Chapter 1 : Internet basics
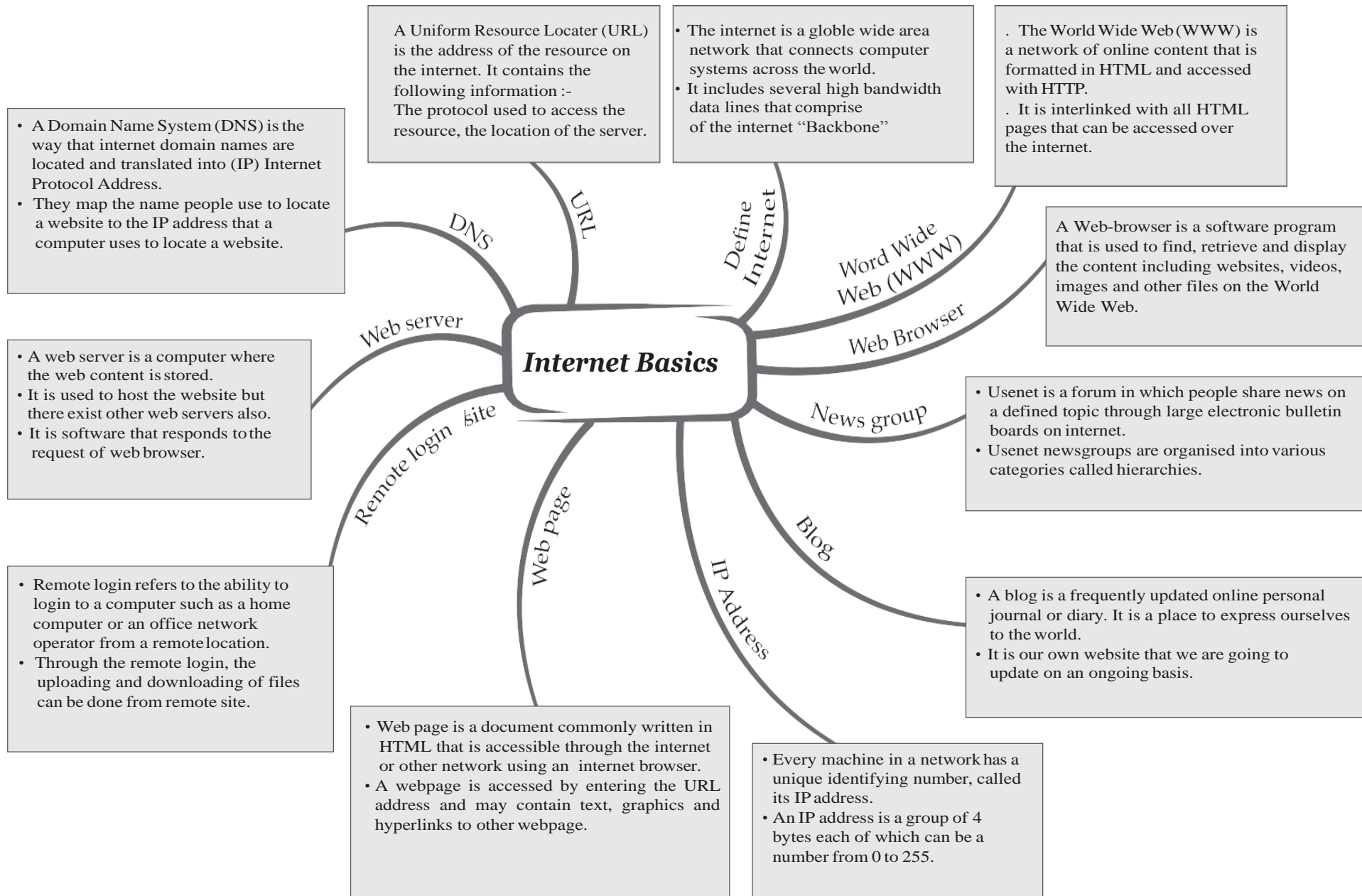
Internet Basics

- A Uniform Resource Locater (URL) is the address of the resource on the internet. It contains the following information :-
The protocol used to access the resource, the location of the server.

- The internet is a globle wide area network that connects computer systems across the world.
- It includes several high bandwidth data lines that comprise of the internet "Backbone"

- . The World Wide Web (WWW) is a network of online content that is formatted in HTML and accessed with HTTP.
. It is interlinked with all HTML pages that can be accessed over the internet.

- A Domain Name System (DNS) is the way that internet domain names are located and translated into (IP) Internet Protocol Address.
- They map the name people use to locate a website to the IP address that a computer uses to locate a website.

A Web-browser is a software program that is used to find, retrieve and display the content including websites, videos, images and other files on the World Wide Web.

- A web server is a computer where the web content is stored.
- It is used to host the website but there exist other web servers also.
- It is software that responds to the request of web browser.

- Usenet is a forum in which people share news on a defined topic through large electronic bulletin boards on internet.
- Usenet newsgroups are organised into various categories called hierarchies.

- Remote login refers to the ability to login to a computer such as a home computer or an office network operator from a remote location.
- Through the remote login, the uploading and downloading of files can be done from remote site.

- A blog is a frequently updated online personal journal or diary. It is a place to express ourselves to the world.
- It is our own website that we are going to update on an ongoing basis.

- Web page is a document commonly written in HTML that is accessible through the internet or other network using an internet browser.
- A webpage is accessed by entering the URL address and may contain text, graphics and hyperlinks to other webpage.

- Every machine in a network has a unique identifying number, called its IP address.
- An IP address is a group of 4 bytes each of which can be a number from 0 to 255.

Branches: DNS, URL, Define Internet, Word Wide Web (WWW), Web Browser, Web server, News group, Remote login Site, Web page, IP Address, Blog

Internet protocol

Internet Protocol

- File Transfer Protocol (FTP) is a standard internet protocol for transmiting files between computers on the internet. FTP is commonly used to transfer web pages files from their creator.

FTP

- Secure copy protocol (SCP), which means you can copy files across SSH connection. It is a very secure way to copy files between computers

SCP

- A network protocol is a set of rules for communication among networked devices.
- It generally includes rules of how and when a device can send or receive the data, how is the sent data packaged and how it reaches its destination.

Define

- The Secure Shell (SSH) is a protocol for secure remote login from one computer to another.

SSH

TELNET

- The word TELNET stands for Terminal Network. It is used for logging onto remote computer connected via the internet.

Point to Point Protocol (PPP)

TCP/IP

- Transmission Control Protocol/Internet Protocol (TCP/IP) is the communication protocol for the communication between computers on internet.
- It defines how electronic devices should be connected to the internet, how data should be transmitted between them.

- PPP comes into play when we establish a connection to our ISP via a modem. It comes from the fact that when we are connected to our ISP, the ISP and we make up two points on the network, hence the protocol is used.

SMTP

- Simple Mail Transfer Protocol (SMTP) is a set of communication guidelines that allow software to transmit an electronic mail over the internet.
- It is used to set up communication rules between servers.

SFTP

POP3

- SFTP is the secure version of FTP, which facilitates data access and data transfer over a Secure Shell (SSH) data stream. It is a part of SSH protocol.

HTTPS

HTTP

Remote login

- Post Office Protocol version 3 (POP3) is a type of computer networking and internet standard protocol that extracts and retrieves email from a remote mail server for access by the host machine.

- HTTPS is a secure version of HTTP, the protocol over which data is sent between browser and the website that you are connected to.

- Hyper Text Transfer Protocol (HTTP) is an application level protocol for distributed, collaboration, hyper media information system.
- It is connectionless, media independent and stateless.

- Remote login refers to the ability to login to computer, such as a home computer or an office network computer from a remote location. It can be set up by using a LAN, WAN or even VPN, so that the resources and system can be accessed remotely.