

#### Before the internet...





- The telegraph (1836):
  - Revolutionized human telecommunication...
  - ...but kind of slow.
- The transatlantic cable (1858-1866):
- Telephone (1876):
  - ...dial-up anyone?

### 1957! USSR lunches Sputnik!





- President Dwight D. Eisenhower saw the need for the Advanced Research Project (PA)
- The organization Networking....net...

  people, who deve interNET...hmmm st successful satellite in 18 months
- Several years later A began to focus on computer networking and communications technology...

## Now a really cool guy comes along....

- In 1962, Dr. J.C.R. Licklider was chosen to head ARPA's research in improving the military's use of computer technology.
- Licklider was a visionary who sought to make the government's use of computers more interactive.
- need Universities=lots of smart people
  =lots of knowledge...
  So let them take over!

# Stanford, UCSB, UTAH, and the first instant messenger!

→ Kleinrock, a computer science professor at UCLA, and his small group of graduate students hoped to log onto the Stanford computer and try to send it some data. They would start by typing "login," and seeing if the letters appeared on the Stanford monitor.

"We set up a telephone connection between us and the guys at SRI...," Kleinrock ... said in an interview: "We typed the L and we asked on the phone,

"Yes, we see the L," came the response.

"We typed the O, and we asked, "Do you see the O."

"Yes, we see the O."

"Then we typed the G, and the system crashed"...

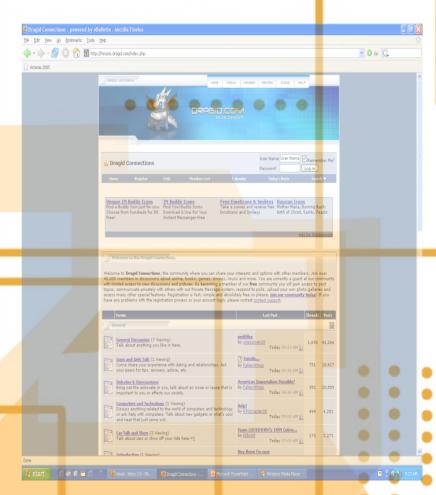
Yet a revolution had begun"...



- 1971: email invented
- 197 2: Internetworking Working Group (INWG) created to establish agreed upon protocols.
  - This way people can create websites that EVERYONE can see and use, and not just one or two people.
- First international connections to the ARPANET: University College of London (England) and Royal Radar
  - **Establishment (Norway)**

### And some more history....

- 1974: Packets become mode of transfer:
  - Transmission Control Program (TCP) specified. Packet network Intercommunication -- the basis of Internet Communication.
  - Telenet, a commercial version of **ARPANET**, opened -- the first public packet data service.
- 1979: Newsgroups born
  - People share knowledge and talk
    - about anything
  - Its like a public forum... ahhhh....
  - **FORUMS!**



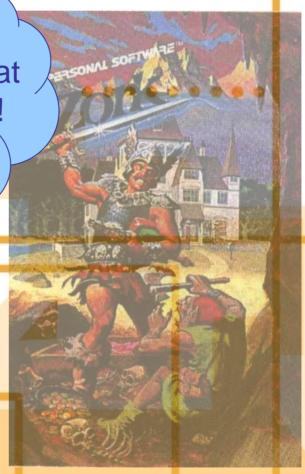
## ...Okay so there is a lot more history

1979: first
Well they weren't that
Cool, it was all text!
Zork anyone?

Dunge

multiuser

Interaction dventure games and games, rich and detailed databases.



#### Modern Internet

- 1982: DCA and ARPA establishes the Transmission Control Protocol (TCP) and Internet Protocol (IP), as the protocol suite, commonly known as TCP/IP, for ARPANET.
  - So why is this so great?
  - Leads to one of the first definitions of an internet as a connected set of networks, specifically those using TCP/IP, and Internet as connected TCP/IP internets.
- Now for the next 10 years a bunch of really cool technology stuff happens (google it if interested), and more and more people are using the internet... until finally...

#### And here we are...

- In 1990, the ARPANET was retired and transferred to the NSFNET.
- The NSFNET was soon connected to the CSNET, which linked Universities around North America.
- And then to the EUnet, which connected research facilities in Europe.
- The use of the Internet exploded after 1990, causing the US Government to transfer management to independent organizations starting in 1995.
  - And here we are.

