

Name :

M.Jawaad Ichan

Roll-No :

P19-0053

Section :

BCS - SA

Assignment :

computer networks

Date :

3/10/2021

Question no #1 :-

a) what are Web cookies?

Ans) A web cookie, also known as an internet cookie or a browser cookie, is a text file that contains information that the website needs to store relating to a particular visit or visitor. The file is stored on the user's machine, can be deleted by the user, and can only be read by the user or the website that created the cookie.

cookies, and other forms of local storage, are vital for running a usable web.

Without cookies, websites wouldn't remember our settings or logins, our preferences or what content we have already seen.

b) Discuss their importance in terms of computer networks?

Ans) As a necessary part of web browsing,

HTTP cookies help web developers give you more personal, convenient website visits.

Cookies let websites remember your website logins, shopping carts and more. But they can also be a treasure trove of private info for criminals to spy on.

As a main purpose of cookie is to identify users and possibly prepare customized web pages or to have site login information for you.

c) What are the advantages and disadvantages of using them?

Ans) Advantages

Here are some of the advantages of using cookies to store session state.

- Cookies are simple to use and implement.
- Occupies less memory, do not require any server resources and are stored on the user's computer so no extra burden on server.
- We can configure cookies to expire when the browser session ends (session cookies) or they can exist for a specified length of time on the client's computer.
- Cookies persist a much longer period of time than session state.

Disadvantages

Here are some of the disadvantages:

- As mentioned previously, cookies are secure as they are stored in clear text, they may pose a possible security risk as anyone can open and tamper with cookies. You can manually encrypt and decrypt cookies, but it requires extra coding and can affect application performance because of the time that is required for encryption and decryption.
- cookies will not work if the security level is set to high in the browser.
- Users can delete a cookie.
- Complex type of doing not allowed. It allows only plain text.

Question No # 2

a) what is web cache/proxy server?

Ans) Web proxy caching stores copies of frequently accessed web objects (such as

document, images and articles) close to users and serves this information to them.
Internet users direct their requests to web servers all over the internet. For a caching server to serve these requests, it must act as a web proxy server.

b) why are they used?

Ans) web caching is the activity of storing data for reuse, such as a copy of a web page served by a web server. It is cached or stored the first time a user visits the page and the next time a user requests the same page, a cache will serve the copy, which helps keep the origin server from getting overloaded.

c) How it's works?

How proxy caching works. Proxies act as a gateway between the user and the source server, storing (or caching) the server's resources. When the user attempts to access a resource, the proxy checks to see if it has a recent copy of the resource on hand. If so, the resource is immediately delivered to the user.

d) Discuss its advantages and disadvantages?

Ans) (Advantage)

1. Anonymity

Proxy has been used primarily for masking the IP addresses. From this way any hacker trying to access your computer will not be able to do it so.

2. Protection

While you are browsing the web, there

are high chances you may end up visiting malicious websites. In case if you visit such a site, the malware will sneak onto your system causing irreversible damage.

3. Unblock websites

Many website owners restrict contents to certain geographical areas, basically due to its copyright law.

4. Performance

Some of the proxies use cache data. Once a user visits a website, these proxies will store all the necessary informations through the cache data.

(Disadvantages)

1. Tracking

The cache data the proxies use can remember all of the personal informations including that of password.

mages.

2. Security

Although proxies provide the benefits of anonymity, it lacks on the side of encryption. Most proxies use SSL certificates for encrypting the data.

3. Incompatibility

A proxy may not always be compatible with your local network. Both the proxy and the network has its own configurations.

4. Cost

Setup and maintenance of a proxy server can be costly. Even though large organizations can easily cover up this expense.

Question #03:-

what are VPN's?

A VPN connection establishes a secure connection between you & the internet. Via the VPN, all your data traffic is routed through an encrypted virtual tunnel. This disguises your IP address when you use the internet, making its location invisible to anyone.

You can still access them using the VPN.