Module 4 Glossary

New terms and their definitions: Course 1 Week 4

ARPANET: The earliest version of the Internet that we see today, created by the US government project DARPA in the 1960s

Children's Online Privacy Protection Act (COPPA): Regulates the information we show to children under the age of 13

Clients: A device that receives data from a server

DARPA: A US government project in the 1960s that went on to create the earliest version of the Internet that we see today

Domain name: A website name; the part of the URL following www.

Domain Name System (DNS): A global and highly distributed network service that resolves strings of letters, such as a website name, into an IP address

Ethernet cable: It lets you physically connect to the network through a cable

Fiber optic cable: Fiber optic cables contain individual optical fibers which are tiny tubes made of glass about the width of a human hair. Unlike copper, which uses electrical voltages, fiber cables use pulses of light to represent the ones and zeros of the underlying data

Globalization: The movement that lets governments, businesses, and organizations communicate and integrate together on an international scale

Hubs: Devices that serve as a central location through which data travels through

Internet: A worldwide system of interconnected networks

Internet Corporation for Assigned Names and Numbers (ICANN): Where website names are registered

Internet of Things (IoT): The concept that more and more devices are connected to the internet in a smarter fashion such as smart thermostats that turn off the air conditioner when you leave and turn it on when you come back

Internet Protocol version 4 (IPv4): An address that consists of 32 bits separated into four groups

Internet Protocol version 6 (IPv6): An address that consist of a 128 bits, four times the amount that IPv4 uses

Internet service provider (ISP): A company that provides a consumer an internet connection

IP address: The most common protocol used in the network layer, used to helps us route information

MAC address: A globally unique identifier attached to an individual network interface. It's a 48-bit number normally represented by six groupings of two hexadecimal numbers

Network: The interconnection of computers

Network Address Translation (NAT): A mitigation tool that lets organizations use one public IP address and many private IP addresses within the network

Networking: Managing, building and designing networks

Networking protocols: A set of rules for how we transfer data in a network

Network stack: A set of hardware or software that provides the infrastructure for a computer

Router: A device that knows how to forward data between independent networks

Server logs: Text files that contains recorded information about activities performed on a specific web server in a defined period of time

Servers: Devices that provide data to other devices that request that data, also known as a client

Switches: Devices that help our data travel

Transfer Control Protocol (TCP): A protocol that handles reliable delivery of information from one network to another

Uniform Resource Locator (URL): A web address similar to a home address

WannaCry Attack: A cyber attack that started in Europe and infected hundreds of thousands of computers across the world

Wireless networking (Wi-Fi): Networks you connect to through radios and antennas

World Wide Web (WWW): The information system that enables documents and other web resources to be accessed over the Internet