

### What is the "internet"?

The Internet is a global information network that connects millions of computers It is growing exponentially and provides a unique information resource that is global, diverse and current.



# What do we use the internet for?

- Browsing information
- Social media and creating awareness
- For entertainment (music, videos, movies)
- Communicating with people all over the world.
- Sharing information
- E-commerce and banking



#### Internet in the 1950's

- 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.



- Scientists and researchers used it to communicate and share data with one another through what was known as DARPNET(Defense's Advanced Research Projects Agency Network).
- This was in response to the Soviet Union bombings and a need to create a communication network which was free from interference and disruption.

#### Internet in the 1960's

- In 1962, a scientist from M.I.T. and DARPA named J.C.R. Licklider proposed : 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.
- In 1965, another M.I.T. scientist 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.

- Without packet switching, the government's computer network—now known as the ARPANET—would have been just as vulnerable to enemy attacks as the phone system.
- In 1969, ARPANET delivered its first message: a "node-to-node" communication from one computer to another but it crashed the full network. The internet was yet to be born



#### Internet in the 1970's

- By the end of 1969, just four computers were connected to the ARPANET, but the network grew steadily during the 1970s.
- 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, a computer scientist named 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. (Later, he added an additional protocol, known as "Internet Protocol." The acronym we use to refer to these today is TCP/IP.)

 TCP/IP was described to be the "handshake" between computers all over the world. It enabled each computer to have its own identity.



### Internet in the 1980's

 Cerf's protocol transformed the Internet into a worldwide network. Throughout the 1980s, researchers and scientists used it to send files and data from one computer to another.

 However, this network was still between scientists and researchers from different universities and labs.

## Internet in the 1990's

- However, in 1991 the Internet changed again.
- 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 first browser and 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: It allowed users to see words and pictures on the same page for the first time and to navigate using scrollbars and clickable links.



- That same year, Congress decided that the Web could be used for commercial purposes. As a result, companies of all kinds hurried to set up websites of their own, and e-commerce entrepreneurs began to use the Internet to sell goods directly to customers.
- More recently, social networking sites like Facebook have become a popular way for people of all ages to stay connected.



Thank you! ③