

Http

- it's abbreviation for Hyper Text Transfer protocol .
- Http called a request / response protocol , http has request from the browser then get response from the server
- communication between web servers & clients
- each request is completely independent.

Https

- it's abbreviation for Hyper Text Transfer protocol secure
- Data sent is encrypted
- it's have a high level of security

Http Methods

- **Get:** retrieves data from the server , it's used when you want to get or fetch data from the server
- **Post:** submit data to the server , it's used when you want to add a resource , the data will be send to the server and then the data will be stored in a database

Note: I can use get request with forms but it will be less secure from post request because in the get request the stuff that I send in the form will appear in the URL.

- **Put :** update data already on the server

- Delete : deletes data from the server

Note :there's more types of http methods but those four is the most important

there's Header and Body

- Header:
 - General:
 - Request URL
 - Request Method(get , post , ..)
 - status code
 - Remote Address
 - Referrer policy
 - Response:
 - server(apache , nginx , ..)
 - set cookie(it's used for servers to send small pieces of data called cookies from the server to the client)
 - content type
 - content length
 - date

- Request:
 - Cookies
 - Accept-xxx
 - Content type
 - Content length
 - Authorization
 - User agent
 - Referrer
- Http status codes:
 - 1xx : informational (request , received / processing)
 - 2xx:success (successfully received , understood and accepted)
 - 3xx:redirect (further action must be taken / redirect)
 - 4xx : client error (request doesn't have what it needs)
 - 5xx:server error (server failed to fulfill an apparent valid request)

Http/2

- It's faster and more efficient & secure
- Respond with more data