

Unit - 4 Assignment - 4

1. What is web server & its application.

↳ A web server is a computer program or software that serves content and handle HTTP request from clients, usually web browser, to deliver web pages and other resources to users over the internet. It acts as an intermediary between the clients web browser & the requested content processing the clients request & sending the appropriate response.

Application of web server :-

> Web hosting: One of the primary application of web server is hosting websites. A web server stores & delivers the web pages & resources that make up a website to visitors who access it through their web browser.

11) Web application: Web server play a crucial role in running web application where dynamic content is generated & delivered to user based on their interaction with the application.

12) Content delivery: Web server can be part of Content Delivery Networks (CDNs) which distribute web content across multiple server geographically. CDNs enhance the performance & reliability of web application by reducing latency & off loading traffic from the main web server.

13) API Hosting: Web servers are used to host APIs that allow application to access specific functionalities or data of a system or server. APIs are widely used in modern web development to enable integration between different system.

v) File sharing: Some web server are also used to file sharing & file storage allowing user to upload & download file over internet.

vi) Streaming services: Web server are utilized to deliver streaming media content such as videos & audio file to user in real-time.

2. How web server works?

↳ When a client sends HTTP requests to the web server, the server follows these steps:

- Web server receives the request from the client
- It processes the request to identify the requested resources
- The server locates the resources on the server file system or through other means like executing server side scripts to generate dynamic

4. Difference between session & cookies

Session

i) It stores the variables & their value within a file in temporary directory on the server

ii) The session ends when the user logout from the application or closes his web browser

iii) We need to call the `session_start()` function to start the session

iv) We can store as much data as we want within session but there is a maximum memory limit such a script can use at a time & it is 128 MB

Cookies

i) Cookies are stored on the users computer as a text file

ii) Cookies end on the lifetime set by the user.

iii) We don't need to call a function to start a cookies as it is stored within the local computer

iv) Maximum size of the browser's cookies is 4 KB

Q. v) It compares they form

5. He
=> When server that

6. It
=>

Q. v) It is more secured compared to cookies as they store same data in encrypted form

v) It is not much secure as they store data in text file

5. How session work?

⇒ When a user accesses a website, the server creates a unique session ID for that user. This session ID is sent to the user's browser as a cookie. The browser then includes the session ID with each subsequent request to the server. The server uses the session ID to identify the user & retrieve the associated session data from its temporary storage.

6. How session handling is done in server side scripts?

⇒ In server-side session handling is typically done using built-in functions or libraries provided by the scripting language.

language. These function allow developers to start a new session, store data in the session, retrieve data from the session & destroy the session when it is no longer needed. The session data is stored on the server-side ensuring security & privacy for sensitive information.

7. Write use of cookies with example
 ⇒ Cookies are often used to remember user preference or maintain state information between session. Here's an example of using cookies to remember the user's preferred website theme.

Suppose a website allows user to choose between two theme "Dark" & "Light". When a user select preferred theme, the server sets a cookie with the chosen theme value, which will persist betⁿ visits to website.

- User visits the website & selects the "Dark" theme
- The server sets a cookie with the name "theme" & value "dark" on the user's browser
- On subsequent visits to the website, the server checks the "theme" cookie
- If the cookie is present, the server applies the user's preferred theme ("Dark") to the website
- If the cookie is not present, the website defaults to the "light" theme