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Computers linked around the world collectively make up the internet. The Internet is a network of millions of individual computers connected through copper cables, fiber-optic cables, wireless radio connections, telephone lines, and satellite links. It is an ever-evolving network that began with phone lines and now includes wireless connection methods. However, the basic underpinnings of the internet communications remain the same. For example, it continues to use standard protocols called the "TCP/IP, " Transfer Control Protocol/Internet Protocol. These international standards give individual devices connected on the internet a unique language for communication. Part of that language is an "IP Address" which is an individual number assigned to every device on the Internet. One connected through their ISP (Internet Service Provider) computers can exchange data through packet switching, which means your email, image or web page is broken into pieces of data, then sent as packets via the fastest possible route. When they reach their intended destination, they are reassembled. This is called "packet switching" and it is what enables the Internet to function at its current speed.

The World Wide Web is composed of various technologies that make communication between computers possible. In addition to personal computers, which are known as "clients," the WWW also has machines that serve as storage space for web content, which are called servers. There are millions of servers fulfilling unique filing tasks, such as storing email, documents, web pages, videos, and more. Within a common space, a Local Area Network (LAN) allows the connection between computers to share resources, such as often needed in an office, home or school. A router connects multiple computers and devices to a single internet connection, wirelessly or through an ethernet wired connection. A Wide Area Network (WAN) allows a broader connection of computers that span outside a confined area. Multi-national companies, for example, could have all their computers in many countries connected to their own private network. The largest network, of course, is the Internet itself, which simply consists of all computers in the world potentially connected to each other.

Currently, the Internet allows us to connect with others across the world in new ways. We can interact with people using email, blogs, live video streaming, wikis, social networking, online chats, and voice over IP. Most of these tools are accessed through the World Wide Web, which is an application that makes use of the Internet infrastructure but is not the Internet itself. WWW pages use common mark-up language called HTML (hypertext markup language) to talk to each other via HTTP, which stands for "hypertext transfer protocol." Both are common languages used to create and send pages that can contain text, images, video, audio, and other media. A web page may also include other common technologies such as Cascading Style Sheets (CCS), Flash, and JavaScript that allow the user to interact with them. Web pages can be accessed by typing the Uniform Resource Locator (URL) into a web browser, which gives the browser the web address of where to find the web page.

References

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