

CSC-318 Web Technology (BSc CSIT, TU)

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Web Cache ?

Solution :

- A Web cache (or HTTP cache) is an information technology for the temporary storage (caching) of Web documents, such as Web pages, images, and other types of Web multimedia, to reduce server lag.
- A Web cache system stores copies of documents passing through it; subsequent requests may be satisfied from the cache if certain conditions are met.
- A Web cache system can refer either to an appliance or to a computer program
- Web caching solutions and strategies enhance page delivery speed significantly and reduce the work needed to be done by the backend server

Web Cache ?

- Types of Web Caches :
 - Site Cache: A site cache or page cache stores website data the first time a
 webpage is loaded. Each time a user returns to your website, saved elements are
 quickly accessed and displayed to visitors. Used for static content. Site owners
 manage the cache.
 - Browser Cache: is a type of site caching built into the end-user's web browser.
 Website elements are stored by the browser on your visitor's computer and grouped with other files associated with your content. A browser cache can contain HTML pages, CSS stylesheets, images, and other multimedia content. Browsers manage the cache.

Web Cache ?

- Types of Web Caches :
 - Server Cache: Server cache is an umbrella term covering a number of different types of caching.
 - This type of caching is administered by website owners without any input from end-users.
 - Server caching is one of the best methods for reducing server loads.
 - When a request is made, the server checks its temporary storage for the necessary content before processing it the request in full.
 - If the requested content is available in the server cache, it will be returned to the browser right away.
 - This enables your server to handle more traffic and return your webpages faster

- Web Cache ?
- Types of Web Caches :
 - Micro Cache: This method stores content for very short periods of time.
 - It generally saves static versions of dynamic elements for up to 10 seconds.
 - As this is a type of site cache, it's controlled by end-users with limited input from website owners
 - A targeted option for highly dynamic sites like currency exchanges rates.

- What are different types of headers in an HTTP message?
- Solution: HTTP header fields provide required information about the request or response, or about the object sent in the message body. There are four types of HTTP message headers.
 - General-header: These header fields have general applicability for both request and response messages.
 - Client Request-header: These header fields have applicability only for request messages
 - Server Response-header: These header fields have applicability only for response messages
 - Entity-header: These header fields define meta information about the entity-body or, if no body is present, about the resource identified by the request.
- Detail: https://www.tutorialspoint.com/http/http_header_fields.htm

- What are the differences between domain name and domain name system?
- **Solution :** The main difference between domain and DNS is that the domain is a piece of string that helps to identify a particular website while the DNS (Domain Name System) is a server that translates the domain to the corresponding IP address to provide the required webpage
- The domain is unique name to a particular websites.
- When the user enters a domain in the browser, the DNS converts that name to the matching IP address to provide the required webpage.
- In brief, DNS resolves the domains to IP addresses.
- Eg: when the user enters a domain abc.com in the web browser, the DNS search its database to find the matching IP address for that domain.
- After finding, it will resolve that domain name to the IP address of the website. Now, the user can communicate with abc.com and retrieve the required webpage.

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