

# Ch.6 – college essay essay



**ASSIGN  
BUSTER**

ARPANET created in 1969 to help scientists communicate and share computer resources. UCLA, Stanford, u of utah, and u of cal santa barbara

NSF network created in 1985 to create a larger network. Connected multiple LANS, not just mainframes. Created an internet (different than the Internet)

primitive command-line user interfaces send e-mail, transfer files, run scientific calculations on Internet supercomputers, difficult to use with limited access

new user friendly internet tools introduced in 1990s, internet accounts became available, monthly subscription fee

the Internet not owned or operated by any single corporation or government

Internet backbone a network of high capacity communications links. Provides the main routes for data traffic across the Internet. Backbone links and routers- maintained by Network Service Providers

NAPs (Network access points) link and connect NSP equipment

ISP (Internet service provider) a company that offers Internet access to individuals, businesses, and smaller ISPs

modem how you communicate with an ISP. communications device such as a modem

static IP address permanently assigned

dynamic IP address temporarily assigned

domain name a key component of web page addresses and email addresses

latency elapsed time for data to make a round trip from point A to point B and back to point A. Ping and traceroute

asymmetric internet connection when upstream speeds differ from downstream speeds

symmetric internet connection when upstream and downstream speeds are the same

internet connection options fixed, portable, and mobile

dial up connection fixed internet connection, uses a voiceband modem and telephone lines to transport data between your computer and your ISP

Voiceband modem converts computer signals into audible analog signals that can travel over telephone lines. Speed is measured in bits per second

DSL connection high speed, digital, always on connection, runs over standard phone lines. Speed varies

cable connection high speed, always on connection, uses the same infrastructure as the cable television service

cable modem convert computer signals into those that can travel over the CATV network

DOCSIS compliant cable modems secures your computer from your neighbors

satellite internet service high speed, always on, asymmetric, broadcasts signals to and from a personal satellite dish

satellite modem modulates computer data signals into a frequency band to carry to the satellite dish. Satellite dish converts signals to another frequency, amplifies, and transmits

fixed wireless internet service broadcasts signals to offer internet access to large areas, always on, high speed

WiMAX most well known fixed wireless standard. Transmits data to and from WiMAX antennas mounted on towers. Transmit data at 70 mbps

portable internet access the ability to easily move your internet service from one location to another

mobile internet access offers a continuous internet connection as you are walking or riding in a bus, car, train, or plane

wifi hotspot an area in which the public can access a wifi network that offers internet service. does not typically provide acceptable mobile internet access

portable WiMAX internet access is available to subscribers anywhere within a tower's coverage. you use the same ISP whether you are at home or on the road. limited coverage

mobile WiMAX up and coming standard

WAP (wireless application protocol) provides internet access from handheld devices

wireless modems provides broadband data access by cellular service providers

cloud computing apps and data are available anytime, anywhere, on any device. Depends on a grid of servers, storage devices and protocols. SaaS

VoIP (voice over internet protocol) communication technology, a broadband internet connection is used to place telephone calls instead of the regular phone system

asynchronous types of communication internet forum, wiki, blog, tweet

grid computing system a network of computers harnessed together to perform processing tasks

distributed grids special type of grid where users voluntarily donate processing power to the grid. [email protected] project.

FTP file transfer protocol. Rules to transfer files from one computer to another over any TCP/IP network

file sharing aka P2P file sharing, allows users to obtain files from other users located anywhere on the Internet

BitTorrent file sharing protocol. Distributes the role of file server across a collection of dispersed computers

intrusion any access to data or programs by hackers, criminals, or other unauthorized persons

communications port doorway that allows a computer to exchange data with other devices

port probe uses automated software to locate computers that have open ports and are vulnerable to unauthorized access

firewall software or hardware designed to filter out suspicious packets attempting to enter or leave a computer

NAT (Network address translation) process router uses to keep track of packets and their corresponding private or public IP addresses

VPN how you can create a secure connection for remote users. Employees who need access are given instructions, addresses, and passwords to make connections