

CSC 309 Introduction

Karen Reid

<http://www.teach.cs.toronto.edu/~csc309h/winter/>

(available later today)

Welcome!

Karen Reid



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CSC108 Fall 2009: Introduction to Computer Programming admin admin (a) Log out

MarkUs Dashboard Assignments Users Notes Summary Key Pairs

A1 Settings Groups Graders Submissions Summaries

Assignment A1 : c8mahler A1 (c8mahler) Download

Previous Submission Notes (0) | (Total Mark: 8.25 / 17.0) | Set to Complete Release Next Submission

Source Code Annotations

A1/reactors.py New Annot.

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```
15.
16. class IReactorInstaller(Interface):
17.     """
18.         Definition of a reactor which can probably be installed.
19.     """
20.     shortName = Attribute("""
21.         A brief string giving the user-facing name of this reactor.
22.     """)
23.
24.     description = Attribute("""
25.         A longer string giving a user-facing description of this reactor.
26.     """)
```

Marks Summary Tags

Expand All Collapse All Expand Unmarked

+ Aliquam dolor dolore est libero at.
vel Molestias dolor nemo repellat. 0.0 / 2.0

+ Non.
quo distinctio necessitatibus nihil Corporis qui incidunt. 0.0 / 3.0

+ Doloremque.

MarkUs (David Liu)

- Ruby on Rails

- written by undergrads (+150)

TAPP (Mathew Zaleski)

- React on thin Rails back end

- also written by undergrads

Goals

- Build a complete web application that you can include in a portfolio to show off your work.

Goals

- Describe the components of a web application.
- Explain the basic architecture of a web server.
- Compare different frameworks.
- Write and debug programs that manipulate the DOM.
- Use browser developer tools to analyze and debug.
- Describe and use multiple models for communication between web server and client.

What aspects of each topic or concept in this course will be relevant 5 years from now?

What have you heard about this course?

Complaints:

- “I didn’t learn the technology I wanted to learn”
- “It was too basic”
- “It was too advanced”
- “I had to learn everything myself on stackoverflow”
- “Lectures were useless”

Course Structure

5 quizzes (3% each)	Tutorials	Try out lecture concepts	solo
Feb 2 (10%)	Project Phase 1	APIs	group of 3 or 4
Mar 2 (15%)	Project Phase 2	Front End	group of 3 or 4
Mar 30 (20%)	Project Phase 3	Back End	group of 3 or 4
Apr 2-5 (5%)	Project Demo	Show off your work to TAs and classmates	groups of 3 or 4
TBA (35%)	Final Exam	Focus on lecture concepts	solo

Course Topics

- HTML, CSS, Layout, Responsive Design
- jQuery, AJAX, JSON
- REST API, Sessions + Cookies, Forms
- Node.js, Express.js, Databases, React.js
- Web Architectures, Performance
- Web Security

History

Hypertext



- Vannevar Bush
- 1945 Essay, “As We May Think”
- “The **memex** was also to be a **storage and retrieval device** using microfilm. It would consist of a desk with viewing screens, a keyboard, selection buttons and levers, and microfilm storage. Information stored on the microfilm could be retrieved rapidly and projected on a screen. The machine was to extend the powers of human memory and association. Just as the human mind forms memories through associations, the user of the memex would be able to make **links** between documents.” (<http://www.ibiblio.org/pioneers/bush.html>)
- Ted Nelson coined the word hypertext in the 1960's and credits Bush.

Current project: <https://hyfen.net>



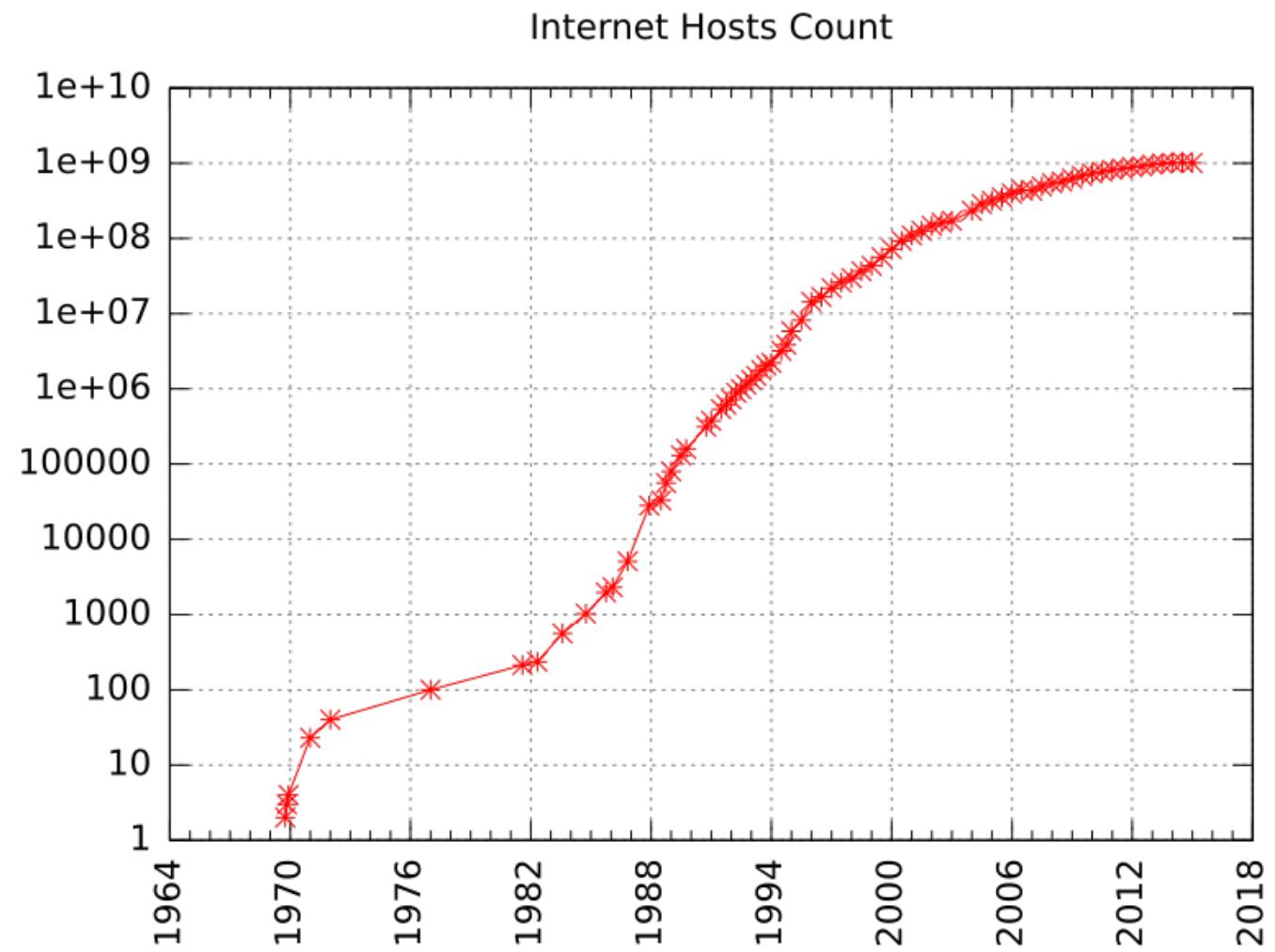
Xanadu



- Ted Nelson coined the word **hypertext** in 1965
- Envisioned Xanadu as a tool to preserve and increase humanity's literature and art.
- Information stored as connected literature.

The Internet

- 1971 - ARPANET has 23 hosts



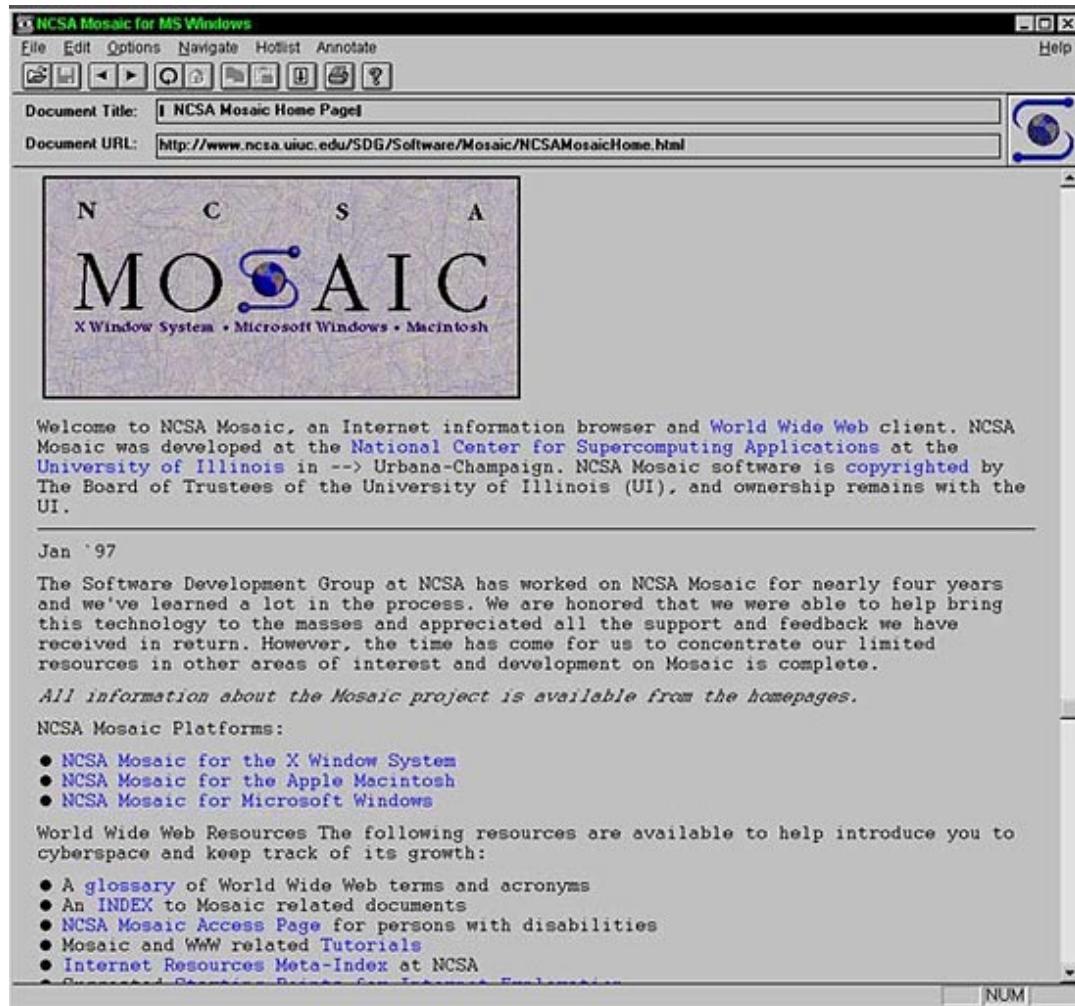
Tim Berners-Lee

- 1989 wrote a proposal to solve information sharing problem at CERN
- 1990 wrote HTML, HTTP, URI
- 1991 available outside CERN
- 1994 moved to MIT to found W3C



Early Browsers

- Marc Andreessen and other students at NCSA developed Mosaic
- 0.1a released in 1993
- supported by NSF funding



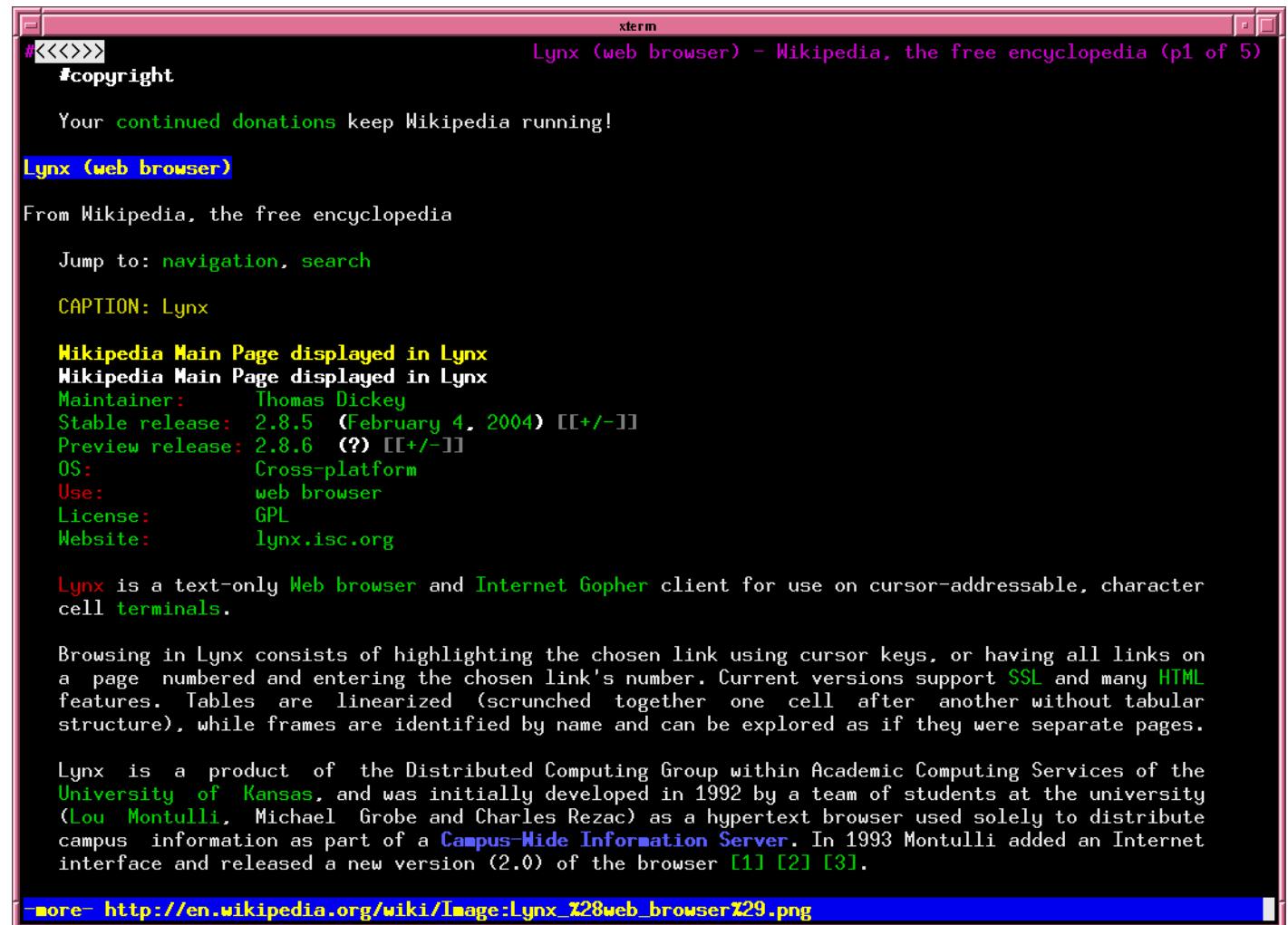
Netscape

- Andreessen founded Netscape Communications Corp.
- 1996: 75% of web users used Netscape
- Many browser features originated with Netscape
 - cookies, frames, Javascript
- Browser wars with Microsoft and increasingly buggy software led to Netscape's demise
- 1998 released code base to open source -> Mozilla was born



Lynx

- Terminal-based web browser



Search

- Excite 1993
- Yahoo! Directory 1994
- Lycos 1994
- AltaVista 1995
- Inktomi 1996
- Google 1997-98



Economic Shifts

- Internet economy GDP share:
 - Canada 3.6%
 - USA 5.4%
 - China 6.9%
 - UK 12% (?)
- Projections are that half of the world's population currently use the Internet



Analysis of the Communications Security Establishment Act and Related Provisions in Bill C-59 (An Act respecting national security matters), First Reading (December 18, 2017)

December 18,
2017

[Transparency and Accountability](#)

Citizen Lab and CIPPIC Release Analysis of the Communications Security Establishment Act

The Citizen Lab and the Canadian Internet Policy & Public Interest Clinic (CIPPIC) have collaborated to produce a report which provides timely legal analysis, political context, and historical background on the Communications Security Establishment Act and related provisions in Bill C-59 (An Act respecting national security matters), First Reading (December 18, 2017).

Twitter's Harassment Problem Is Baked Into Its Design

Many women recently boycotted the social network, protesting its failure as a public sphere where all voices are welcome.

DEBBIE CHACHRA | OCT 16, 2017 | TECHNOLOGY

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