

1. HTTP CLIENT SERVER RESEARCH

HTTP is an application layer protocol that allows web-based application to communicate and exchange data. The HTTP is the messenger of the web. It is the TCP/IP based protocol. It is used to deliver contents, e.g images, videos, audios and documents etc. if two computer want to communicate and exchange data namely, the client and server usually in form of a request response cycle, those two computers must speak both of them the HTTP communication protocol. The client is the computer that makes the request and the server is the one that serves by responding to the request.

The HTTP was created first to fetch html documents and sends it to the client. The user types in the URL of the page using the client program usually a browser. But first they need to be physically connected (the computer of the user and server) that's the job of the internet using the tcp/ip suit of protocols. It establishes the connection using the combination of cable media and wireless media, and do the necessary work to prepare the environment for the two computers to talk via the HTTP protocol. When the connection establishes the client sends a request called an HTTP message, and because the HTTP is the connectionless protocol, the client disconnects from the server waiting for the response. The server on the side process the request prepare the response establishes the connection again and send back the response again in the form of HTTP message to the client. Then the two computer completely disconnect.

2. WEB BROWSER PROCESSES HTML, CSS, JAVASCRIPT

The browser parses (it goes and gets the file and breaks it into pieces and then starts trying to figure out what to do with the pieces) the HTML file. The HTML contains the content for a web page plus the structure. HTML contains links to other resources. The web then goes out using the URLs it fetches those resources. If there are images that the web page needs the browser goes out and requests those files, while those files are coming back, it goes out and it looks for any style sheets that it needs. Style sheet in the cascading style sheet or CSS format determines how the web page appears or presented. Finally the web browser is going to go out and find any JavaScript files that the web page needs and it's going to request them as well. JavaScript is how we described how a web page should behave once it's all loaded and ready to go. A browser has a couple of simple behaviours that it knows how to do automatically. For example if you click a form submit button it knows how to submit a form, but for all other things you want a web page to be able to do all the interactive you use JavaScript and web browser goes out and asks for all of these

files using get commands, and the various servers that contains these resources send them back. This can take a while but as the return the browser assembles them into the document and stores its work in an internal data structure of some sort different for every browser.

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