1 Beginnings of the Internet

See Hobbes' Internet Timeline ⟨URL:http://www.zakon.org/robert/internet/timeline/⟩

2 Early Days

1968 Englebart's demo of the first hypertext system

- See poor quality video at ⟨URL:http://sloan.stanford.edu/mousesite/1968Demo.html⟩
- The black and white film is much better
- Until about two years ago that system did things that no web browser could!

1969 ARPANET is live

User Population A network for scientists

Apps File sharing, limited discussion

3 Later, but before the WWW

Size Exponential growth of sites and user numbers continues

Users Not just scientists but still mostly Universities and Technology Companies

Apps Discussion has moved beyond e-mail

- But e-mail is still the killer app
- Thousands of mailing lists

More Apps

- relay chats, newsgroups, something like instant messaging
- FTP

Spam Brad Templeton claims first spam came from a DEC marketroid

4 Late 1980s/Early 1990s

Size Exponential growth continues

Users Spreading to middle-class populations of industrialized countries

- Those who pay for access (viz. not students or employees) often pay per packet
- Many dial-up lines

Apps

- E-mail is still killer app
- Thousands of mailing lists
- Usenet (newsgroups) are huge
- Internet relay chat
  - ▷ every app had its own interface

Search Engines Archie revolutionizes FTP use

Spam B1FF and Canter & Siegel (knock Oz off 'net)

4.1 'When It All Changed'

- gopher and the information superhighway
  - a view of the Internet as for 'good & proper' purposes
    - no games or porn
    - no real notion of e-commerce
    - great resistance to commercial use of Usenet
  - one interface to rule them all
    - gopher has a menu structure
    - easier to use (recognition rather than recall)
    - hides much of the underlying complexity
    - learn only one interface for everything
  - **Search Engines**: Jughead and Veronica (for gopher)

4.2 A New View Of Commercial Content

1991: WWW announced (by TBL, on `alt.hypertext` etc.) from CERN
Only interested customers pay for access
The WWW extended the single UI concept
22 April 1993: NCSA releases Mosaic

- first publically available graphical browser