

Internet

Agenda

- What is Internet ?
- History of Internet



- Watch the video at

<https://www.youtube.com/watch?v=nAzmdrxdxv6M>

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What is Internet ???

- The Internet is the global network system which connects millions of computers.
- Internet links millions of computers all over the world.
- It allows your computer to get information stored on other computers far away.

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History

- ❖ The Internet has no single “inventor.” Instead, it has evolved over time
- ❖ The Internet got its start in the United States more than 50 years ago as a government weapon in the Cold War.
- ❖ For years, scientists and researchers used it to communicate and share data with one another.
- ❖ Today, we use the Internet for almost everything, and for many people it would be impossible to imagine life without it.

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1. Sputnik Effect

- ❖ On October 4, 1957, the Soviet Union launched the world's first manmade satellite "Sputnik" into orbit.
- ❖ America became serious about Science and Technology as an after shock of Sputnik.
- ❖ The federal government itself formed new agencies, such as the National Aeronautics and Space Administration (NASA) and the Department of Defense's Advanced Research Projects Agency (ARPA), to develop space-age technologies such as rockets, weapons and computers.

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2. *J.C.R. Licklider*

- ❖ In 1962, a scientist J.C.R. Licklider from M.I.T. proposed a solution to this problem: a “galactic network” of computers that could talk to one another. Such a network would enable government leaders to communicate even if the Soviets destroyed the telephone system.
- ❖ He envisioned a globally interconnected set of computers through which everyone could quickly access data and programs from any site. In spirit, the concept was very much like the Internet of today.
- ❖ Leonard Kleinrock at MIT published the first paper on packet switching theory in July 1961 and the first book on the subject in 1964.

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J.C.R. Licklider



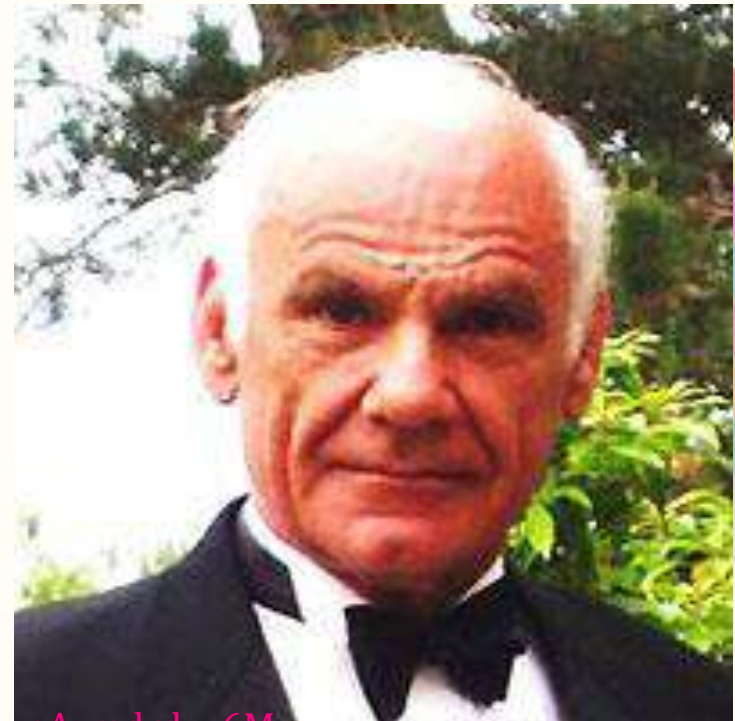
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3. Packet switching

- ❖ In 1965, another M.I.T. scientist Leonard Kleinrock developed a way of sending information from one computer to another that he called “packet switching.”
- ❖ Packet switching breaks data down into blocks, or packets, before sending it to its destination. That way, each packet can take its own route from place to place.
- ❖ Lawrence Roberts of MIT connected a Massachusetts computer with a California computer in 1965 over dial-up telephone lines.

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Leonard Kleinrock Lawrence Roberts



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4. ARPAnet delivered LOGIN

- ❖ Roberts moved over to ARPA in 1966 and developed his plan for ARPANET.
- ❖ In 1969, ARPAnet delivered its first message: a “node-to-node” communication from one computer to another.
- ❖ The first computer was located in a research lab at UCLA and the second was at Stanford; each one was the size of a small house. The message “LOGIN” was short and simple, but it crashed the fledgling ARPA network anyway: The Stanford computer only received the note’s first two letters.
- ❖ By the end of 1969, just four computers were connected to the ARPAnet, but the network grew steadily during the 1970s.

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5. Bob Kahn and Vinton Cerf: TCP

- ❖ As packet-switched computer networks multiplied, however, it became more difficult for them to integrate into a single worldwide “Internet.”
- ❖ By the end of the 1970s, Bob Kahn and Vinton Cerf had begun to solve this problem by developing a way for all of the computers on all of the world’s mini-networks to communicate with one another. He called his invention “Transmission Control Protocol,” or TCP.

Vinton Cerf



Bob Kahn



6. *Tim Berners-Lee : World Wide Web*

- ❖ In 1991, a computer programmer in Switzerland named Tim Berners-Lee introduced the World Wide Web: an Internet that was not simply a way to send files from one place to another but was itself a “web” of information that anyone on the Internet could retrieve. Berners-Lee created the Internet that we know today.
- ❖ In 1992, a group of students and researchers at the University of Illinois developed a sophisticated browser that they called Mosaic. (It later became Netscape.) Mosaic offered a user-friendly way to search the Web
- ❖ That same year, Congress decided that the Web could be used for commercial purposes.

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Tim Berners-Lee



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Thank You !!!!!

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