

# **ACCESSIBILITY & WEB HISTORY**

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"The power of the Web is in its universality. Access by everyone regardless of disability is an essential aspect."

Tim Berners-Lee, W3C Director and  
inventor of the World Wide Web (1997)



# What is accessibility?

Giving users with disabilities or impairments **alternative ways to access “products”**

- These products can be web pages or other types of digital documents
- Educational, governments, some business clients may require it



In some countries it is also mandated **by law**

# What is accessibility?

When you focus on accessibility you tend to build **better stuff**

Web applications built considering the needs of

- **blind** or **visually impaired** users are easier to use in external environments with a lot of light
- **deaf** or **hard of hearing** users can benefit those who do not know well the language or in noisy environments

# WEB HISTORY

# 1989, at CERN



CERN DD/OC

Tim Berners-Lee, CERN/DD

Information Management: A Proposal

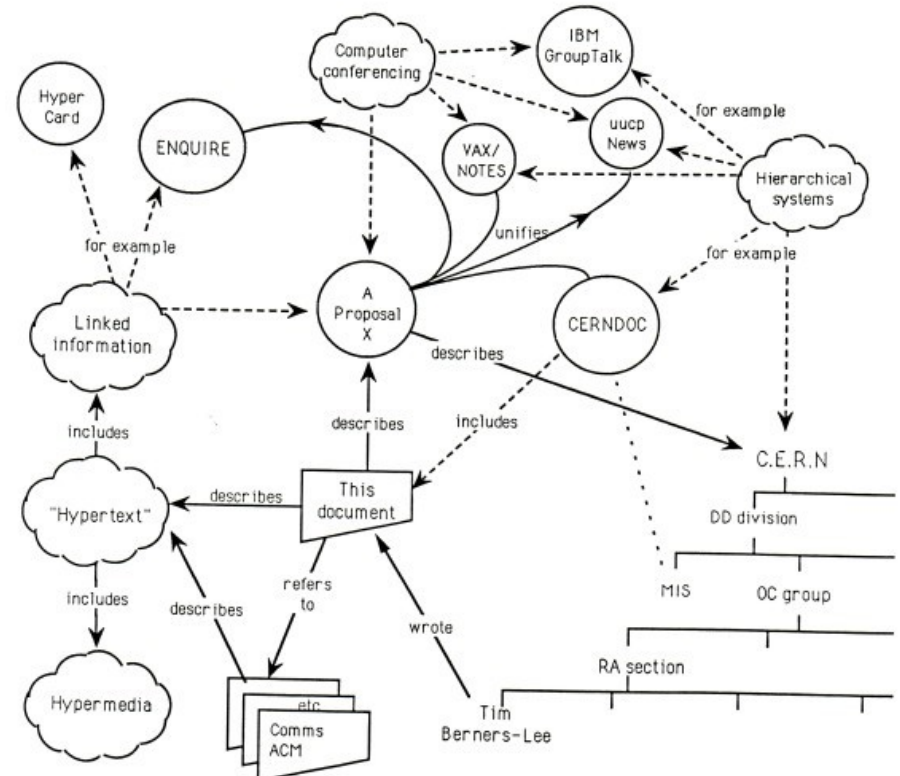
March 1989

## Information Management: A Proposal

### Abstract

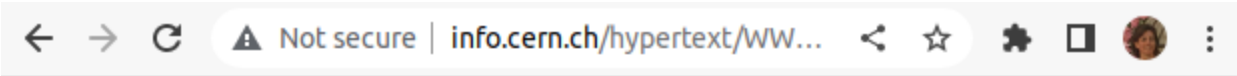
This proposal concerns the management of general information about accelerators and experiments at CERN. It discusses the problems of loss of information about complex evolving systems and derives a solution based on a distributed hypertext system.

**Keywords:** Hypertext, Computer conferencing, Document retrieval, Information management, Project control



Source: <https://home.cern/science/computing/birth-web/short-history-web>

# 1<sup>st</sup> web page, textual browsers



## World Wide Web

The WorldWideWeb (W3) is a wide-area [hypermedia](#) information retrieval initiative aiming to give universal access to a large universe of documents.

Everything there is online about W3 is linked directly or indirectly to this document, including an [executive summary](#) of the project, [Mailing lists](#), [Policy](#), November's [W3 news](#), [Frequently Asked Questions](#).

### [What's out there?](#)

Pointers to the world's online information, [subjects](#), [W3 servers](#), etc.

### [Help](#)

on the browser you are using

### [Software Products](#)

A list of W3 project components and their current state. (e.g. [Line Mode](#), X11 [Viola](#), [NeXTStep](#), [Servers](#), [Tools](#), [Mail robot](#), [Library](#).)

### [Technical](#)

Details of protocols, formats, program internals etc

### [Bibliography](#)

Paper documentation on W3 and references.

### [People](#)

A list of some people involved in the project.

### [History](#)

A summary of the history of the project.

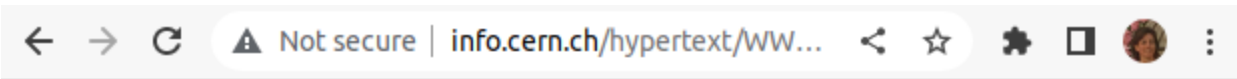
### [How can I help?](#)

If you would like to support the web..

### [Getting code](#)

Getting the code by [anonymous FTP](#), etc.

# 1<sup>st</sup> web page, textual browsers



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[NeXTStep](#) , [Servers](#) , [Tools](#) , [Mail](#)

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### [Getting code](#)

Getting the code by [anonymous F](#)

Internet Gopher Information Client v1.12

Root gopher server: gopher.tc.umn.edu

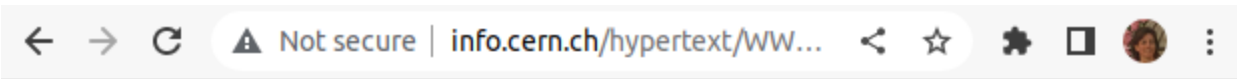
- > 1. Information About Gopher/
- 2. Computer Information/
- 3. Internet file server (ftp) sites/
- 4. Fun & Games/
- 5. Libraries/
- 6. Mailing Lists/
- 7. UofM Campus Information/
- 8. News/
- 9. Other Gopher and Information Servers/
- 10. Phone Books/
- 11. Search lots of places at the U of M <?>

Press ? for Help, q to Quit, u to go up a menu

Page:1/1



# 1<sup>st</sup> web page, textual browsers



## World Wide Web

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Everything there is online about W3 is listed in an [executive summary](#) of the project, [Mail](#), [Asked Questions](#).

### [What's out there?](#)

Pointers to the world's online information.

### [Help](#)

Information on the browser you are using.

### [Software Products](#)

A list of W3 project components and other software.

[NeXTStep](#), [Servers](#), [Tools](#), [Mail](#).

### [Technical](#)

Details of protocols, formats, programs, etc.

### [Bibliography](#)

Paper documentation on W3 and related topics.

### [People](#)

A list of some people involved in the project.

### [History](#)

A summary of the history of the project.

### [How can I help?](#)

If you would like to support the project.

### [Getting code](#)

Getting the code by [anonymous FTP](#), etc.

### Lynx Information

#### Lynx

Lynx is a text browser for the World Wide Web. Lynx 2.8.8 runs on Un\*x, MacOS, VMS, Windows 95/98/NT, DOS386+ (but not 3.1, 3.11), as well as OS/2 EMX. The current developmental version (2.8.9) is also available for testing.

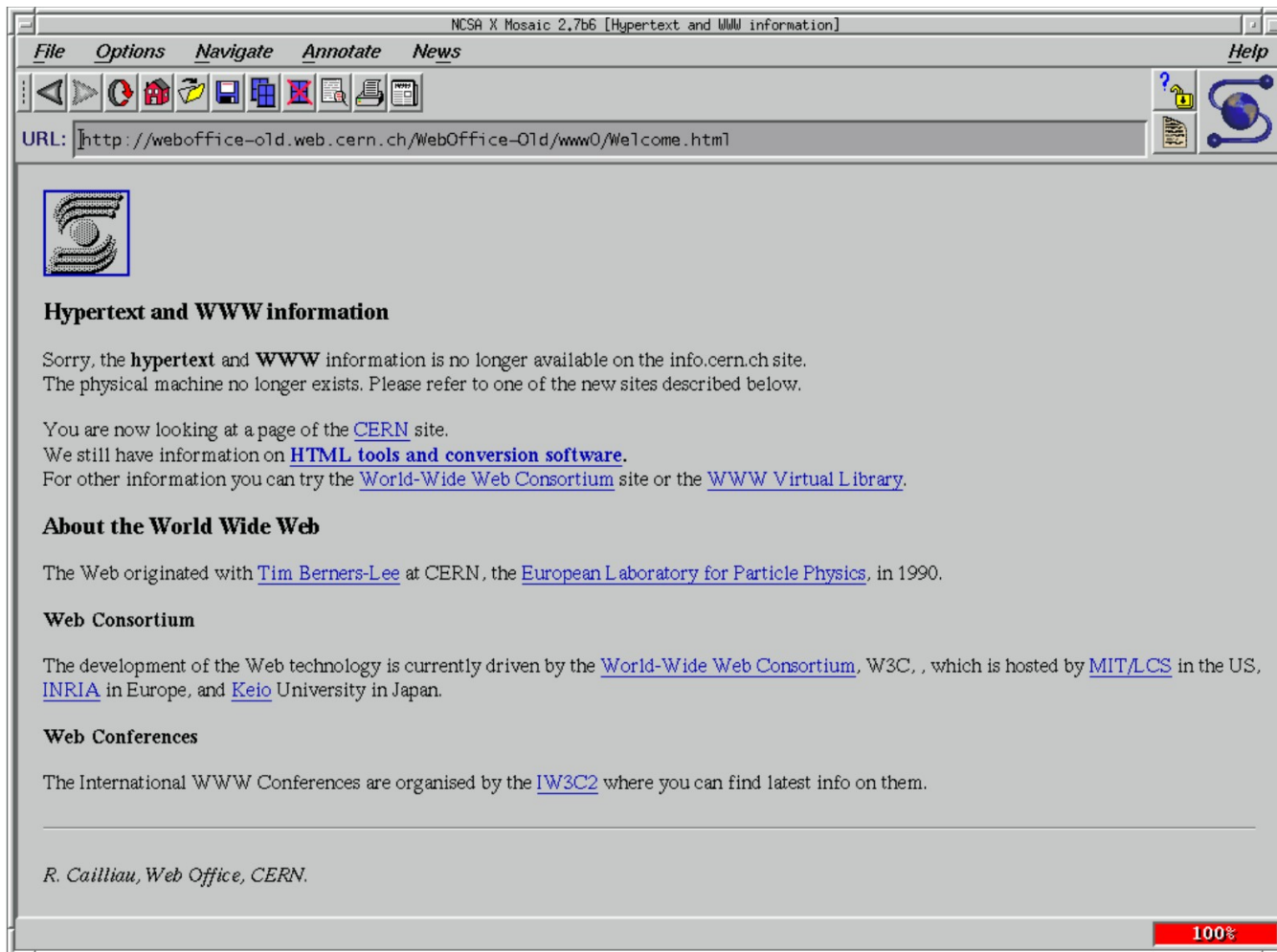
- \* Many user questions are answered in the online help provided with Lynx. Press the '?' key to find this help.
- \* If you are encountering difficulty with Lynx you may write to [lynx-dev@nongnu.org](mailto:lynx-dev@nongnu.org). Be as detailed as you can about the URL where you were on the Web when you had trouble, what you did, what Lynx version you have (try '=' key), and what OS you have. If you are using an older version, you may well need to upgrade.

Maintained by [web@lynx.browser.org](mailto:web@lynx.browser.org).

<http://lynx.invisible-island.net/release/>

# 1993, at NCSA

The National Center for Supercomputing Applications (University of Illinois) released a first version of its **Mosaic** browser



# 1994, first conference on WWW

A screenshot of a web browser displaying the homepage for the First International Conference on the World-Wide Web. The browser's address bar shows the URL 'thewebconf.org/www1/'. The page features a large, stylized 'W' logo composed of green and white 3D blocks on a yellow background. Below the logo, the title 'First International Conference on the World-Wide Web' is written in a large, bold, black serif font. Underneath the title, the dates and location 'May 25-26-27 1994, CERN, Geneva (Switzerland)' are listed. A bulleted list of links follows, including 'The Conference on the MBONE', 'For the volunteers', 'Attention All Attenders', 'Welcome reception & Registration', 'Holiday', 'Hotels', and 'Organisation'. A bold section header 'Attention All Attenders: read notices lower down.' is present, followed by a paragraph about relaying events on the MBONE and California SIGWEB meeting. Another paragraph reminds attendees to vote for the 'Awards!'. A final bold section header 'Welcome Reception and Registration' is followed by details about a welcome reception on Tuesday 24 May and the registration office hours.

## First International Conference on the World-Wide Web

May 25-26-27 1994, CERN, Geneva (Switzerland)

- [The Conference on the MBONE](#)
- [For the volunteers](#)
- [Attention All Attenders](#)
- [Welcome reception & Registration](#)
- [Holiday](#)
- [Hotels](#)
- [Organisation](#)

### **Attention All Attenders: read notices lower down.**

We will relay some of the events on the MBONE, and also to the California SIGWEB meeting, watch this document!

You should not forget to cast your vote for the [Awards!](#)

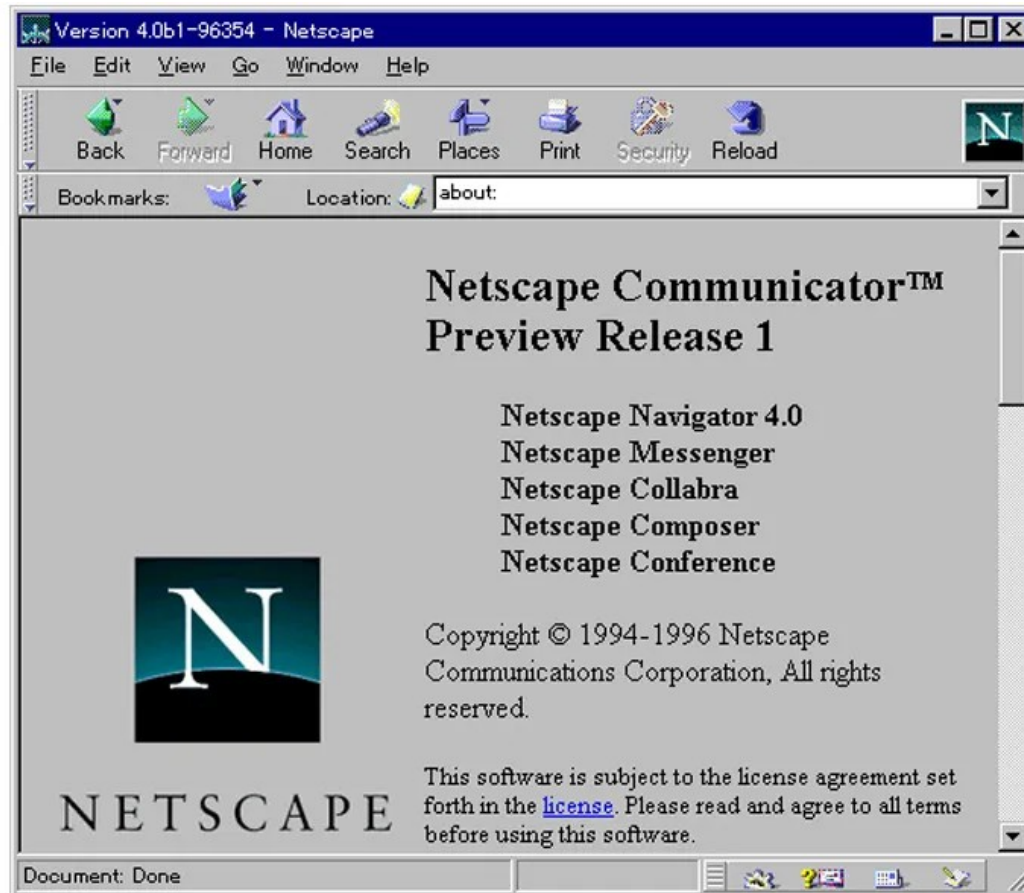
### **Welcome Reception and Registration**

There will be a welcome reception on Tuesday 24 May, from 18:00 to 22:00 in the restaurant of CERN.

The registration office will be open from 18:00 to 21:00 in the same room. (see above on how to get there)

# 1994, at Netscape Communications

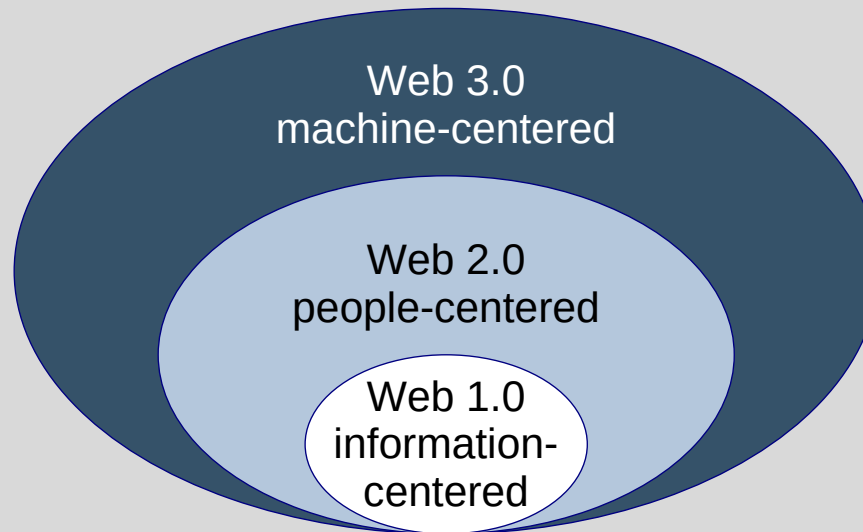
Netscape announced in its first press release (13/10/1994) that it would make Navigator available without charge to all non-commercial users



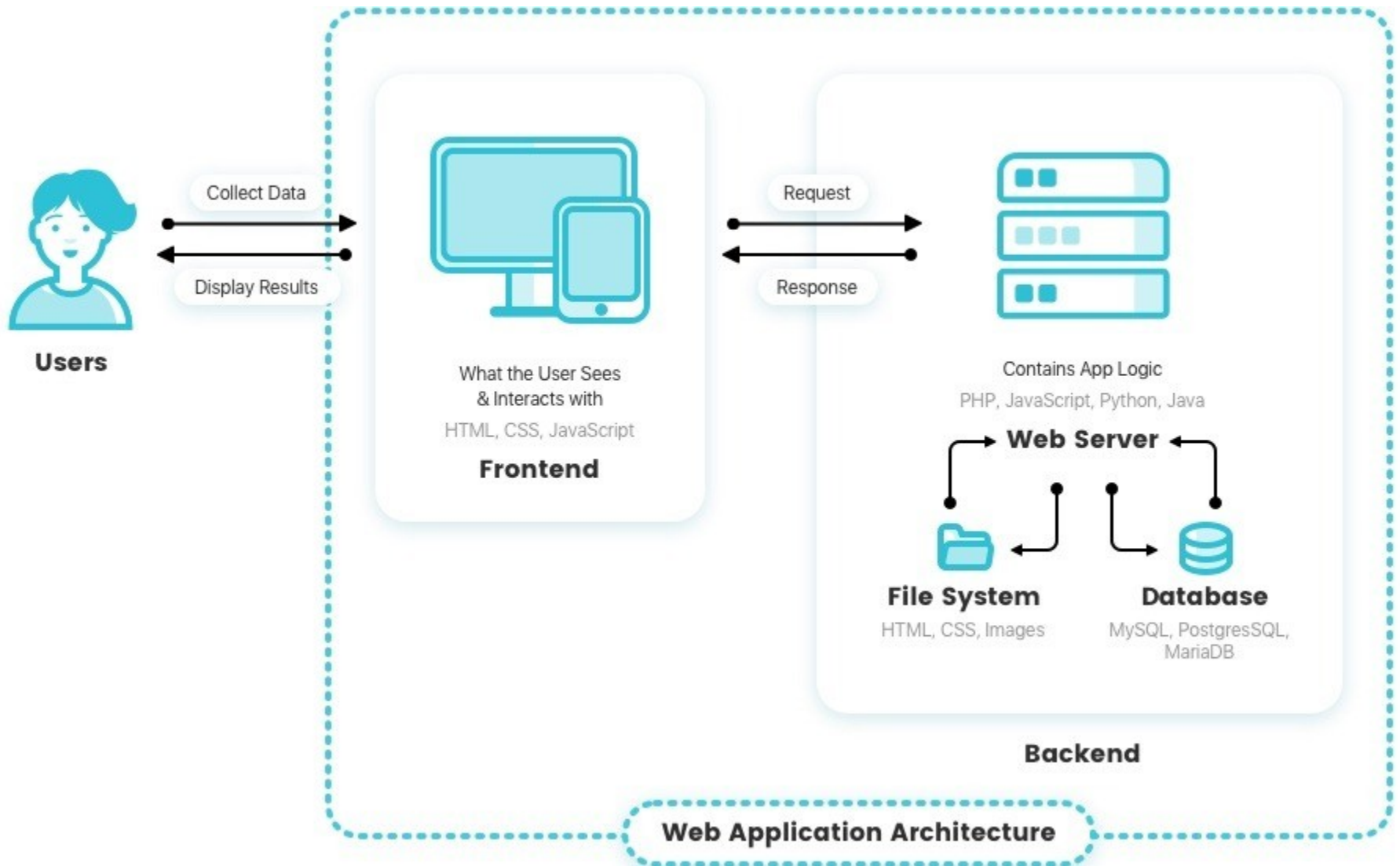
# Thanks to user-friendly browsers



# Web 1.0, Web 2.0, Web 3.0







# 1991 – 2004, Web 1.0

First stage of the WWW evolution

Information-centered

- personal web pages
- no advertisements on websites
- “controlled” content



# 1991 – 2004, Web 1.0

## Web 1.0 site design

- **static pages**
- content served from the **server's file system**
- pages built using Server Side Includes (SSI) or Common Gateway Interface (CGI)
- **Frames** and **Tables** used to position and align the elements on pages

# 2004 – today, Web 2.0

**User-generated content**, usability, interoperability for the users

Called the **participative social web**

Not real modification to any technical specification, but **changes in the way web pages are designed and used**

**Enhanced front-end** thanks to web browser technologies such as AJAX and JavaScript frameworks

# 2004 – today, Web 2.0

Online tools and platforms where people share their perspectives, opinions, thoughts, and experiences

- Podcasting
- Blogging
- Tagging
- Social networking
- Social media
- Web content voting
- Marketplace (eBay, Amazon, Uber,...)
- Complex video creation (TikTok)

# 2004 – today, Web 2.0



# 2004 – today, Web 2.0

facebook

Connect with friends and the world around you on Facebook.

Log In

[Forgot password?](#)

Create new account

Create a Page for a celebrity, brand or business.

2004

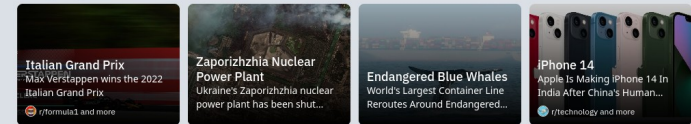
reddit

Search Reddit

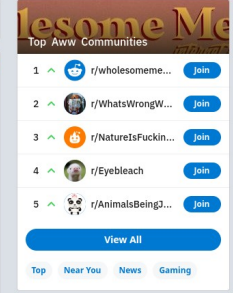
Log In

Sign Up

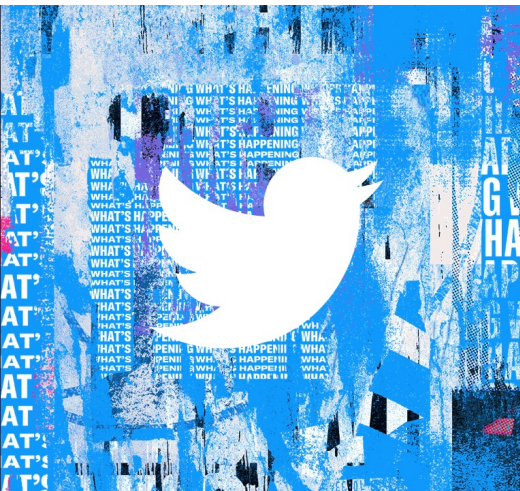
Trending today



Popular posts



2005



Happening now

Join Twitter today.

[Sign up with Google](#)

[Sign up with Apple](#)

or

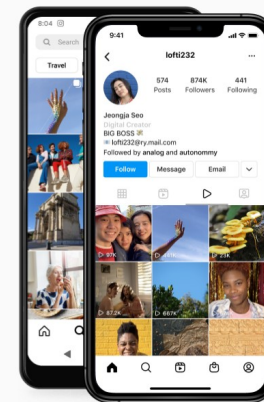
[Sign up with phone or email](#)

By signing up, you agree to the Terms of Service and Privacy Policy, including Cookie Use.

Already have an account?

[Sign In](#)

2006, today X



Instagram

Log In

OR

[Log In with Facebook](#)

[Forgot password?](#)

Don't have an account? [Sign up](#)

Get the app.

[Download on the App Store](#)

[GET IT ON Google Play](#)

2010

Meta About Blog Jobs Help API Privacy Terms Top Accounts Hashtags Locations Instagram Lite Contact Uploading & Non-Users  
Dance Food & Drink Home & Garden Music Visual Arts

Feedish v. © 2022 Instagram from Meta

and many others...

# 20?? – today, Web 3.0

Web 3.0 is a term that is used to describe **many evolution of web usage** and interaction among several paths

After a long time of focusing on the front-end, the back-end of the web becomes fundamental

Data is not owned but instead shared, and services show different views for the same web / the same data

# 20?? – today, Web 3.0

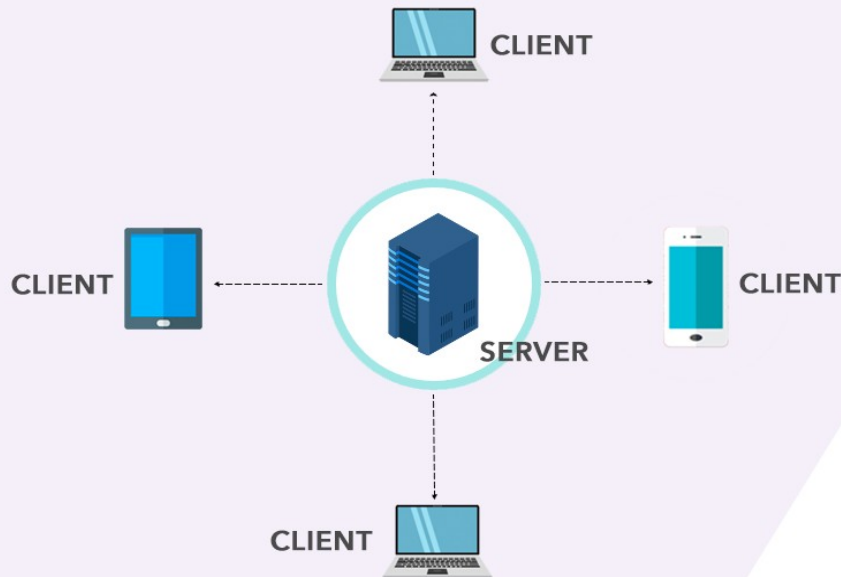
Topics which are included in Web 3.0 are

- Semantic web
- Artificial Intelligence
- 3D graphic
- Ubiquity
- DLT and Smart Contract

# 20?? – today, Web 3.0

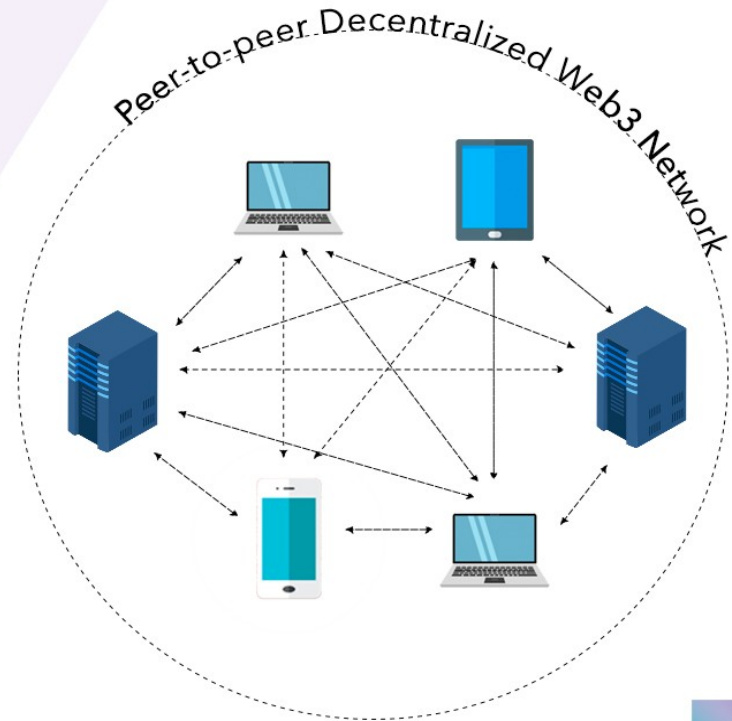
## WEB3

Data & apps owned by many and stored on servers throughout the Web3 network



## WEB2

Data & apps stored on servers owned and controlled by companies and regulations



SKIP  
LEVEL



Web 1.0		Web 2.0	Web 3.0
1.	Mostly Read-Only	Wildly Read-Write	Portable and Personal
2.	Company Focus	Community Focus	Individual Focus
3.	Home Pages	Blogs / Wikis	Live-streams / Waves
4.	Owning Content	Sharing Content	Consolidating Content
5.	WebForms	Web Applications	Smart Applications
6.	Directories	Tagging	User behavior
7.	Page Views	Cost Per Click	User Engagement
8.	Banner Advertising	Interactive Advertising	Behavioral Advertising
9.	Britannica Online	Wikipedia	The Semantic Web
10.	HTML/Portals	XML / RSS	RDF / RDFS / OWL

11.	Data was not Focused.	Data of many was controlled by some mediatory.	Data was personalized and no use of mediatory.
12.	Information sharing is the goal.	Interaction is the goal.	Immersion is the goal.
13.	It connects information as its primary goal.	It aims to connect people.	Focuses on relating knowledge.
14.	Static websites	Introduction of web applications	Intelligent web-based functions and apps
15.	A simpler, more passive web.	An enhanced social Web	A semantic web exists.
16.	Web and File Servers, HTML, and Portals are technologies connected to Web 1.0.	AJAX, JavaScript, CSS, and HTML5 are examples of related technology.	Web 3.0 technologies include blockchain, artificial intelligence, and decentralized protocols.
17.	<b>Associated Technologies:-</b> <ul style="list-style-type: none"> <li>• Web and File Servers</li> <li>• Search Engines (including AltaVista and Yahoo!)</li> <li>• E-mail accounts (Yahoo!, Hotmail)</li> <li>• Peer-to-Peer File Sharing (Napster, BitTorrent) and others.</li> </ul>	<b>Associated Technologies:-</b> <ul style="list-style-type: none"> <li>• Frameworks for Ajax and JavaScript</li> <li>• Microsoft.NET</li> <li>• Blogs</li> <li>• Wikis and others.</li> </ul>	<b>Associated Technologies:-</b> <ul style="list-style-type: none"> <li>• Searching Using Semantics</li> <li>• Databases of Information</li> <li>• Ontologies</li> <li>• Intelligent Digital Personal Assistants and others.</li> </ul>

**Surface Web**

Google  
facebook  
Websites  
wikipedia  
Blogs  
Ecommerce  
youtube

**Deep Web**

Private forums  
Private networks  
Hidden wiki  
Netbanking  
Research Papers  
Medical Records

**Dark Web**

Tor  
Illegal Information  
Silk Road  
Anonymous

