**What is HTTP?**

HTTP stands for HyperText Transfer Protocol.

It is a protocol used to access the data on the World Wide Web (www).

The HTTP protocol can be used to transfer the data in the form of plain text, hypertext, audio, video, XML, JSON and so on.

**Connectionless protocol :**

HTTP is a connectionless protocol.

HTTP client initiates a request and waits for a response from the server. When the server receives the request,

the server processes the request and sends back the response to the HTTP client after which the client disconnects the

connection. The connection between client and server exist only during the current request and response time only.

**Stateless :**  HTTP is a stateless protocol as both the client and server know each other only during the current request.

Due to this nature of the protocol, both the client and server do not retain the information between various requests of the web pages.

**Uniform Resource Locator (URL) :**

A client that wants to access the document in an internet needs an address and to facilitate the access of documents,

the HTTP uses the concept of Uniform Resource Locator (URL).

The Uniform Resource Locator (URL) is a standard way of specifying any kind of information on the inter

The URL defines four parts: method, host computer, port, and path.

**" method://host:port/path"**

e.g:

"http://localhost:8383/demo

**Method:** The method is the protocol used to retrieve the document from a server. For example, HTTP.

**Host:** The host is the computer where the information is stored, and the computer is given an alias name.

Web pages are mainly stored in the computers and the computers are given an alias name that begins with the characters "www". This field is not mandatory.

**Port:** The URL can also contain the port number of the server, but it's an optional field. If the port number is included,

then it must come between the host and path and it should be separated from the host by a colon.

**Path:** Path is the pathname of the file where the information is stored. The path itself contain slashes that separate the

directories from the subdirectories and files.

**HTTP Request / Response :**

The World Wide Web is about communication between web clients and web servers.

Communication between clients and servers is done by requests and responses:

**A typical HTTP request / response circle:**

1. The browser requests an HTML page. The server returns an HTML file.

2. The browser requests a style sheet. The server returns a CSS file.

3. The browser requests an JPG image. The server returns a JPG file.

4. The browser requests JavaScript code. The server returns a JS file

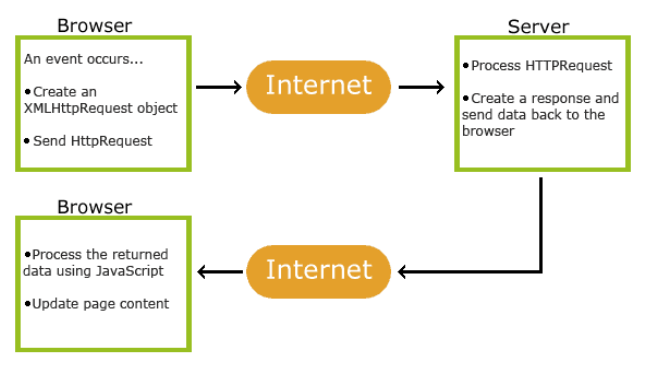
5. The browser requests data. The server returns data (in XML or JSON).

**XHR - XML Http Request :**

All browsers have a built-in XMLHttpRequest Object (XHR).

XHR is a JavaScript object that is used to transfer data between a web browser and a web server.

The XHR Object is the underlying concept of [**AJAX**](https://www.w3schools.com/whatis/whatis_ajax.asp) and [**JSON**](https://www.w3schools.com/whatis/whatis_json.asp):



**HTTP Methods :**

**GET**

The GET method is used to RETRIEVE information from the given server using a given URI. Requests using GET should only retrieve data and should have no other effect on the data.

**POST**

A POST request is used to send(CREATE) data to the server, for example, customer information, file upload, etc. using HTML forms.

**PUT**

Replaces(UPDATE) all current representations of the target resource with the uploaded content.

**DELETE**

Removes (DELETE) all current representations of the target resource given by a URI.

**Https:**

**What is Domain Name?**

A domain name is a unique address used to access a website.

Usually, it consists of a website name and a domain name extension.

e.g. abc.com

here, “abc” is website name.

“.com” is extension.

A domain name is your website’s equivalent of a physical address. It helps users find your site easily instead of using its internet protocol (IP) address. Domain names consisting of a name and an extension are a key part of the internet infrastructure.

Every website has two main elements – a domain name and a [web hosting server](https://www.hostinger.in/web-hosting). All domain names are linked to their respective IP addresses and point to the specific web servers that host the websites.

When a user enters a domain name into a browser, it looks for the associated IP address through a global network of [Domain Name System (DNS)](https://www.hostinger.in/tutorials/what-is-dns) servers.

How Do Domains Work :

domain purchase cost:

Domain name vs URL :

domain renewal cost and criteria:

premiun domain :

where to check if not available:

hot to sell domain:

how to tranfer domain:

what is EPP code:

subdomain (What and Why) :

- use to show saple website, inder construction website, template

e.g:

https://demo1.elitesoftwares.co.in/