***How the Web Works?***

The moment you enter the website you want in browser and hit enter

-The URL is resolved

-The request sent to server

-The server will respond

- The page is displayed

Then the domain translated into IP Address , there is special type of server in the internet –not just one type but many servers- called DNS (Domain name server) , The job of these servers to translate domains into IP addresses , IP stores in server ‘s database

***Client Server Architecture :***

Now .. We are on facebook , I have an account and you also have , and another friend has , We all are called “Clients” , we can’t connect directly with each other , So we let facebook server do the mission , Me as a client can get or post data on facebook , what if I want to get my friend ‘s latest post ?

, I will send a request to the server and the server will response with the latest post , the response will be shown :

In HTTPprotocol (stands for : Hypertext Transport Protocol) but the response will show in the client side as HTML and CSS

What types of request that client can send?

* Static request like : photo
* Dynamic request like : Facebook ‘s home page

Finally , I want to say that the server connect to database to respond to the client

***How the Internet works?***

In the current time , No one don’t use the internet to send emails or watch videos on Youtube .

The internet becomes everything ,Now let me explain how the internet works . First let me show the meaning of network! A network is a group of connected computers that are able to send data to each other.The internet is collection of networks that connect to each other. Computers connect to each other and to the Internet via wires, cables, radio waves, and other types of networking infrastructure. All data sent over the Internet is translated into pulses of light or electricity, also called "bits," and then interpreted by the receiving computer. The wires, cables, and radio waves conduct these bits at the speed of light. The more bits that can pass over these wires and cables at once, the faster the Internet works.

***HTTP:***

It’s important to know that http is stateless , it means that every request is completely independent , if you visit facebook page ,then visit google and reload the page ,it doesn’t remember any thing about the previous request to get facebook . There is something similar to HTTP called HTTPS ,it is more secure, ‘S’ character in https refers to secure , In https data sent is encrypted by something called ‘SSL’ (secure socket layer) Or ‘TlS’ (transport layer security) . There are 5 HTTP request methods.

-Get : Retrive data from server

-Post: Submit data into server

-Push: Update data already on server

-Pitch: Also is used for updating

-Delete: Delete data from the server

The common 2 types are get and post , But post is more secure because it's visible in URL.Every request has header and body . Header has method(like get) , path , and protocol(like HTTP/1.1)

.The response have multiple status code :

Informational responses 1xx

Successful responses 2xx

Redirection messages 3xx

Client error responses 4xx

Server error responses 5xx

What does 1xx mean?

X refer to numbers from 0 to 9 , it means it's from 100 to 199

Now .. there is a major version of HTTP called(HTTP/2) . It's more fast , secure ,efficient and responds with more data.