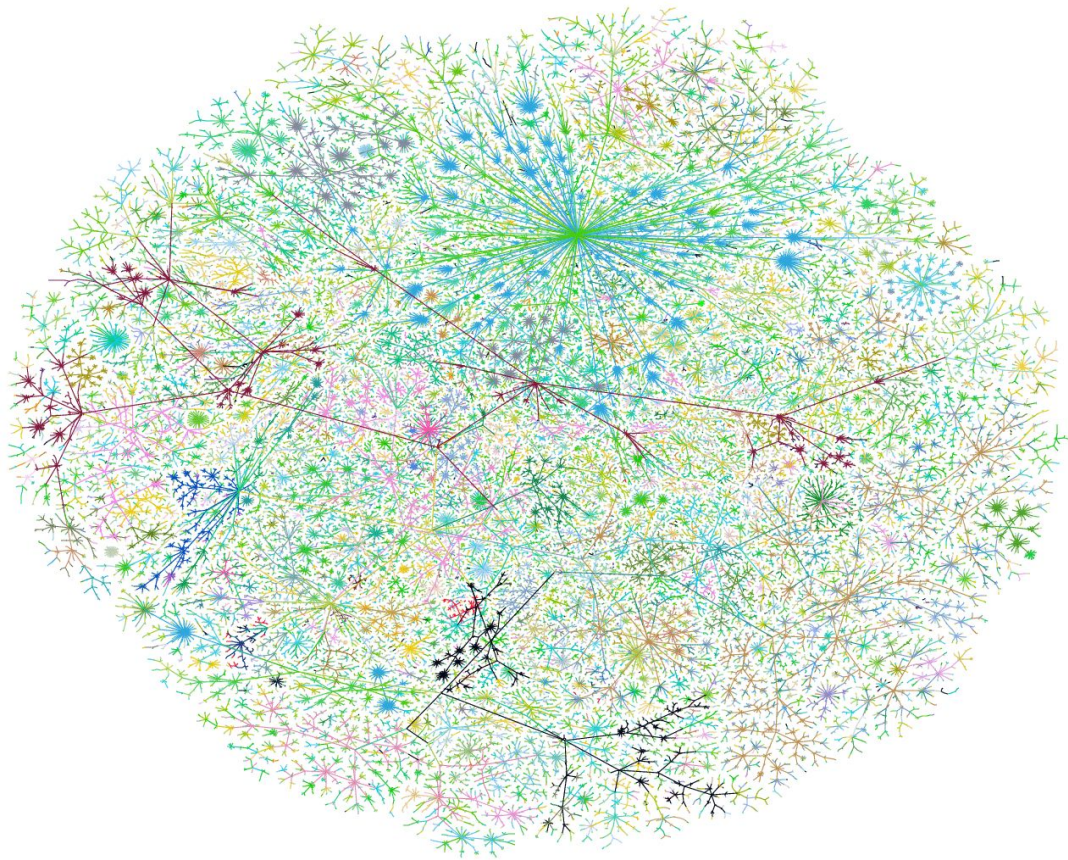
History of the Web



A short historical journey

Internet?

A Network of Networks



Internet - what is it?

- uses the “Internet Protocol Suite” TCP / IP
- carries

hypertext documents (HTML)

email

Usenet newsgroups

peer-to-peer networks (filesharing)

voip

video

- basis for the HTTP protocol

Internet becomes common

- origins date back to the 1960's where the USA, GB and FR wanted a “*robust, fault-tolerant communication via computer networks*”

USA: ARPANET 1969

GB: NPL network 1970

FR: CYCLADES 1970

packet switching and packet switching networks were born

- since 1980's used by academia and military
- became widespread in 80's / 90's because of faster data delivery, cheaper computers, HTTP and Webrowsers

Internet regulations

- there is no central authority
- only two definitions are maintained by the “*Internet Corporation for Assigned Names and Numbers*” (ICANN):

Internet Protocol address (IP address)

Domain Name System (DNS)

- standardization is done by the “*Internet Engineering Task Force*” (IETF)

Internet communication is new? No!

December 9, 1968

**Augmentation Research Center at Stanford
Research Institute Menlo Park, CA**

demonstration of the online system NLS



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WWW

World Wide Web

Sir Timothy John Berners-Lee

born 8 June 1955

- founder of the WWW
- director of the
World Wide Web
Consortium (W3C)



Why?

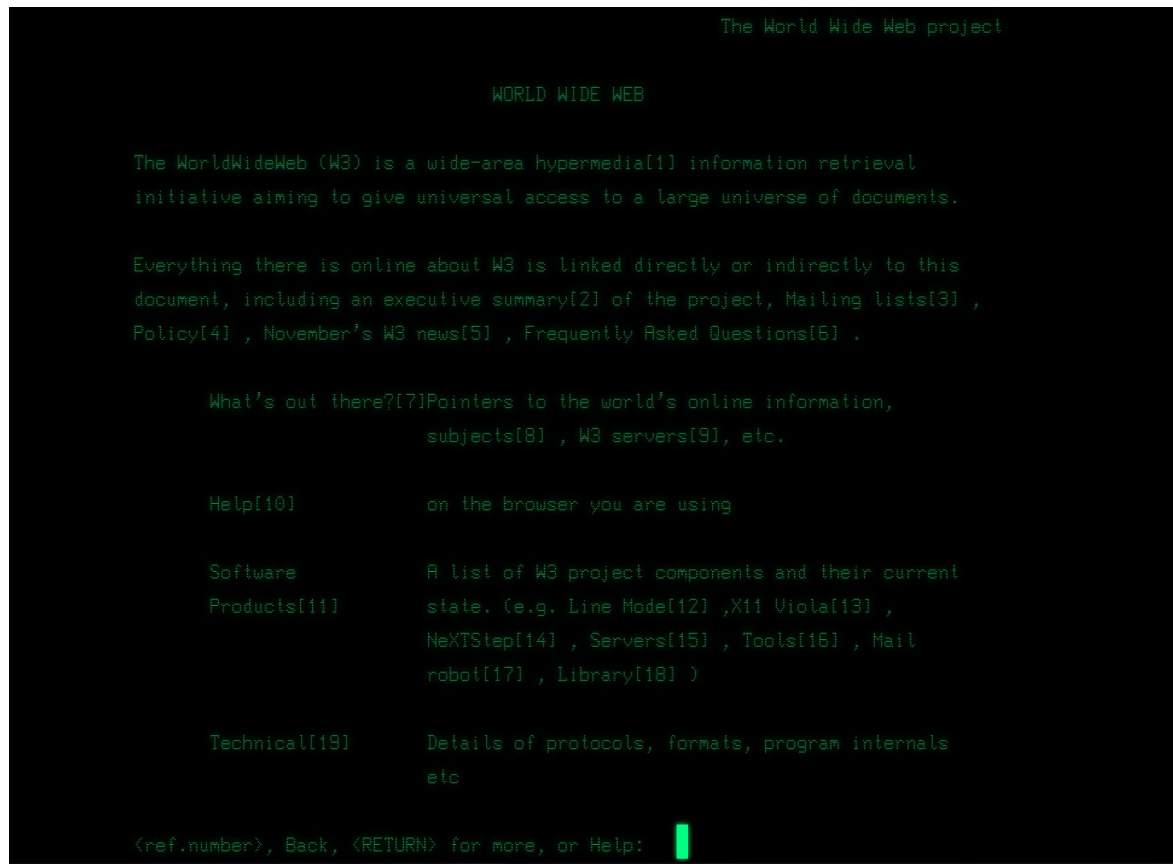
need for

“a more elaborate information management system based on links embedded in readable text”

How?

- Berners Lee worked at CERN and made a proposal for a system called “Mesh”, based on ENRIQUE, a database and software project he built in 1980
- on 12 November 1990 followed a formal proposal to build a "Hypertext project" called "WorldWideWeb" (one word) as a "web" of "hypertext documents" to be viewed by "browsers" using a client–server architecture
- he already worked on HTML and HTTP at this time
- first webserver: Berners Lee’s *“NextComputer”*
- he wrote the first WebBrowser
- the first website was published 20 December 1990

The first Website



Line Mode Browser Simulator

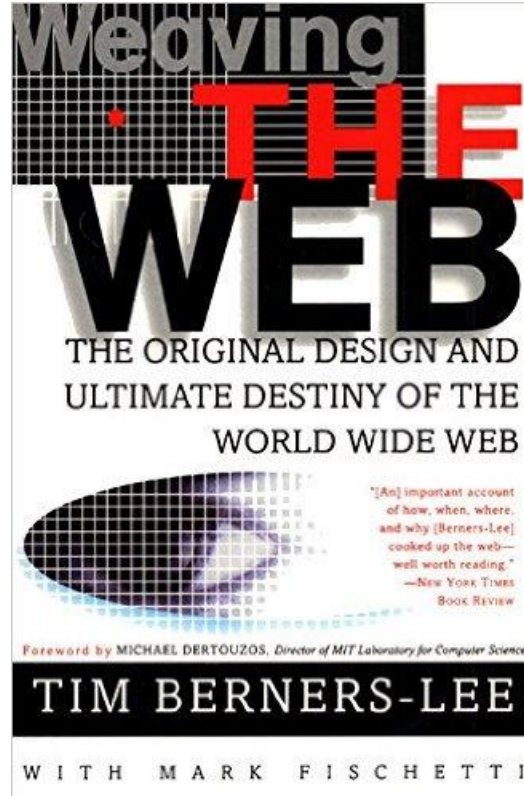
<http://line-mode.cern.ch/www/hypertext/WWW/TheProject.html>

What?

Tim Berners Lee “married” Hypertext to the Internet by developing three essential technologies:

- a system of globally unique identifiers for resources on the Web and elsewhere (UDI, URL, URI)
- the publishing language HyperText Markup Language (HTML)
- the Hypertext Transfer Protocol (HTTP)

Read “Weaving the Web”



“A Little History of the World Wide Web”

<https://www.w3.org/History.html>

and check

<http://webfoundation.org/>

Evolution (www.evolutionoftheweb.com)

- 1991 - HTTP
- 1993 - HTML 1
- 1993 - Mosaic Browser
- 1994 - Netscape Navigator, Amazon, Yahoo, GeoCities
- 1995 - SSL, Java, Opera, JavaScript, IE, AltaVista, Wiki, Ebay, Lycos, AOL
- 1996 - XML, Flash, CSS, InternetArchive, Hotmail
- 1997 - GoDaddy, Netflix
- 1998 - Google, PayPal
- 1999 - AJAX, RSS, Napster, SourceForge
- 2000 - Blogger, Tripadvisor

Evolution continued

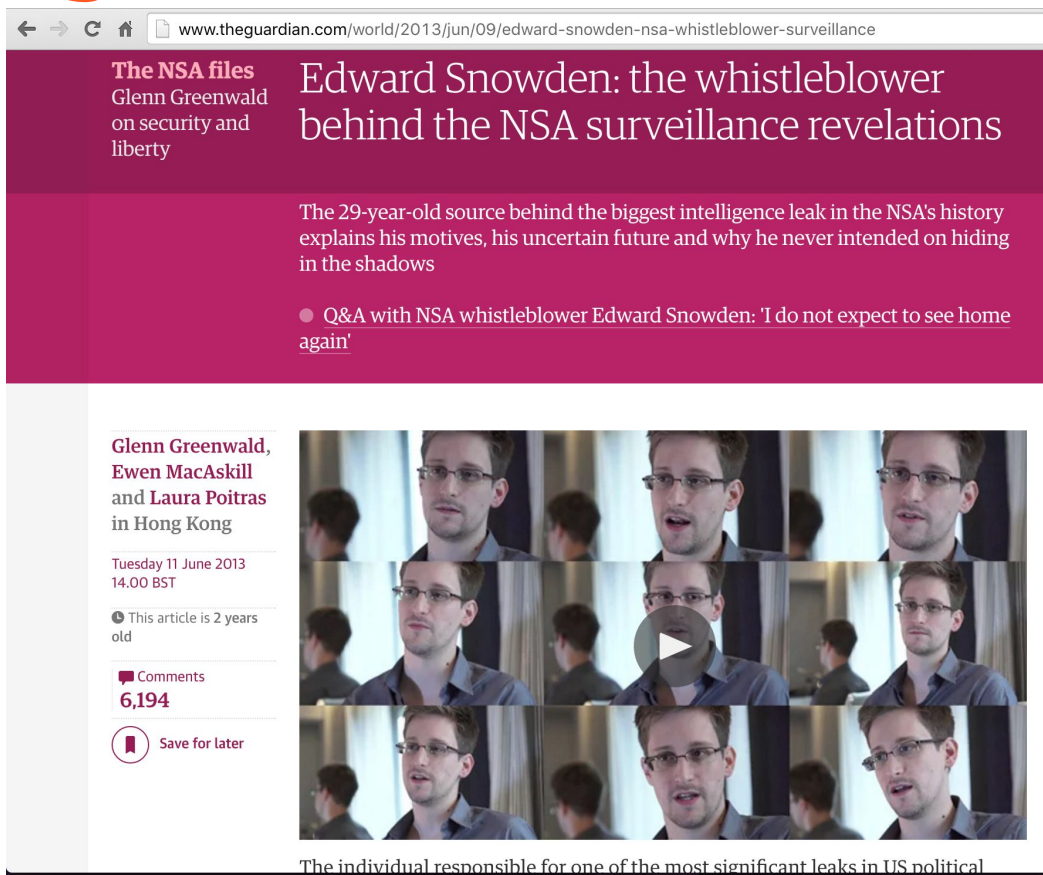
- 2001 - SVG, Wikipedia, Meetup
- 2002 - Tor, LinkedIn, Last.fm, Tinyurl
- 2003 - Safari, iTunes, Skype, MySpace, 4chan, PirateBay
- 2004 - Firefox, Canvas, GMail, OpenStreetMap, Facebook, Flickr
- 2005 - Youtube, OpenID, Reddit
- 2006 - XMLHttpRequest2, Twitter, WikiLeaks, Khan Academy
- 2007 - Tumblr, Soundcloud, Kindle
- 2008 - Chrome, HTML5, Github, Spotify, Amazon EC2, Dropbox
- 2009 - CSS3, Whatsapp, Google Docs, Bitcoin, Bing
- 2010 - Diaspora, Instagram, Pinterest

Evolution continued

- 2011 - Google+, Snapchat,
- 2012 - Outlook.com, Coursera
- 2013 - Mega

and ...

The Change!



Thankx!