# Kursintroduktion

DA344A, DA355A

- Webbapplikationer för mobila enheter

- Flerplattformsapplikationer med webbtekniker

# Dagens agenda

- Del 0 Upprop
- Del 1 Introduktion till kursen
  - Vilka lärare är involverade?
  - · Vilka läser denna kurs?
  - · Varför läser ni denna kurs?
  - Kursplan
  - Kursens examinationer
  - Planering för kursen



# Upprop



## Lärare i kursen



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### Vilka läser kursen?

- Informationsarkitekt (termin 4)
  - DA355A Data- och informationsvetenskap: Flerplattformsapplikationer med webbtekniker
- Datavetenskap och applikationsutveckling (termin 4)
  - DA344A Webbapplikationer för mobila enheter
- Samläsning innebär
  - Olika förkunskaper
  - Olika perspektiv på applikationer
  - · Samma mål med kursen
  - Samma examinerande uppgifter



# Förkunskaper?

Hur webbiga är ni?



# Informationsarkitekter?

Hur skulle ni beskriva er kunskap inom området?



# Applikationsutvecklare?

Hur skulle ni beskriva er kunskap inom området?

# Förkunskaper

- HTML?
- CSS?
- JavaScript?
  - jQuery?
  - · Andra bibliotek?
- JSON?
- XML?
- Övrigt?





# Förväntningar?

Vad vill ni få ut av denna kurs?



# Funderingar?

Något som vi inte ska missa i kursen?

# Varför är kursen relevant?

# Total number of Websites

1,128,160,930

Websites online right now

# Internet users in the world 3,533,744,109

# Internet!= WWW

Year (June)	Websites	Change	Internet Users	Users per Website	Websites launched
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
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	Twttr
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
1996	257,601	996%	77,433,860	301	
1995	23,500	758%	44,838,900	1,908	Altavista, Amazon,

# När började ni använda webben?

## 1991 – World wide web

#### 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 <u>executive summary</u> of the project, <u>Mailing lists</u>, <u>Polic</u>, November's <u>W3 news</u>, <u>Frequently Asked Questions</u>.

#### 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

#### <u>Bibliography</u>

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.

### 1994 - Yahoo





Yellow Pages - People Search - City Maps -- Stock Quotes - Sports Scores

- Arts and Humanities Architecture, Photography, Literature...
- Business and Economy [Xtra!] Companies, Investments, Classifieds...
- Computers and Internet [Xtra!] Internet, WWW, Software, Multimedia...
- Education Universities, K-12, College Entrance...
- Entertainment [Xtra!] Cool Links, Movies, Music, Humor...
- Government 96 Elections, Politics [Xtra!], Agencies, Law, Military...
- Health [Xtra!] Medicine, Drugs, Diseases, Fitness...
- News and Media [Xtra!] Current Events, Magazines, TV, Newspapers...
- Recreation and Sports [Xtra!] Sports, Games, Travel, Autos, Outdoors...
- Reference Libraries, Dictionaries, Phone Numbers...
- Regional Countries, Regions, U.S. States...

### 1995 - Altavista





Tip: To find an old friend or information about someone, try: Santa Claus or "Santa Claus"

Using a capital letter ensures that only that capitalization will be found.

#### 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 <u>100 Hot Web Sites</u>. 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 <u>million title catalog</u> by author, subject, title, keyword, and more... Or take a look at the <u>books we recommend</u> in over 20 categories... Check out our <u>customer reviews</u> and the <u>award winners</u> from the Hugo and Nebula to the Pulitzer and Nobel... and <u>bestsellers</u> 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 order, you will be given the opportunity to create an account.

## 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!

<u>Take a look at the listings</u>. 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 <u>wanted</u> page.

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

Join our community. Become a registered user. Registered users receive <u>additional benefits</u> such as daily updates and the right to participate in our user feedback forum and the bulletin board.

## 1998 - Google



Search the web using Google!

10 results 
Google Search I'm feeling lucky

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

#### **About Google!**

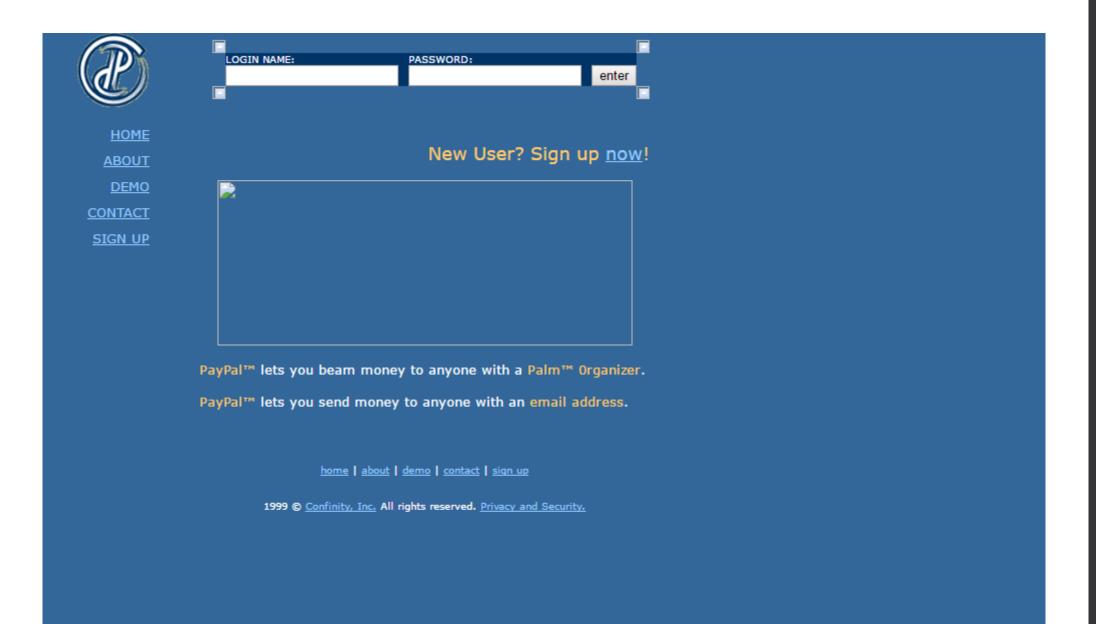
Stanford Search Linux Search

Get Google! updates monthly!

your e-mail Subscribe Archive

Copyright @1997-8 Stanford University

# 1999 - Paypal



## 2003 - LinkedIn



Sign In

#### Already a member? Sign In

#### Lost Your Invitation?

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

Send Replacement

Linked In 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.

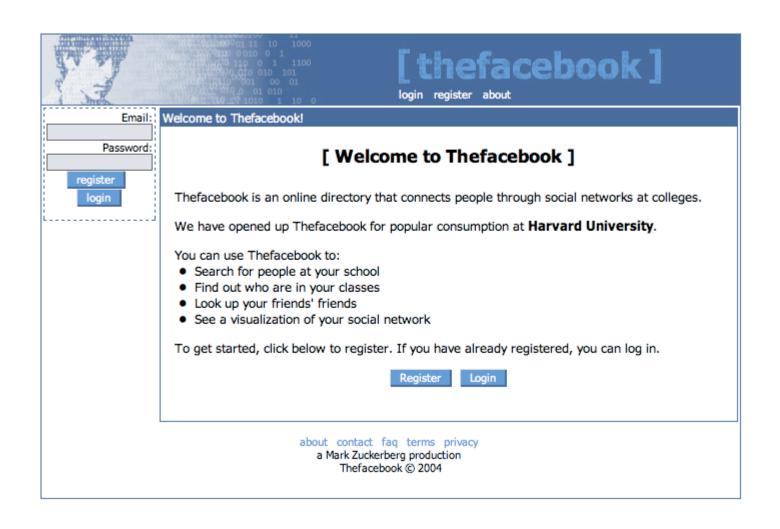
Make contact with thousands of professionals, through trusted connections, and help yourself and your colleagues get it done.

Join Today

Privacy Policy | Copyright Policy | About LinkedIn | Customer Service/FAQ

All content Copyright © 2003, LinkedIn, Ltd. All rights reserved.

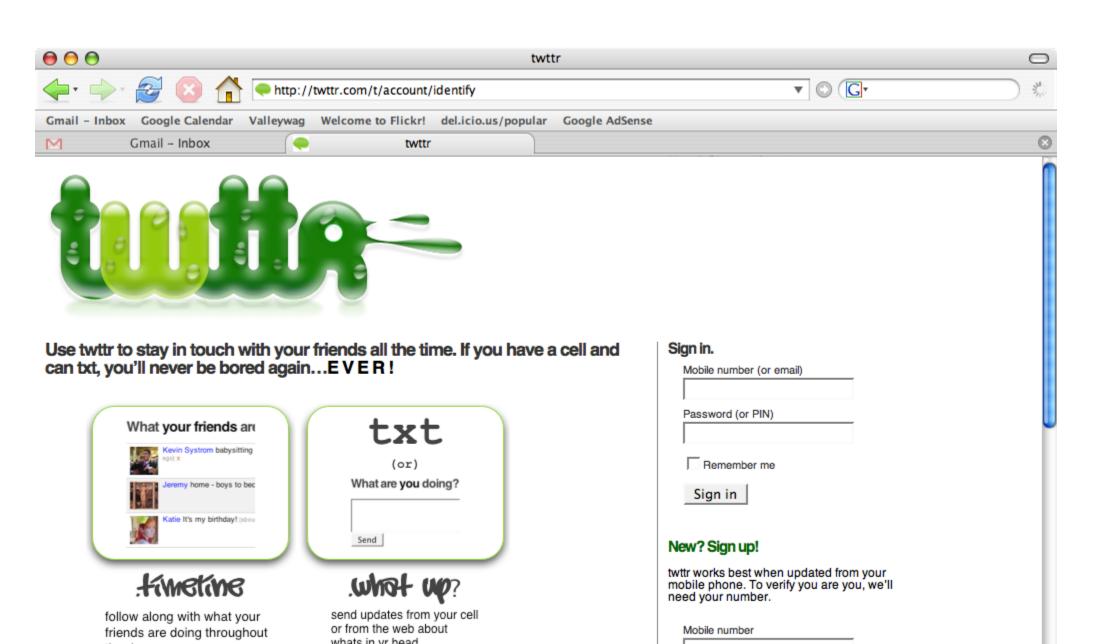
## 2004 - thefacebook



## 2005 - YouTube



## 2006 - Twitter



## 2008 - Dropbox



Log in

Beta signup



# På "bara" 20år har det hänt en del...

# http://www.internetlivestats.com/

Dagsaktuellt.

# Hur ansluter ni er till omvärlden?

## Tankeverkstad

• Vad gör ni på internet? Top 5

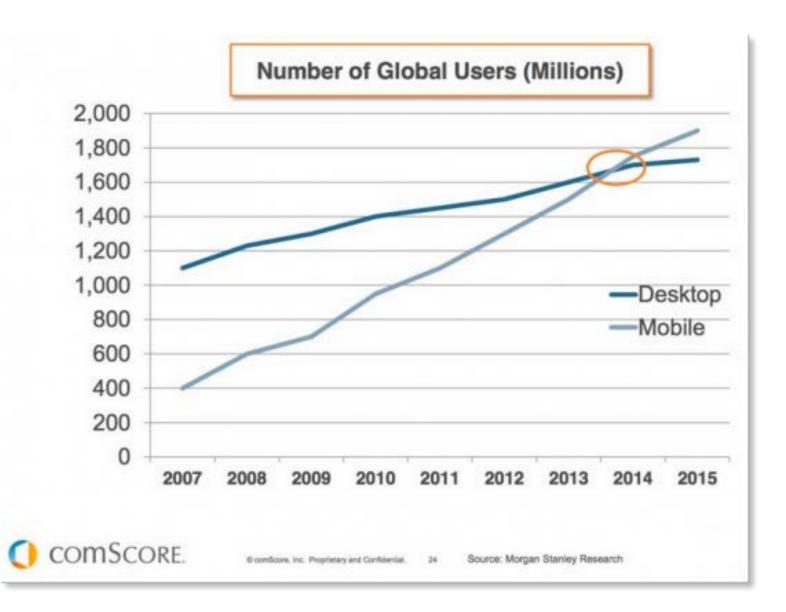
• Vilka tjänster använder ni? Top 5

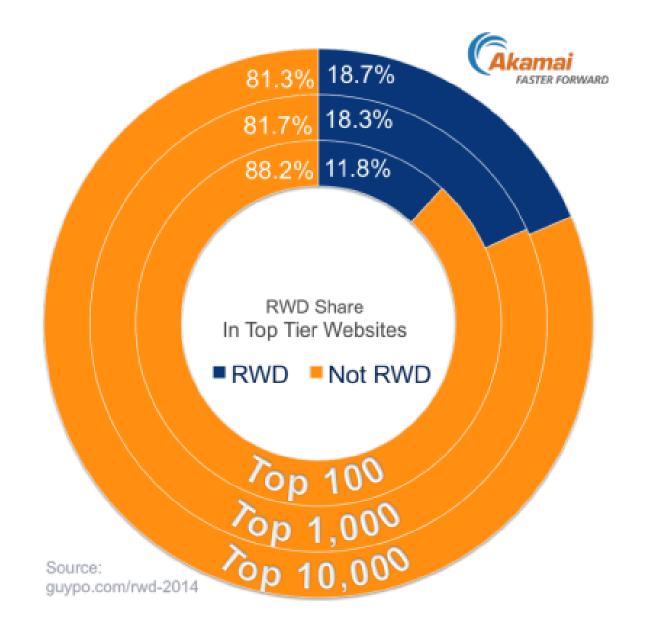
• Vilken plattform använder ni till detta? Dator/Tablet/Mobil/Annan (i %)

- Hur tror ni att detta ser ut för andra målgrupper?
  - < 20 år
  - < 30 år
  - < 40 år
  - < 50 år
  - $\cdot > 50 \, \text{år}$

## Varför läser vi denna kurs?

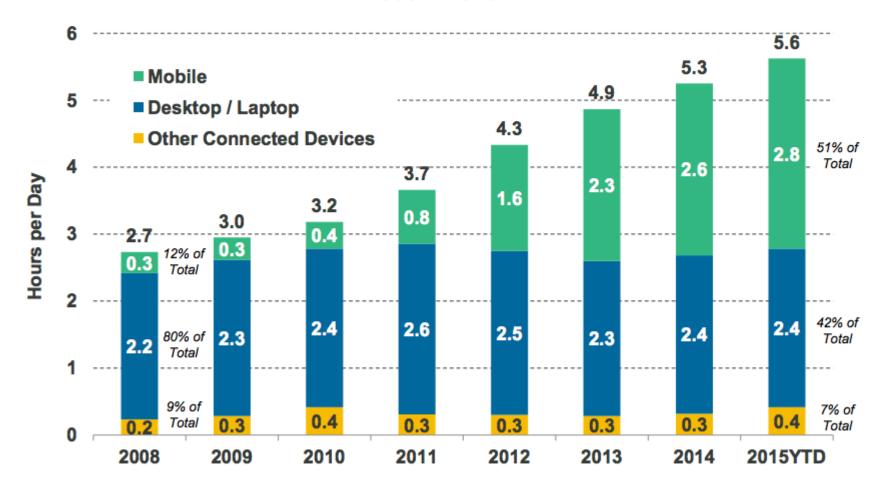
- För att få ett perspektiv på mobil webbutveckling
  - Vilka alternativ finns?
  - · Vilka fördelar & nackdelar innebär webben för handhållna enheter?
  - Vilka möjligheter och begränsningar erbjuder dagens webblösningar?
- Ge en inblick i mobil webbutveckling
  - Vad kan HTML5, CSS3 & JavaScript erbjuda?
  - Vilka externa bibliotek/ramverk finns för
    - Utökad funktionalitet
    - Effektivisering/optimering av kod
- Hur vi kan använda webbtekniker för utveckling med fokus på flera plattformar (iOS, Android, Windows, etc.)





#### Internet *Usage* (Engagement) Growth Solid +11% Y/Y = Mobile @ 3 Hours / Day per User vs. <1 Five Years Ago, USA

### Time Spent per Adult User per Day with Digital Media, USA, 2008 – 2015YTD



#### Multi-screen guidelines

## Make sure your site's ready for mobile-friendly Google search results

<

NEXT: POLICY FAQS FOR MOBILE OPTIMIZED (MULTI-SCREEN) WEBSITES >

Starting April 21, 2015, Google Search will be expanding its use of mobile-friendliness as a ranking signal. This change will affect mobile searches in all languages worldwide and will have a significant impact in Google Search results. Users will find it easier to get relevant, high quality search results optimized for their devices. To help you make sure your website is ready for this search change, we've put together the following frequently asked questions:

#### Will this change affect my desktop traffic?

No. This change will affect mobile searches in all languages worldwide.

#### How can I check if my site is mobile-friendly?

You can check your site by testing your pages with the Mobile-Friendly Test tool ②. This tool shows how Google Search sees your pages. To get a list of mobile usability issues across your sites, log in to your Search Console account ② and use the Mobile Usability Report ②.

## Vilka språk kommer vi att använda?



## Kursplanen – Kursens innehåll

- Översikt av aktuella webbtekniker
  - HTML
  - · CSS
  - JavaScript
- Möjligheter och begränsningar med webbapplikationer
- Utvecklingsmiljö och arbetssätt
- Konstruktion av webbapplikationer
- Designprinciper och användargränssnitt
- Användning av enhetens hårdvarufunktionalitet

## Kursplan – Lärandemål

#### Kunskap och förståelse

- Grundläggande byggstenar och begrepp vid utveckling av webbapplikationer
- Begränsningar och möjligheter för webbapplikationer
- Designprinciper och utformning av användargränssnitt för webbapplikationer

## Kursplan – Lärandemål

#### Färdighet och förmåga

- DA355A (Informationsarkitekt)
  - konstruera webbapplikationer som uppfyller principer för flerplattformsdesign
  - använda enhetens resurser i praktisk tillämpning
  - · använda lämpliga utvecklingsmiljöer vid konstruktion av webbapplikationer
  - söka, samla, värdera och kritiskt tolka information relevant för egna utvecklingsprojekt
- DA355A (Datavetenskap och applikationsutveckling)
  - Konstruera webbapplikationer som uppfyller designprinciper
  - · Använda enhetens hårdvarufunktionalitet i praktisk tillämpning
  - · Använda lämpliga utvecklingsmiljöer vid konstruktion av webbapplikationer

## Kursplan – Bedömingsformer

#### Krav för godkänd

• Godkända inlämningsuppgifter (5 hp) och godkänt projekt (2.5 hp).

#### Krav för väl godkänd

• Väl godkänd på inlämningsuppgifterna samt godkänt projekt.

## Planering för kursen

Vecka	Tema	
3	APP: Intro HTML & CSS	IA: Repetition JS
4	APP: Intro CSS & JS	IA: Repetition JS
5	Responsiv design	
6	Introduktion till jQuery & Ajax	
7	HTML 5 & handhållna enheter	
8	Externa ramverk	
9	Porta till app (Phonegap): App Store, Google Play	
10	Projekt	
11	Projekt	
12	Projekt + projektredovisning	

## En typisk vecka

• Måndag, 10-12: Föreläsning

• Tisdag, 13-15: Föreläsning

• Torsdag, 8-12: Laboration



## Kursens examinerade moment

#### • Inlämningsuppgift 1

- Skapa en responsiv webbplats (desktop/surfplatta/mobil)
  - Utan externa ramverk
- Enklare JavaScript/jQuery
  - Interaktiv meny
  - Någon annan interaktiv funktion

#### • Inlämningsuppgift 2

- Skapa en responsiv webbplats m.h.a. externt bibliotek (bootstrap, material design, etc.)
- Bygga mot ett externt API
- Fånga media genom webbplatsen (ljud/bild/video)

#### Projekt

· Skapa en webbplats med fokus på mobil/tablet för ett givet syfte.

## Resurser

- Internetbaserade resurser
- Weyl, Estelle (2013) Mobile HTML5. Using the latest today, O'Reilly Media





## http://mah-dv.github.io/

Kursens webbplats

INSTALLING THINGS HAS GOTTEN SO FAST AND PAINLESS. WHY NOT SKIP IT ENTIRELY, AND MAKE A PHONE THAT HAS EVERY APP "INSTALLED" ALREADY AND JUST DOWNLOADS AND RUNS THEM ON THE FLY?

I FELT PRETTY CLEVER UNTIL I REALIZED I'D INVENTED WEBPAGES.

# Frågor?