



DA106A

Introduktion till webbutveckling

HT20

7.5hp

Anton Tibblin



Vilka lärare är med i kursen?

Anton Tibblin



Yuji Dong





DA106A

Introduktion till webbutveckling

HT20

7.5hp

Anton Tibblin



Kursintroduktion

- Syfte
- Lärandemål
- Upplägg
- Innehåll
- Överblick



Läsperiod 1: HT20

DA156A

Introduktion till webbutveckling

DA154A

Introduktion till datavetenskap

KURS GRUNDNIVÅ 7.5 HP

INTRODUKTION TILL WEBBUTVECKLING

[Sammanfattning](#)[Kursplan](#)[Kontakt](#)

SAMMANFATTNING

Kursen syftar till att introducera fundamentala koncept och tekniker som ingår i modern webbutveckling. Studenten ska ges praktiska färdigheter i utveckling av webbplatser, liksom en teoretisk bakgrund till de begränsningar och möjligheter som ges av aktuella standarder och plattformar. Studenten ska också utveckla en inledande förståelse av hur användarbehov och - beteende kan styra utvecklingen av ett gränssnitt.

BEHÖRIGHETSKRÄV

Grundläggande behörighet + Engelska B.

Meritpoäng inför urval enligt Områdesbehörighet 6/A6

Denna kurs ges som en del av program:



KURSPLAN

Syfte

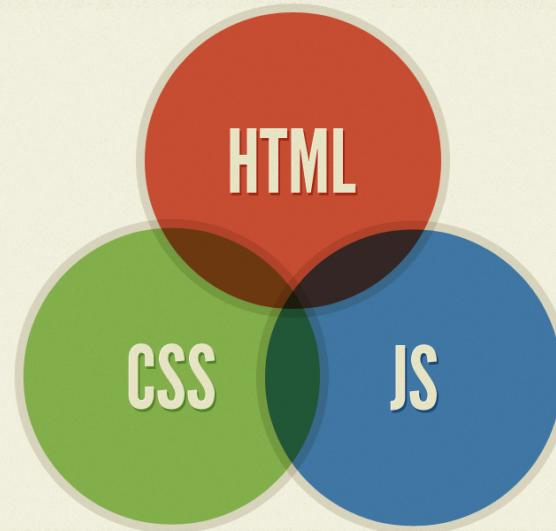
- Kursen syftar till att introducera fundamentala **koncept** och **tekniker** som ingår i modern **webbutveckling**.
- Studenten ska ges praktiska färdigheter i utveckling av **webbplatser**, liksom en teoretisk bakgrund till de **begränsningar** och **möjligheter** som ges av aktuella standarder och plattformar.
- Studenten ska också utveckla en inledande förståelse av hur **användarbehov** och -**beteende** kan styra utvecklingen av ett gränssnitt.

Tekniker i modern webbutveckling



<http://business-marketing-tips.com/wp-content/uploads/2013/07/Responsive-Web-Design1.jpg>

Praktiska färdigheter



<http://joelglovier.com/img/wallpaper/power-3.jpg>

Användarbehov



Lärandemål

Efter genomången kurs ska studenten kunna...

Kunskap och förståelse

- förklara begreppet **representation** och dess betydelse inom informationsteknologin
- förklara hur begreppen **information**, **presentation** och **beteende** förhåller sig till komponenterna av en webbsida och varandra, samt varför begreppen brukar särskiljas
- beskriva och exemplifiera kring **standarders** roll inom webbutveckling och till viss del datavetenskap

Färdighet och förmåga

- **konstruera webbsidor** baserat på för området aktuella standarder, med speciell hänsyn till **tillgänglighet** och **kompatibilitet**, samt viss hänsyn till **användbarhet**
- beskriva en resulterande webbsida baserat på källkod skriven i **HTML**, **CSS** och enklare **JavaScript**
- motivera **användningsmässiga** ställningstagande vid utformning av en webbsida

Värderingsförmåga och förhållningssätt

- diskutera på ett problematiserande och reflekterande vis, hur webbutvecklare kan förhålla sig till **standarder, målplattformer och målgrupper.**

Allmän kursinfo

- 10 veckor
 - 12 föreläsningar
 - 5 labbuppgifter
 - 7 labbtillfällen
-
- 3 inlämningsuppgifter
 - 1 tentamen



En typisk vecka

- 1-2 föreläsningar
- 1 laborationstillfälle
- Aktiviteter (laborationer/uppgifter)



Moment i kursen

Moment	Betygsskala	Högskolepoäng
Inlämningsuppgifter	UG	3,5
Skriftlig tentamen	UV	4

Laborationer

- ”Learning by doing”
- Inte examinerande – men ett mycket viktigt tillfälle att lära sig kursens mål
- Ger **0.5p** per redovisad laboration till tentan
 - Lösningen laddas upp på Canvas

Kurslitteratur



Kurslitteratur (lista)

- Kurslitteratur:
 - Duckett, Jon: HTML and CSS: Design and Build Websites, JOHN WILEY SONS, 2014
- Referenslitteratur:
 - Marcotte, Ethan: Responsive Web Design, A Book Apart, 2011
 - Krug, Steve: Don't Make Me Think!, Pearson Professional Education, 2nd ed., 2005
 - Lawson, Bruce och Remy Sharp: Introducing HTML5, New Riders Press, 2nd ed., 2011
 - Zeldman, Jeffrey: Designing with Web Standards, New Riders Press, 3rd ed., 2009



**MALMÖ
UNIVERSITET**

da106a.ia-mau.se

Vår kurswebbplats

Planering

Start Resurser Föreläsningar Laborationer Inlämningsuppgifter Planering Om tentamen

Introduktion till webbutveckling (DA106A)



Planering

För enkelhetens skull är alla viktiga datum och tider sammanställda här. För att undvika motsägande information är digitala platser inte angivna - se det [officiella schemat](#).

Labbtillfällena är i grunden fria att disponera, men i tabellen nedan anges så långt man minst bör sträva efter att komma. (Det skadar aldrig att jobba senare delar!) Lärare finns på plats 8-12 för att ge råd och svara på frågor.

Innehållet för varje tillfälle presenteras, eller kommer att presenteras, på sidorna för [föreläsningar](#), [laborationer](#) och [inlämningsuppgifter](#).

1. Tillfällen och deadline

Vecka	Datum	Tid*	Vad	Läshänvisningar
	1/9	10-12	Föreläsning 1: Kursintroduktion	-
36	2/9	13-15	Föreläsning 2: Introduktion till HTML	HTML & CSS: Kap. 1-5
	4/9	08-12	Laboration 1: Enkel personlig webbsida	
	8/9	10-12	Föreläsning 3: Tabell & formulär	HTML & CSS: Kap. 6-7
37	9/9	13-15	Föreläsning 4: Introduktion till CSS	HTML & CSS: Kap. 10-14
	11/9	08-12	Laboration 2: a) Formulär & tabeller, b) Introduktion till CSS	
	15/9	10-12	Föreläsning 5: Layout med CSS (1)	HTML & CSS: Kap. 15
38	16/9	13-15	Föreläsning 6: Layout med CSS (2)	HTML & CSS: Kap. 15
	18/9	08-12	Laboration 3: Layout med CSS	
	22/9	10-12	Föreläsning 7: Responsiv webbutveckling	HTML & CSS: Kap. 15
39	23/9	13-15	Föreläsning 8: Tutorial, att bygga en webbsida	
	25/9	08-12	Laboration 4: Responsiv webbplats	
	27/9		<i>Deadline: Inlämningsuppgift 1</i>	

Innehåll

Planering

1. Tillfällen och deadline

?

"Internet är en fluga"

- Ines Junéa Uusmann (kommunikationsminister, 1996)

2020 This Is What Happens In An Internet Minute



WHAT IF IT TOLD YOU

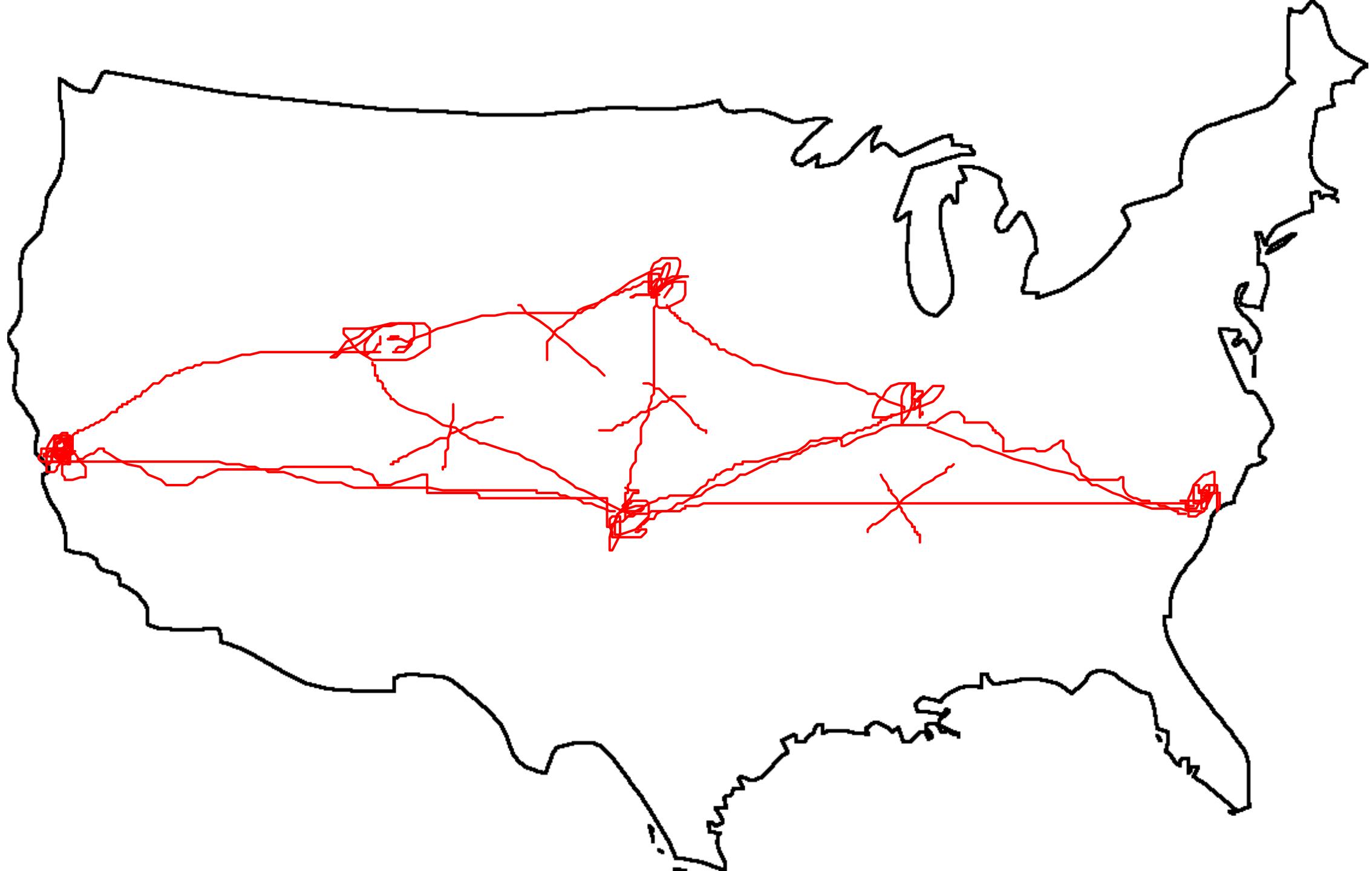


THAT THE WORLD WIDE WEB AND
THE INTERNET IS NOT THE SAME?

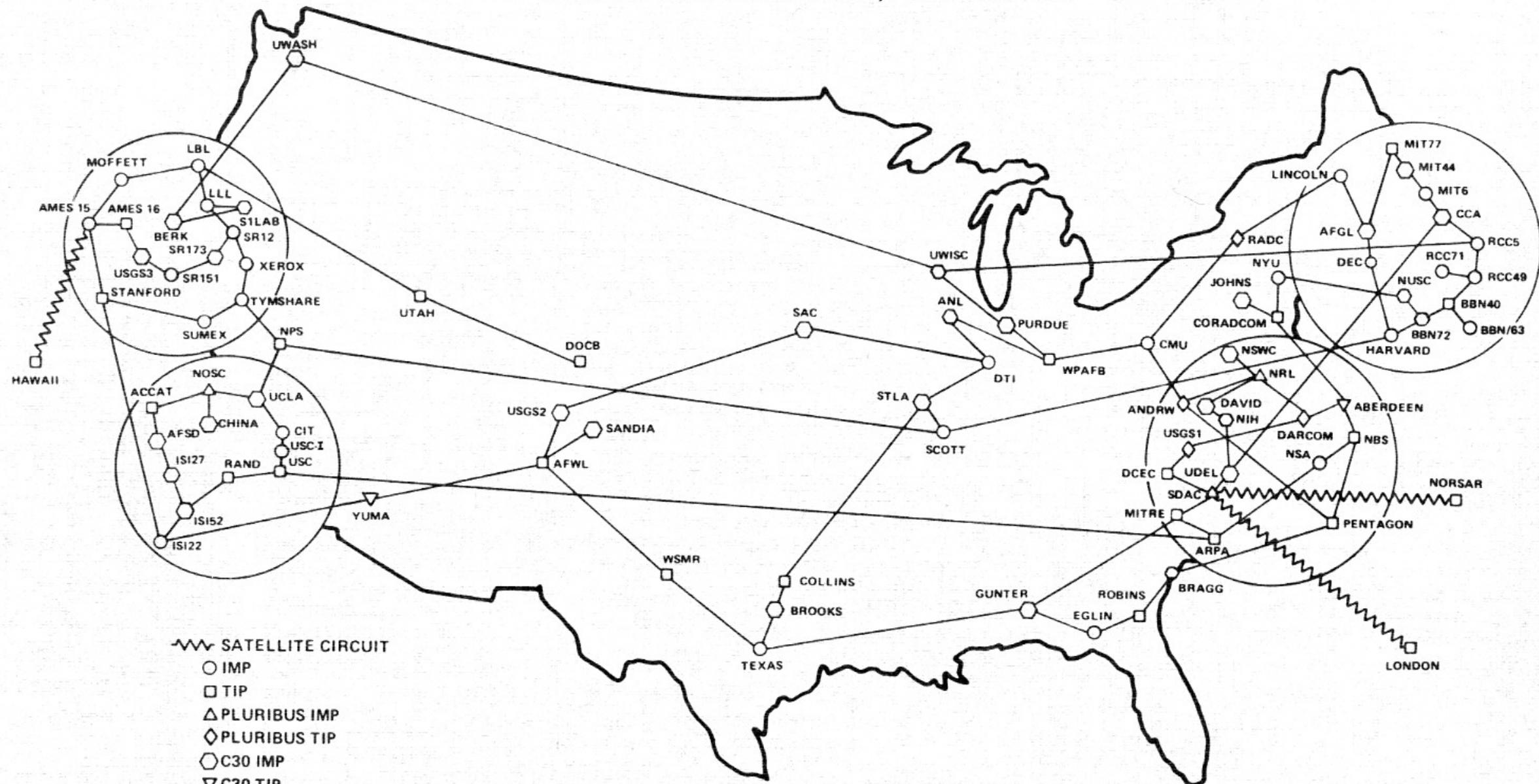
Internet och Webben
är inte samma sak

Viktiga begrepp att hålla isär





ARPANET GEOGRAPHIC MAP, FEBRUARY 1982



(NOTE: THIS MAP DOES NOT SHOW ARPA'S EXPERIMENTAL SATELLITE CONNECTIONS)
NAMES SHOWN ARE IMP NAMES, NOT (NECESSARILY) HOST NAMES







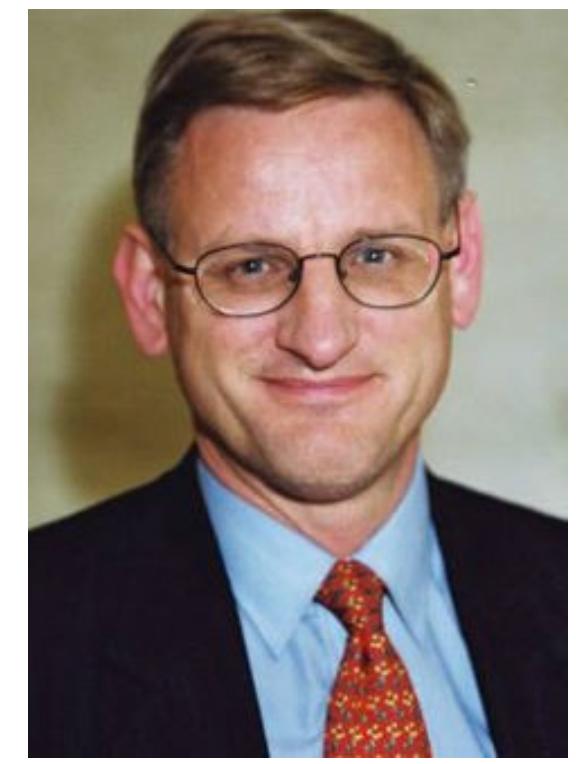
VOIP



<http://www.viv>

Webben – vad har hänt?

När började ni använda webben?



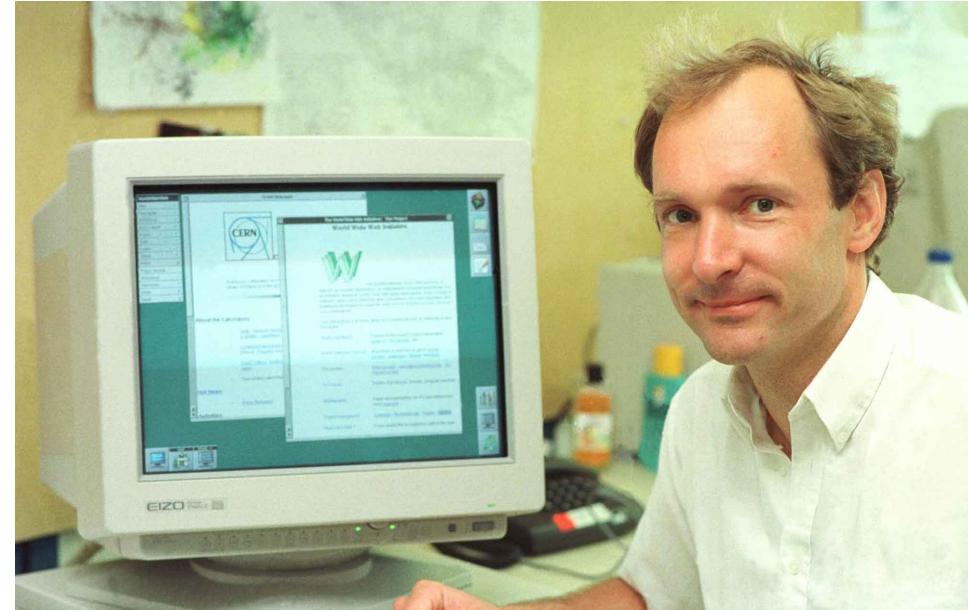
Tim Berners-Lee

- Tidigt 90-tal utvecklades standarderna
 - HTML
 - HTTP
- Målet var att genom länkar
 - Ge möjlighet att få **tillgång** till information var som helst
 - Möjlighet att dela **information**



Tidigt 90-tal

- Textbaserade webbsidor, en enda kolumn
- Världens första webbläsare
- World Wide Web Consortium(W3C)



Hur såg webbsidorna ut?

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 ?](#)

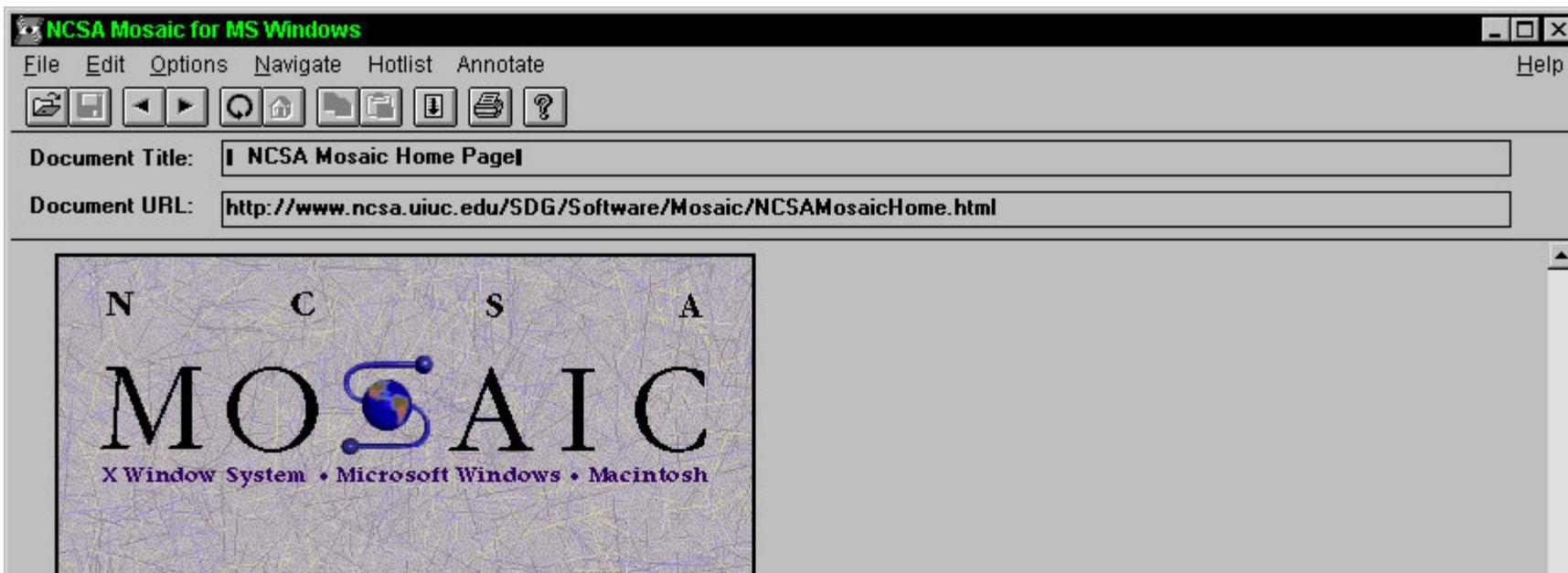
If you would like to support the web..

[Getting code](#)

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

http://www.newscientist.com/data/images/ns/cms/dn18158/dn18158-1_708.jpg

Mosaic – Tjoho bilder!



Welcome to NCSA Mosaic, an Internet information browser and World Wide Web client. NCSA Mosaic was developed at the National Center for Supercomputing Applications at the University of Illinois in --> Urbana-Champaign. NCSA Mosaic software is copyrighted by The Board of Trustees of the University of Illinois (UI), and ownership remains with the UI.

Jan '97

The Software Development Group at NCSA has worked on NCSA Mosaic for nearly four years and we've learned a lot in the process. We are honored that we were able to help bring this technology to the masses and appreciated all the support and feedback we have received in return. However the time has come for us to concentrate our limited resources in other areas of interest and development on Mosaic is complete.
<http://www.nsf.gov/od/opa/news/03/images/mosaic.6beta.jpg>

All information about the Mosaic project is available from the homepages.

Mitten av 90-tal

- Layout (genom tabell) strukturerar upp webbsidorna
- Webbsidorna har flera kolumner
- JavaScript (Mocha) introduceras
- Animerad text, skrollande text, GIF-bilder

Hur såg webbsidorna ut?



[recent] [Search] [archives by Date | Subject | Author]

Saturday
Oct 27, 2012 Perhaps you want to see edgy, "hardcore gamer" videos set to dubstep tracks ... of [forklift](#), [truck](#), [farming](#), or [train](#) simulators. Afterwards, clear your palate and cleanse your mind with the [street cleaning](#) or [demolition](#) simulators.
to [Games](#) by [isosceles](#)

Monday
Oct 8, 2012 Despite starting off as a [joke mocking critical theory](#), the [Swole Acceptance](#) movement quickly realized that there was [legitimate](#) grievance against [weak privilege](#). From being groped to being called meatheads to being accused of being drug users, the so-called [swole](#), be they [cisswole](#) or [transswole](#), have realized the joke is more serious than they thought.

Accompanying this is another joke, a Discordanian "religion" called [Brodinism](#), which is acknowledged as a joke but still used as a source of wisdom and solidarity. So, to sum up: Swole Acceptance is not a joke, except when it is; and Brodinism is a joke, except when it is not.
to [Health](#) by [isosceles](#)

Sunday
Oct 7, 2012 "From Varka's humble bedroom lab through to a pretty substantial and very busy industrial unit in Phoenix, [Bad Dragon](#) has remained dedicated to producing the [finest](#) fantasy-themed [adult toys](#) money can buy."

It seems only natural that a place that would offer hypothetical experiences with [cockatrices](#), [gryphons](#) and [dragons](#) would operate out of a city named after yet another mythological beast.
to [Sex](#) by [isosceles](#)

Thursday
Oct 4, 2012 [Harry Potter and the Methods of Rationality](#); a preposterously long fanfic covering methods of rationality.
to [Science](#) by [isosceles](#)

Sunday
Sep 23, 2012 Attention fellow documentarians of the horrifying, yet fascinating recesses of Brony subculture. There are far worse things than [fluffy ponies](#). There are [fat ponies](#), pony [thread simulators](#), and [fat pony thread simulators](#).

1995 - Altavista



ALTAVISTA

AltaVista gives you access to the largest Web index: 30 million pages found on 275,600 servers, and four million articles from 14,000 Usenet news groups. It is accessed over 20 million times per weekday.

NEWS FROM ALTAVISTA

AltaVista Search is your favorite search service! Over 2.5 billion hits to date, and a top ten rating from [100 Hot Web Sites](#). Mile High Tower rises in Cyberspace. [AltaVista ForumForum](#) is open for business!

POWERED BY [DIGITAL UNIX](#), [DIGITAL ALPHA](#) AND [ALTAVISTA SEARCH](#) SOFTWARE

[Surprise](#) · [Legal](#) · [FAQ](#) · [Add URL](#) · [Feedback](#) · [Text-Only](#)

[AltaVista Software](#)

*** Check out our [NEW Australian Mirror Site](#) ***

1995 - Amazon



Welcome to Amazon.com Books!

*One million titles,
consistently low prices.*

(If you explore just one thing, make it our personal notification service. We think it's very cool!)

SPOTLIGHT! -- AUGUST 16TH

These are the books we love, offered at Amazon.com low prices. The spotlight moves **EVERY** day so please come often.

ONE MILLION TITLES

Search Amazon.com's [million title catalog](#) by author, subject, title, keyword, and more... Or take a look at the [books we recommend](#) in over 20 categories... Check out our [customer reviews](#) and the [award winners](#) from the Hugo and Nebula to the Pulitzer and Nobel... and [bestsellers](#) are 30% off the publishers list...

EYES & EDITORS, A PERSONAL NOTIFICATION SERVICE

Like to know when that book you want comes out in paperback or when your favorite author releases a new title? Eyes, our tireless, automated search agent, will send you mail. Meanwhile, our human editors are busy previewing galleys and reading advance reviews. They can let you know when especially wonderful works are published in particular genres or subject areas. Come in, [meet Eyes](#), and have it all explained.

YOUR ACCOUNT

Check the status of your orders or change the email address and password you have on file with us. Please note that you do not need an account to use the store. The first time you place an

1995 - Ebay

Auction Web

[Menu] [\[Listings\]](#) [\[Buyers\]](#) [\[Sellers\]](#) [\[Search\]](#) [\[Contact/Help\]](#) [\[Site Map\]](#)

Welcome to today's online marketplace...

...the market that brings buyers and sellers together in an honest and open environment...

Welcome to eBay's AuctionWeb.

Welcome to our community. I'm glad you found us. AuctionWeb is dedicated to bringing together buyers and sellers in an honest and open marketplace. Here, thanks to our [auction format](#), merchandise will always fetch its market value. And there are plenty of great deals to be found!

Take a look at the listings. There are always several hundred auctions underway, so you're bound to find something interesting.

If you don't find what you like, take a look at our **Personal Shopper**. It can help you search all the listings. Or, it can keep an eye on new items as they are posted and let you know when something you want appears. If you want to let everyone know what you want, post something on our [wanted page](#).

If you have something to **sell**, start your auction instantly.

Join our community. Become a registered user. Registered users receive [additional benefits](#) such as daily updates and the right to participate in our user feedback forum and the bulletin board.

Please **read on** about the AuctionWeb vision...

From the founder: I launched eBay's AuctionWeb on Labor Day, 1995. Since then, this site has become more popular than I ever expected, and I began to realize that this was indeed a **grand experiment** in Internet commerce.

February 25, 1996

By creating an open market that encourages **honest**

Sent 90-tal

- Flash introducerades
- En kombination av flash och HTML-kod byggde upp webbsidorna
- Flashbaserad navigation
- (massor av onödiga animationer)



Hur såg webbsidorna ut?

The screenshot shows the homepage of the Dole/Kemp '96 Online Campaign. The background features a blue gradient with white stars, resembling the American flag. At the top center is the campaign's logo: "VOTE Dole/Kemp '96 ONLINE CAMPAIGN" with two small red and white striped flags on either side. Below the logo is a navigation menu with three main categories: "Welcome Students", "IN BOX", and "ISSUES". Under "IN BOX" is a link to "Latest News and Updates". Under "ISSUES" are links to "K-12 Education", "Technology and Issues", and "HOME STATE". The main content area contains six circular icons, each with a different theme: "About the Team" (Story of American Heroes), "Dole Interactive" (Games, trivia, posters, and postcards), "The Dole Agenda" (Policy, local issues, and feedback), "Get Involved" (How can you help elect Bob Dole), "On the Campaign Trail" (Follow the campaign around America), and "News Room" (Latest news and information). To the right, there is a section titled "Today's Headlines" dated November 5, 1996, with a link to "TOP STORIES" (Follow along on the Victory March) and "Calculate your tan out!".



<http://www.dolekemp96.org>

More opportunities. Smaller government. Stronger and safer families

[Home](#) | [Register](#) | [Volunteers](#) | [Donations](#)
[About the Team](#) | [Dole Interactive](#) | [Newsroom](#) | [The Dole Agenda](#) | [On the Campaign Trail](#) | [Get Involved](#)

Originally Paid for by Dole/Kemp '96 Campaign Committee
Original Web Design by [Page Internet Campaigns](#)
To Learn more about Bob Dole, Please Visit the [Dole Institute](#)
This Web Site is Presented for Educational Purposes by [dPresident.org](#)

1998 - Google

Google!

Search the web using Google!

10 results ▾

Index contains ~25 million pages (soon to be much bigger)

About Google!

[Stanford Search](#) [Linux Search](#)

Get Google! updates monthly!

[Archive](#)

Copyright ©1997-8 Stanford University

1999 - Paypal

The screenshot shows the original PayPal login interface from 1999. It features a blue header with the Confinity logo (a stylized 'P' inside a circle) and navigation links for HOME, ABOUT, DEMO, CONTACT, and SIGN UP. Below the header is a login form with fields for LOGIN NAME and PASSWORD, and an 'enter' button. A yellow banner in the center reads 'New User? Sign up now!'. Below the banner is a large empty rectangular area. At the bottom, there is descriptive text about the service: 'PayPal™ lets you beam money to anyone with a Palm™ Organizer.' and 'PayPal™ lets you send money to anyone with an email address.'. At the very bottom, there is a footer with links to home, about, demo, contact, and sign up, along with a copyright notice: '1999 © Confinity, Inc. All rights reserved. Privacy and Security.'

[HOME](#)
[ABOUT](#)
[DEMO](#)
[CONTACT](#)
[SIGN UP](#)

LOGIN NAME: PASSWORD: enter

New User? [Sign up now!](#)

PayPal™ lets you beam money to anyone with a Palm™ Organizer.

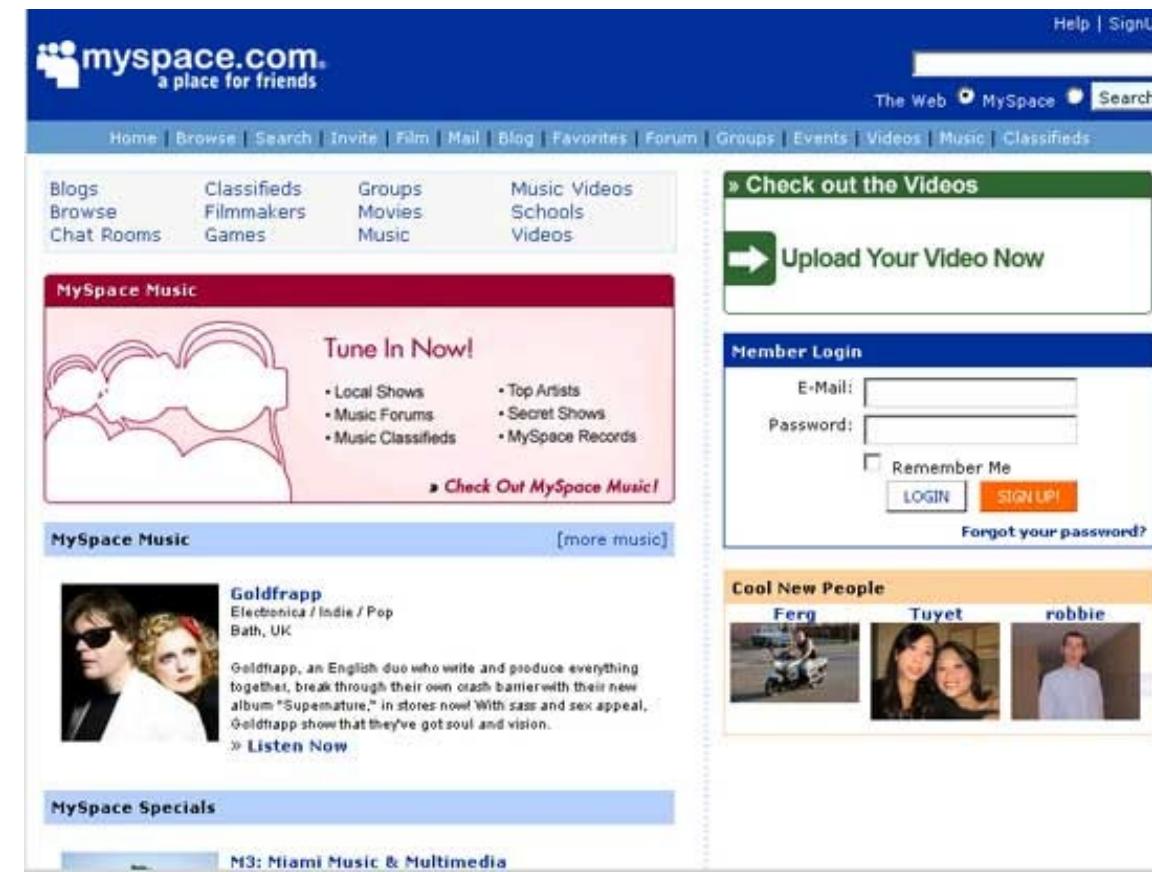
PayPal™ lets you send money to anyone with an email address.

[home](#) | [about](#) | [demo](#) | [contact](#) | [sign up](#)

1999 © [Confinity, Inc.](#) All rights reserved. [Privacy and Security](#).

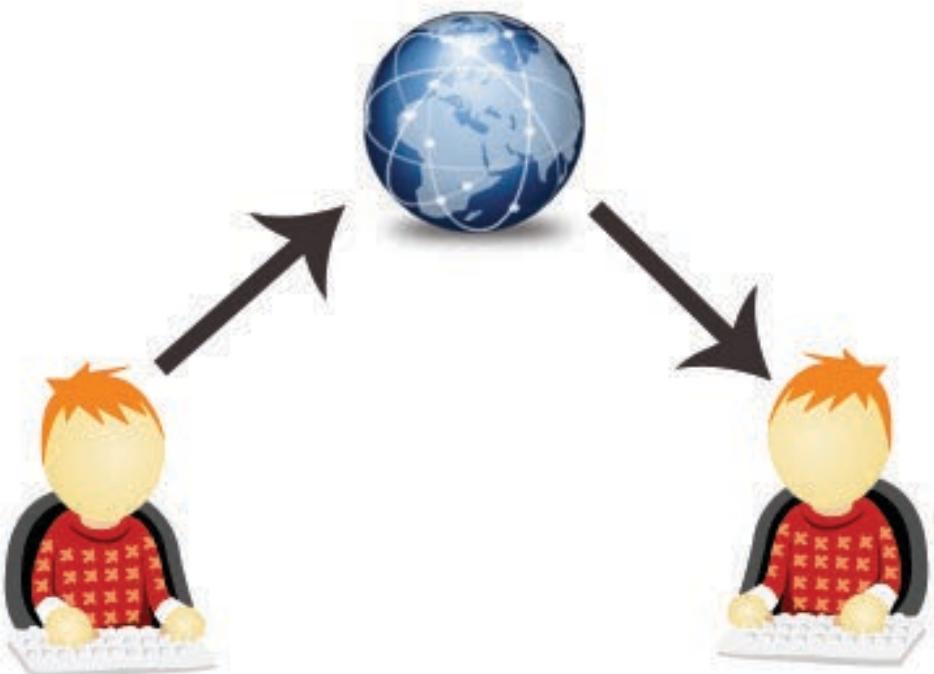
Tidigt => mitten av 2000-tal

- CSS introduceras
- JavaScript tar över allt mer på webben
- Formulär på webben

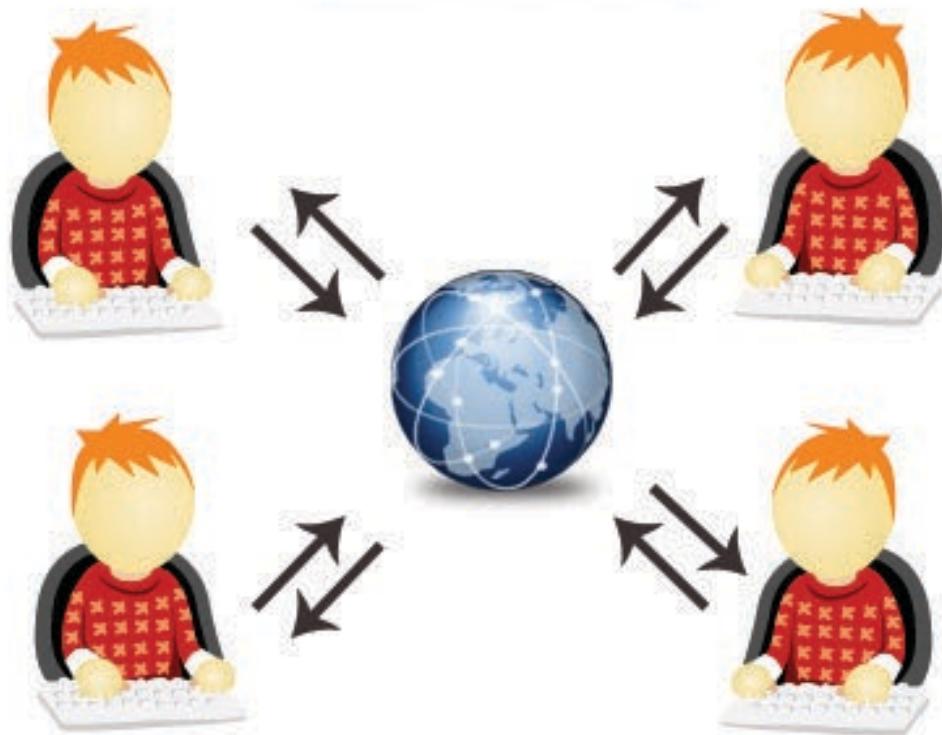




Web 1.0



Web 2.0

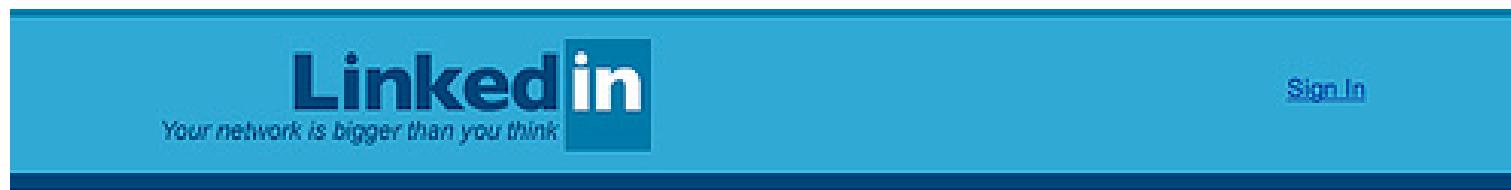


Nytt sätt att använda webben



<http://www.pbdink.com/blog/wp-content/uploads/2013/08/networks.jpg>

2003 - LinkedIn



Already a member?

[Sign In](#)

Lost Your Invitation?

Enter your email address here, and we'll send you a replacement:

[Send Replacement](#)

LinkedIn makes your professional network faster and more powerful.

You're already connected to the people you need to reach your business goals — through the business connections you already have.

Make contact with thousands of professionals, [through trusted connections](#), and help yourself and your colleagues get it done.

[Join Today](#)

2004 - thefacebook

The screenshot shows the homepage of thefacebook.com. At the top, there is a blue header bar with the text "[thefacebook]" in white. Below the header, there are links for "login", "register", and "about". On the left side, there is a sidebar containing fields for "Email:" and "Password:", and buttons for "register" and "login". The main content area has a title "[Welcome to Thefacebook]" and a sub-headline: "Thefacebook is an online directory that connects people through social networks at colleges. We have opened up Thefacebook for popular consumption at **Harvard University**. You can use Thefacebook to: • Search for people at your school • Find out who are in your classes • Look up your friends' friends • See a visualization of your social network To get started, click below to register. If you have already registered, you can log in." At the bottom, there are links for "about", "contact", "faq", "terms", and "privacy", followed by the text "a Mark Zuckerberg production Thefacebook © 2004".

[thefacebook]

login register about

Email:

Password:

register

login

Welcome to Thefacebook!

[Welcome to Thefacebook]

Thefacebook is an online directory that connects people through social networks at colleges.

We have opened up Thefacebook for popular consumption at **Harvard University**.

You can use Thefacebook to:

- Search for people at your school
- Find out who are in your classes
- Look up your friends' friends
- See a visualization of your social network

To get started, click below to register. If you have already registered, you can log in.

Register Login

about contact faq terms privacy

a Mark Zuckerberg production

Thefacebook © 2004

2005 - YouTube



2006 - Twitter

A screenshot of a web browser window titled "twtr" showing the homepage of twtr.com. The page features a large green "twitter" logo at the top. Below it is a headline: "Use twtr to stay in touch with your friends all the time. If you have a cell and can txt, you'll never be bored again...E V E R !". On the left, there are two rounded rectangular boxes: "What your friends are" (listing Kevin Systrom babysitting, Jeremy home - boys to bed, and Katie It's my birthday!) and "txt (or) What are you doing?". At the bottom, there are two more boxes: "Timeline" (follow along with what your friends are doing throughout the day) and "what up?" (send updates from your cell or from the web about what's in yr head). On the right, there is a "Sign in" form with fields for mobile number and password, a "Remember me" checkbox, and a "Sign in" button. Below the sign-in form is a "New? Sign up!" link and a note about verifying the user's mobile number.

twtr

http://twtr.com/t/account/identify

Gmail - Inbox Google Calendar Valleywag Welcome to Flickr! del.icio.us/popular Google AdSense

Gmail - Inbox twtr

twitter

Use twtr to stay in touch with your friends all the time. If you have a cell and can txt, you'll never be bored again...E V E R !

What your friends are

Kevin Systrom babysitting
Jeremy home - boys to bed
Katie It's my birthday!

txt (or)
What are you doing?

Timeline

follow along with what your friends are doing throughout the day

what up?

send updates from your cell or from the web about what's in yr head

Sign in.

Mobile number (or email)

Password (or PIN)

Remember me

Sign in

New? Sign up!

twtr works best when updated from your mobile phone. To verify you are you, we'll need your number.

Mobile number

2008 - Dropbox



Dropbox

Log in

[Beta signup](#)



Dropbox

www.getdropbox.com

På ”bara” 20år
har det hänt en del...



4,663,600,960

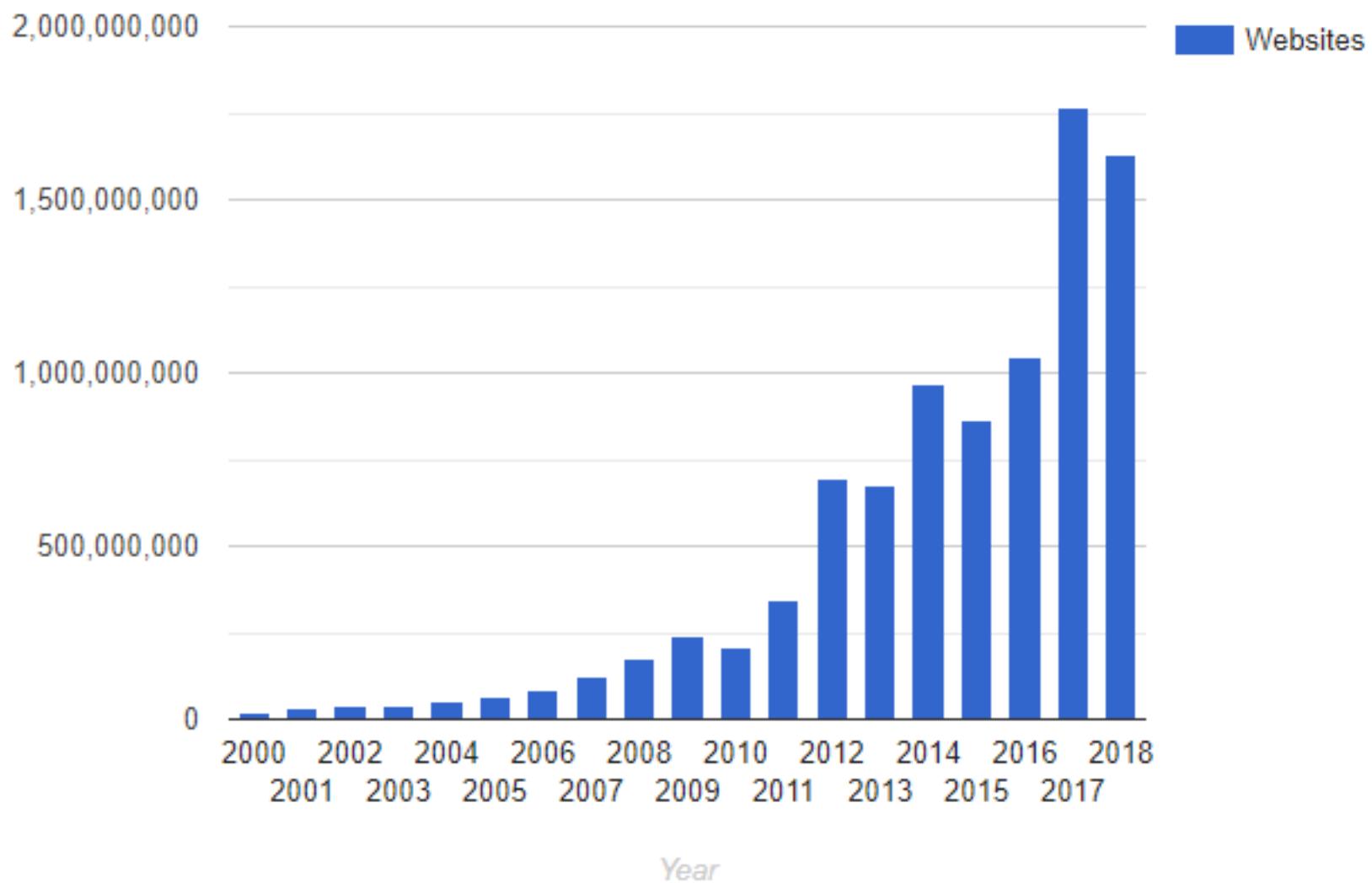
Internet Users in the world



1,796,538,437

Total number of Websites

Total number of Websites



Year (June)	Websites	Change	Internet Users	Users per Website	Websites launched
2018	1,630,322,579	-8%			
2017	1,766,926,408	69%			
2016	1,045,534,808	21%			
2015	863,105,652	-11%	3,185,996,155*	3.7	
2014	968,882,453	44%	2,925,249,355	3.0	
2013	672,985,183	-3%	2,756,198,420	4.1	
2012	697,089,489	101%	2,518,453,530	3.6	
2011	346,004,403	67%	2,282,955,130	6.6	
2010	206,956,723	-13%	2,045,865,660	9.9	Pinterest , Instagram
2009	238,027,855	38%	1,766,206,240	7.4	
2008	172,338,726	41%	1,571,601,630	9.1	Dropbox
2007	121,892,559	43%	1,373,327,790	11.3	Tumblr
2006	85,507,314	32%	1,160,335,280	13.6	Twtr
2005	64,780,617	26%	1,027,580,990	16	YouTube , Reddit
2004	51,611,646	26%	910,060,180	18	Thefacebook , Flickr
2003	40,912,332	6%	778,555,680	19	WordPress , LinkedIn
2002	38,760,373	32%	662,663,600	17	
2001	29,254,370	71%	500,609,240	17	Wikipedia
2000	17,087,182	438%	413,425,190	24	Baidu
1999	3,177,453	32%	280,866,670	88	PayPal
1998	2,410,067	116%	188,023,930	78	Google
1997	1,117,255	334%	120,758,310	108	Yandex , Netflix
1996	257,601	996%	77,433,860	301	
1995	23,500	758%	44,838,900	1,908	Altavista , Amazon , AuctionWeb
1994	2,738	2006%	25,454,590	9,297	Yahoo

Webbläsare idag

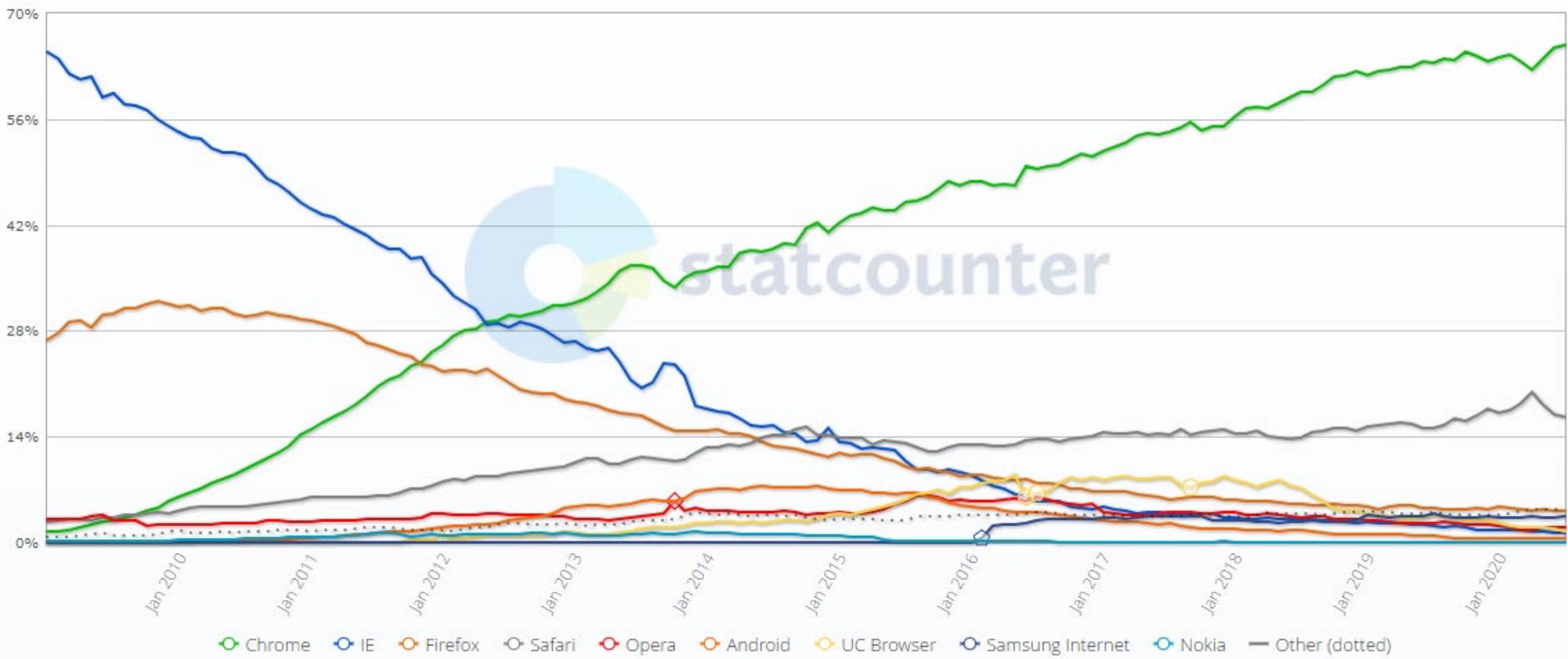


<http://www.soft32.com/blog/wp-content/uploads/2013/01/web-browsers.jpg>

Browser Market Share Worldwide

Jan 2009 - July 2020

Edit Chart Data



[Save Chart Image \(.png\)](#)

[Download Data \(.csv\)](#)

[Embed HTML](#)

```
<div id="all-browser-ww-monthly-200901-202007" width="600" height="4
```

Vad är en webbläsare?

Webbläsare

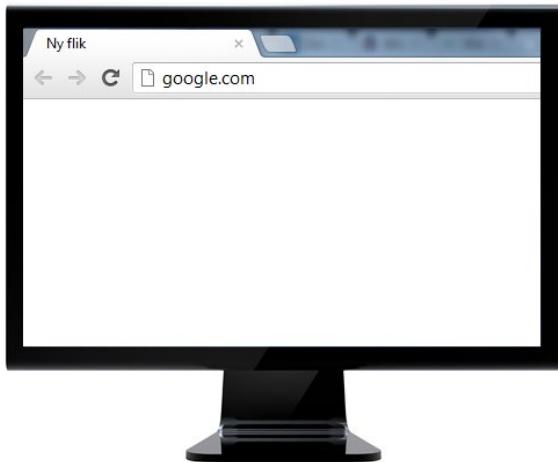
Tolkar kod (html m.m.) och visar upp det för användaren.



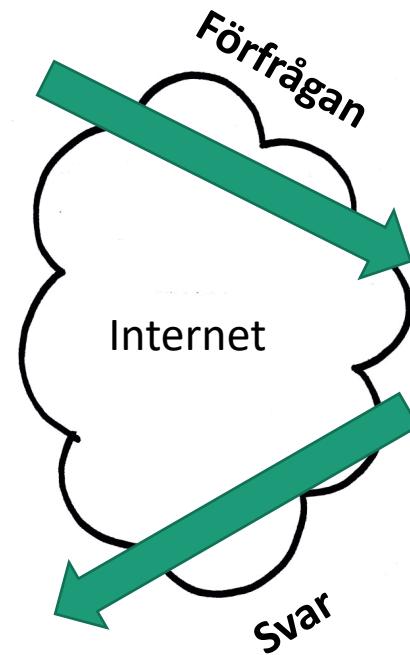
```
<!DOCTYPE HTML PUBLIC "-//IETF//DTD HTML 2.0//EN">
<html>
  <head>
    <meta name="TITLE" content="Webbläsare">
    <meta name="KEYWORDS" content="HTML, CSS, JavaScript, webb, programmering">
    <meta name="DESCRIPTION" content="En webbläsare för att visa upp HTML-kod.">
    <link rel="stylesheet" type="text/css" href="style.css">
    <script language="javascript">
      window.onload = function() {
        document.body.style.backgroundColor = "#ffffff";
        document.body.style.color = "#000000";
      }
    </script>
  </head>
```

Hur fungerar det?

Klient



Klient



Server



Svar?

- Svaret är i form av HTML, som strukturerar upp den information som skickas från servern till oss
- HTML-dokumentet kan sedan inkludera bl.a. text, bilder, formgivning av sidan, interaktiva element osv.



Resultat

- En webbläsare visar oss en webbsida efter att ha renderat ett HTML-dokument

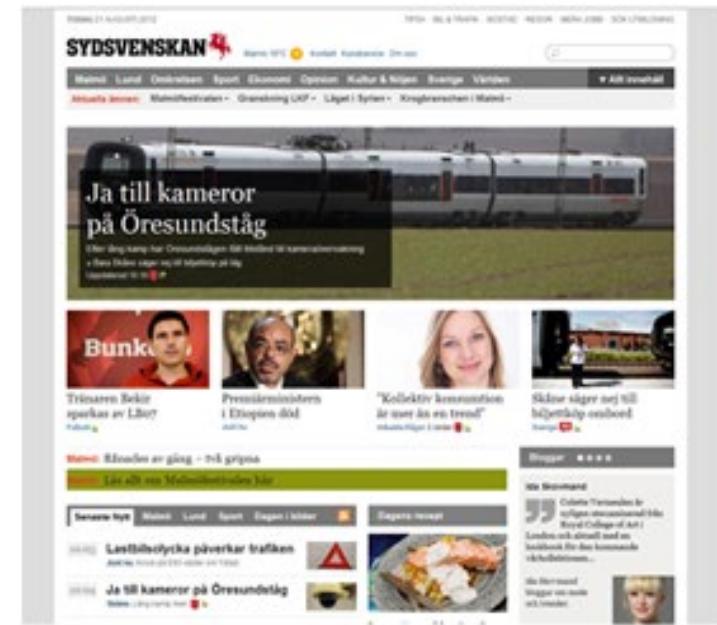
HTML-dokument

```
<div id="ctl00_ctl127">
<div class="main_nav_box mainmenu" style="height: 60px;">
    <ul class="main_nav_list">
        <li class="first">
            <a href="/malmö/" target="_self">
                Malmö
            </a>
        <ul class="main_nav_inner">
            <li>
                <a href="/malmö/mangs/" target="_top">
                    Rättegången mot Mangs
                </a>
            </li>
            <li>
                <a href="/hurmardumalmö/" target="_self">
                    Hur mår du, Malmö?
                </a>
            </li>
            <li>
                <a href="/stories/morden-i-malmö/" target="_self">
                    Morden i Malmö
                </a>
            </li>
        </ul>
    </li>
</ul>
</div>
```

Webbläsare

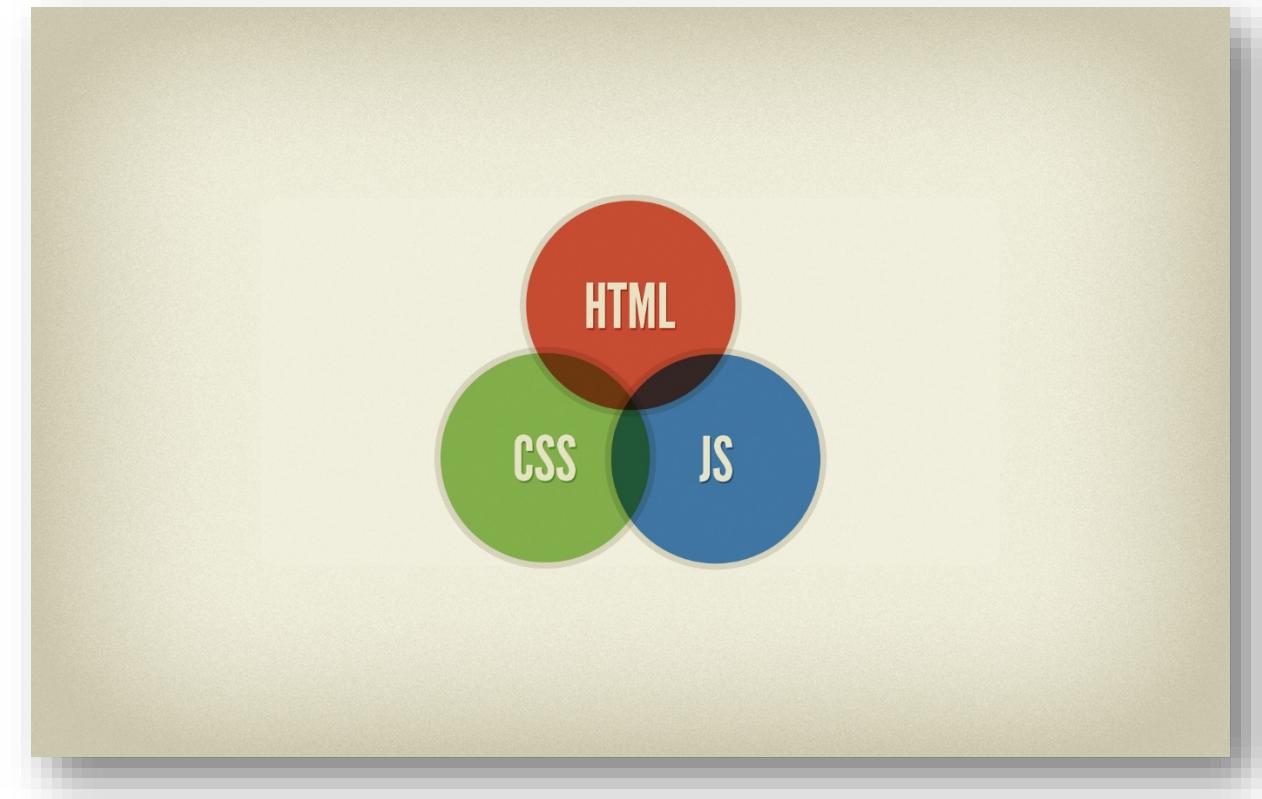


Webbplats

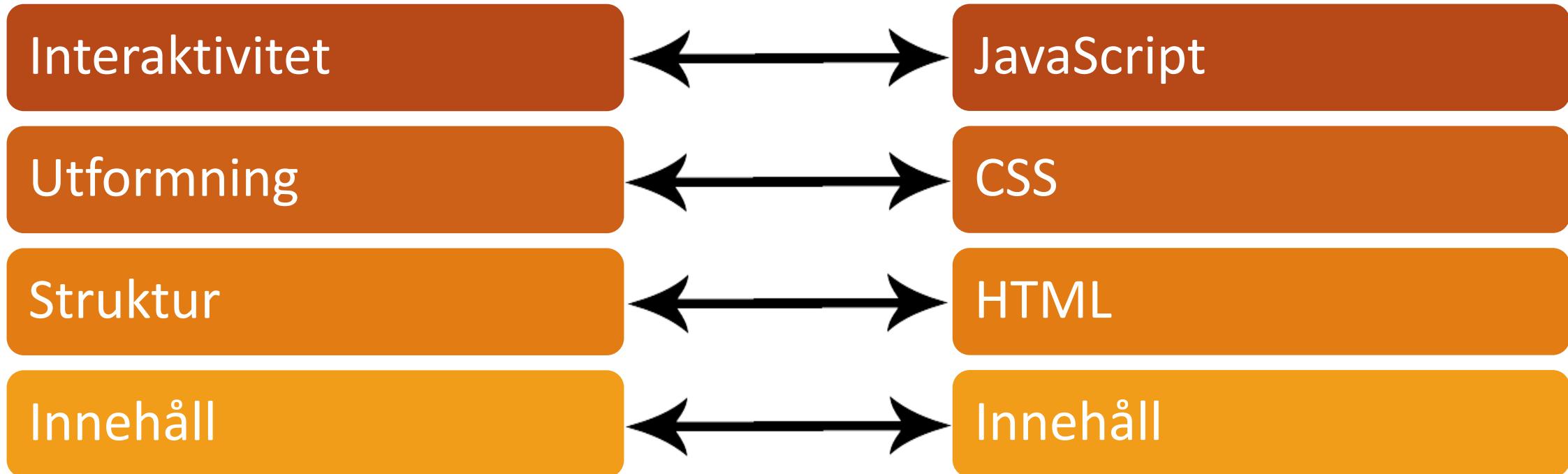


Webbsida

- Består av olika sorters kod
 - HTML
 - CSS
 - JavaScript



Vad består en webbplats av?

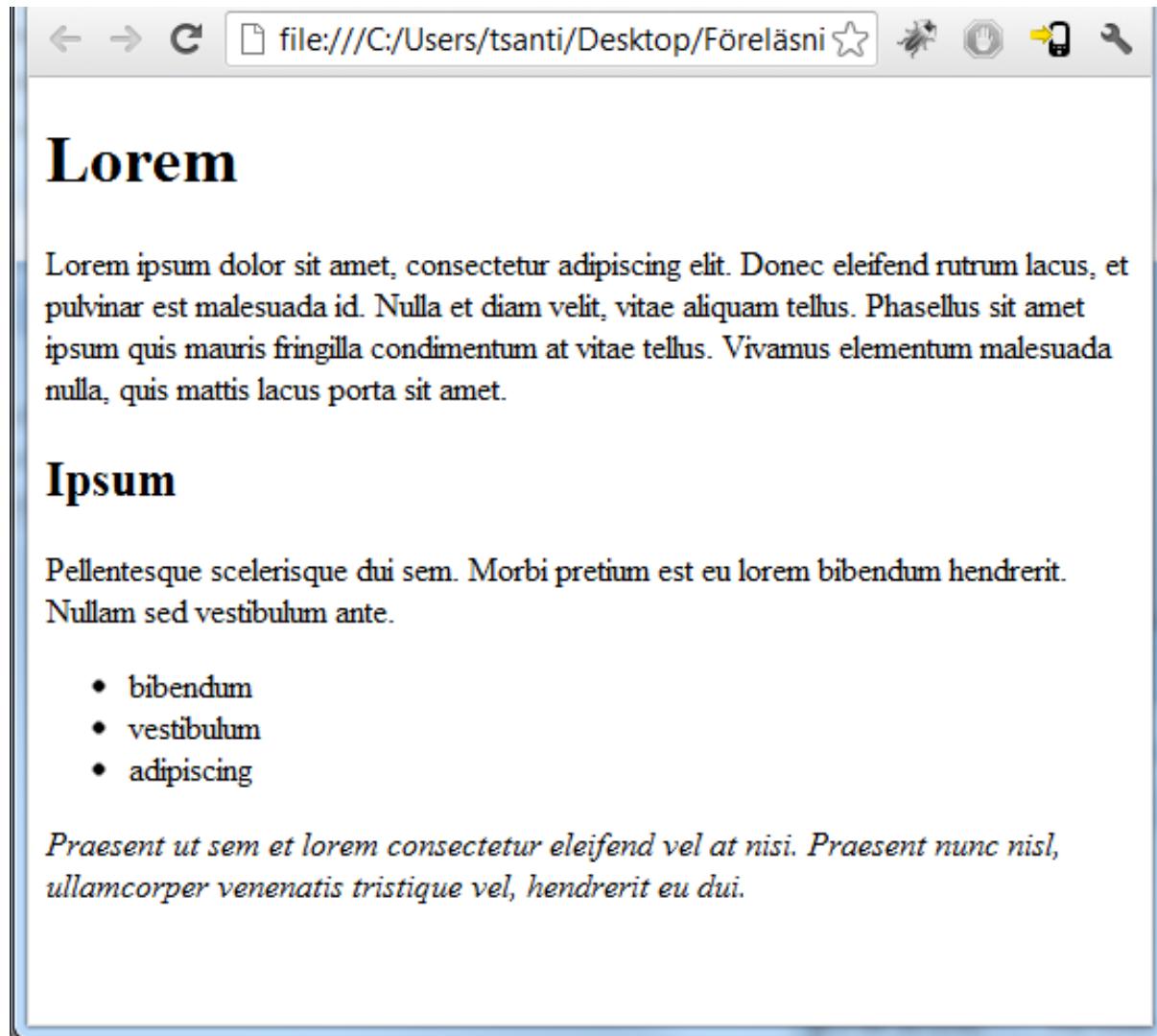


HTML

- Hypertext Markup Language
- Märkspråk
- Används för att ge dokument en struktur – vad är vad?
- HTML byggs upp utav element som märker upp vilken typ av innehåll som finns på sidan



HTML som märkspråk



The screenshot shows a web browser window with the address bar displaying "file:///C:/Users/tsanti/Desktop/Föreläsni". The page content is as follows:

Lorem

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec eleifend rutrum lacus, et pulvinar est malesuada id. Nulla et diam velit, vitae aliquam tellus. Phasellus sit amet ipsum quis mauris fringilla condimentum at vitae tellus. Vivamus elementum malesuada nulla, quis mattis lacus porta sit amet.

Ipsum

Pellentesque scelerisque dui sem. Morbi pretium est eu lorem bibendum hendrerit. Nullam sed vestibulum ante.

- bibendum
- vestibulum
- adipiscing

Praesent ut sem et lorem consectetur eleifend vel at nisi. Praesent nunc nisl, ullamcorper venenatis tristique vel, hendrerit eu dui.

Element?

- Det finns olika element som representerar olika innehåll, t.ex. rubriker, paragrafer, listor m.m.
- Grundprincipen är att det finns en start- och ett sluttagg. Det innehåll som finns mellan dessa taggar tilldelas elementets formatering.
- Kan även ha attribut



Ett HTML-dokuments struktur

Element som alltid ingår i ett HTML-dokument:

- <html>, rotelementet
- <head>, dokumenthuvud (info om dokumentet)
- <title>, dokumentets titel
- <body>, dokumentets innehåll

```
<!DOCTYPE HTML>
<html>
    <head>
        <meta charset=utf-8">
        <title>Min sida</title>
    </head>

    <body>
        <!-- Här kommer innehåll som visas för användaren ligga -->
    </body>
</html>
```

Exempel på HTML-struktur

Text-editor

Webbläsare

```
Välkommen!
... och känner dig som hemma
På denna sidan kan ni hitta lite
grundläggande saker om html. Nedan
ett exempel på en lista på olika
taggar som kan vara bra att känna till:
em
strong
div
span
```

HTML-dokumentet i helhet

```
<!DOCTYPE HTML>
<html>
  <head>
    <meta h
    <title>
  </head>

  <body>
    <h1>Väl
    <h2><em>
    <p>På d
    grundlä
    ett exe
    kan var
    <ul>
      <li>
      <li>
      <li>
      <li>
    </ul>
  </body>
</html>
```



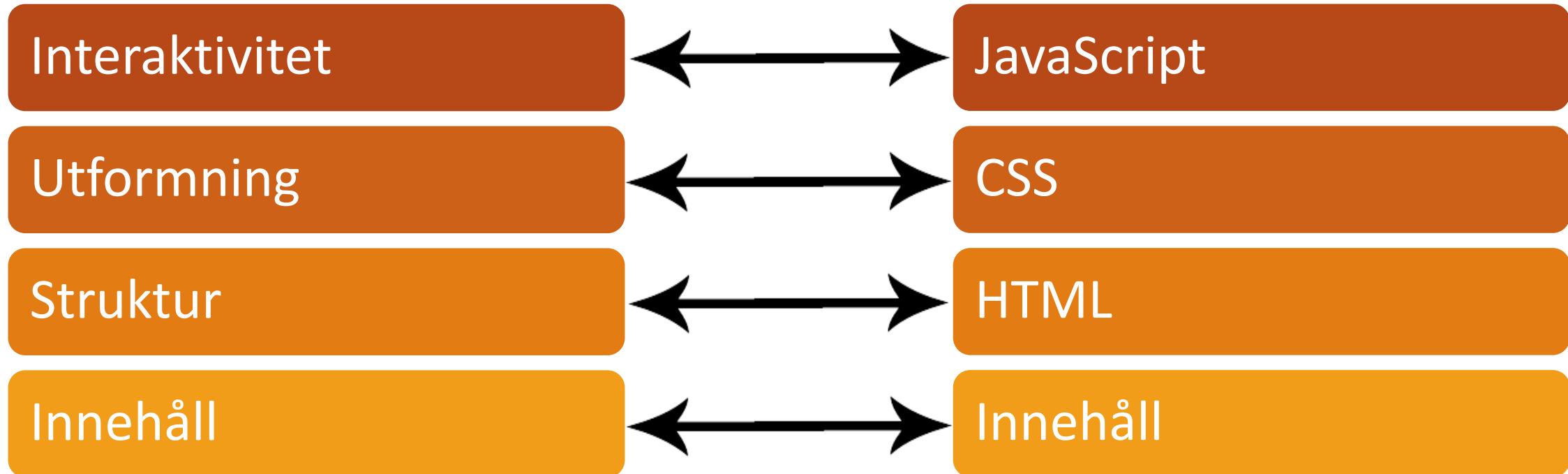
Kort om CSS

- CSS sköter formgivning av innehåll, medan HTML sköter struktur av innehåll.
- CSS styr hur HTML-elementen ska visas
- Typisk användning av CSS är för typografi, layout, bildhantering m.m.
- CSS är ett eget språk, men går att använda tillsammans med HTML
- Genom att koppla olika CSS-mallar till samma HTML-dokument kan informationen presenteras på olika sätt

Kort om JavaScript

- Ger möjlighet till interaktiva webbplatser
- Är ett programmeringsspråk som körs direkt i webbläsaren
- Kan skrivas tillsammans med HTML-kod
- Exempel på användningsområden är:
 - Validering av information i formulär
 - Visa/dölja information utan att ladda om sidan
 - Animeringar (t.ex. bildspel)

Vad består en webbplats av?



Frågor?



Nästa föreläsning

Imorgon, onsdag 2/9, kl. 13.15



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