Unit One

Revision of Unit Two of shastri second first semester

<u>File Transfer Protocol (FTP)</u>

The File Transfer Protocol (FTP) service allows an Internet user to move a file from one computer to another on the Internet. A file may contain any type of digital information, such as text document, image, artwork, movie, sound, software, etc. Hence anything that can be stored on a computer can be moved with FTP service. Moving a file from a remote computer to one's own computer is known as downloading and moving a file from one's own computer to remote computer is known as uploading.

Common uses of FTP

1. Download files
2. MP3 music sharing
3. Companies have FTP servers that allow users to send and receive files.
4. Most universities have FTP servers that allow their students to download course materials , and upload assignment for submission.
5. Use FTP to transfer files among users, especially if files are too large.

Requirements for using FTP

1. FTP Client should be installed in the system
2. FTP server address
3. FTP Username and Password

FTP Clients

The files can be uploaded or downloaded in File Transfer Protocol using the FTP clients. Many FTP clients are available

- <u>FileZilla</u> (For Linux, Windows, MAC)
- <u>Cyberduck</u> (For Windows and MAC)
- <u>Winscp</u> (For Windows)

FTP clients are of two types GUI based FTP Clients and Browser based FTP clients

A) <u>GUI Based FTP clients</u>

<u>GUI based</u> FTP clients are WS_FTP client and cuteFTP client

1. WS_FTP Client

Transferring a file with WS_FTP

- Find the file name which you want to transfer and select it.
- Specify the ASCII file type for picture files and binary type for data files.
- Click the button with an arrow pointing in the direction you want to move a file or files.

2. Cute FTP

To move a file from the local system to the remote system or vice versa do this

- Locate the file you want to transfer
- Drag the file or files you want to move
- Click the Yes button to complete the transfer.

B) <u>Browser based FTP clients</u>

1. <u>FTP with internet explorer</u>

Windows Explorer which makes remote file access as easy as accessing folders on your own computer.

2. <u>FTP with Netscape Navigator</u>

Netscape Navigator has similar FTP features as in internet explorer.

<u>FTP Server</u>

A computer dedicated to receive an FTP connection is referred to as an FTP server of FTP site . FTP servers are devised into two parts.

- Anonymous server
- Non-anonymous server

<u>Anonymous server</u>

Anonymous server is the most common use of FTP. FTP sites that allow anonymous FTP do not require a password for access. You only have to log in as anonymous and enter your email address as password.

<u>Non-anonymous server</u>

If you use a non- anonymous server, you must login as yourself and give your password.

FTP Authentication

<u>Basic **authentication**</u> is a built-in **authentication** method that requires users to provide a valid Windows user name and password to gain access to content. The user account can be local to the **FTP** server, or a domain account. Note. Basic **authentication** transmits unencrypted passwords across the network.

<u>Anonymous **authentication**</u>: This form of **authentication** allows access to an **FTP** site without a user account on your server or domain, and is most often used for public **FTP** sites.

<u>FTP commands</u>

FTP commands

Some useful FTP commands available on most systems include:

FTP Command	Description of Command
append	Append text to a local file.
ascii	Switch to ASCII transfer mode.
bell	Turns bell mode on or off.

FTP Command	Description of Command
binary	Switches to binary transfer mode.
bye	Exits from FTP.
cd	Changes directory.
close	Exits from FTP.
delete	Deletes a file.
debug	Sets debugging on or off.
dir	Lists files, if
disconnect	Exits from FTP.
get	Get file from the remote computer.
help	Accesses the Help screen and displays information about the command if the command is typed after help.
lcd	Displays local directory if typed alone or if path typed after lcd will change the local directory.
mget	Get multiple files.
mkdir	Make directory.

FTP Command	Description of Command
mls	Lists contents of multiple remote directories.
mput	Send multiple files.
open	Opens address.
prompt	Enables or disables the prompt.
put	Send one file.
pwd	Print working directory.
quit	Exits from FTP.
quote	Same as the literal command.
recv	Receive file.
rename	Renames a file.
rmdir	Removes a directory on the remote computer.
send	Send single file.
status	Shows status of currently enabled and disabled options.
user	Send new user information.

Unit Two

Web publishing

Web Publishing. Web publishing, or "online publishing," is the process of publishing content on the Internet. It includes creating and uploading websites, updating webpages, and posting blogs online. The published content may include text, images, videos, and other types of media.

Components of Web publishing

- Domain name planning and registration.

- Web hosting.

- Web design and development.

- Promotion.

- Maintenance.

Web hosting

Web Hosting typically refers to a **hosting** services provider that provides server **hosting** space for websites of various types. A web hosting service is a type of Internet hosting service that allows individuals and organizations to make their website accessible via the World Wide Web.

Websites are **hosted**, or stored, on special computers called servers.

web publishing - Documents incharge Standards

Every network and every computer in the networks exchange information according to certain rules called protocols.

1. Connection less and connection oriented protocols

With a connectionless protocol , clients connect to the server, make a request, get a response, and then disconnect. For the internet, HTTP (Hyper Text Transfer Protocol) is a connectionless protocol.

With a connection- oriented protocol, clients connect to the server, make a request, get a response, and then maintain the connection to handle future requests. An example of a connection-oriented protocol is File Transfer Protocol (FTP). Only 250 users can access the FTP server at a time.

2. Stateless and stateful protocols

In a stateless protocol , no information about a transaction is maintained after a transaction has been processed. In a stateful protocol, state information is kept even after a transaction has been processed. Servers using stateful protocols maintain the following information

- Status of the connection
- Processes running
- Status of the processes running

HTTP is a stateless protocol

Components of web Publishing

After creating a website, to make your website available to everyone on the Web, you need to publish it on the Web server. The Web publishing components are

1. Web browser

A web browser is a software package supplied free by Microsoft Corporation and many other companies. It is used to view pages as well as navigate the WWW. Browsers are also referred to as Web clients.

2. Web Cookies

Web cookie refer to a piece of information sent by a Web server to a Web browser that the browser software is expected to save and to send back to the server whenever the browser makes additional requests from the server. Web cookies technically called Persistent Client State HTTP Cookies allow a website to store information about you as well as to track your visits to it over a prolonged period of time.

3. Web server

A web server is a program that runs on a website and is responsible for replying to Web Browser requests for files. You need a Web Browser to publish documents on the Web.

Document Management in Web Publishing

The action of identifying, acquiring, processing , storing, updating and distributing the document is called document Management. It may include file organization, uploading, etc.

1. File Organization

When organizing the files on your site, keep files in separate folders. That way, the site is easier to update. Have separate folders for images, HTML files, video, sound and CGI scripts.

2. Uploading

Uploading means transferring files from your computer to the internet server. HTML and text files should be uploaded in ASCII format. While images, CGI Scripts, Flash files, sounds and video should all be uploaded in the binary format.

3. File Names

When you are naming the files for your site, stick to what is known as 8.3 file names, i.e, 8 characters for file name and 3 characters for extensions.

4. Backing up

Whatever you do, be sure to back up your files on your website. Put them on to a Zip disk or CD (Compact Disk) and then store it away in a safe place.

Web page Design Consideration and Principles

Following are some principles about web page Design

- Present your webpage in a way that users are impressed within the first few seconds after they arrive at the Website.
- The title of the page should be short, fascinating and descriptive.
- Keep webpages fresh and updated. Remove any outdated information and add new information from time to time.
- Keep your webpages focused. Don't show everything on one page. Use separate pages for separate topics.
- Make sure buttons and other links behave as the viewers expect them to do.
- Make sure that the website avoids such features that are not supported by all the browsers.
- Use compressed images so that a web page gets quickly loaded.
- Test your Webpage before publishing to make sure that every link and other features work properly.

Search Engines

A web search engine or Internet search engine is a software system that is designed to carry out web search, which means to search the World Wide Web in a systematic way for particular information specified in a textual web search query.

A **search engine** is a web-based tool that enables users to locate information on the World Wide Web. Popular **examples** of **search engines** are Google, Yahoo!, and MSN **Search**.

List of Top 10 Most Popular Search Engines In the World (Updated 2019)

- Google.
- Bing.
- Yahoo.
- Baidu.
- Yandex.ru.
- DuckDuckGo.
- Ask.com.
- AOL.com.

So a search engine is a program that searches through a database of webpages for particular information.

The information searching process in Yahoo

1. Go to the Yahoo Home page by logging on to www.yahoo.com
2. Type the information to be searched for , in the box provided for it and then click the web Search button next to it.
3. Within a few seconds, the search engine will display the available links to the Webpage.
4. If you click the advanced Search button the query form will opens
5. Within a few seconds, the search engine will search for that information and display the links to the webpages.

How to register a Web Site on Search Engines

Once you find a host for the site and publish it there, you need to promote the site to make sure that intended audience knows it is there. Finally you need to update the site, keep it fresh.

1. Telnetting from your web browser

Links to Telnet sites can be embedded into Web pages. When you select such a link, your browser will attempt to launch your Telnet program to connect to the site.

Publishing Tools

There are a number of Web Publishing tools developed by various corporations. Some of the more popular ones are

- Netscape Navigator Gold
- Macromedia's Backstage Desktop Studio
- Adobe's PageMill and SiteMill
- Other Web Publishing Tools,such as GoLive, HotDog, HotMetal, Dreamweaver and WebEdit.

Netscape Navigator Gold

Netscape Gold offer a visual editing environment that closely approximates that of a Web page and the same time adopts many of the concepts used by word processor and document Publishing tools.

Macromedia's Backstage Desktop Studio

Backstage Desktop Studio consists of a suite of tools to assemble and manage an end to end Website. The advantage of Macromedia is its excellence in multimedia Web authoring.

SiteMill

It is the perfect choice for both managing and editing Web pages on the server. It catalogues a website, checks each link, and display all errors.

PageMill

PageMill is an excellent choice for creating Web pages. It allows to create a webpage complete with forms, graphics and formatting.