What is HTTP?

- Hyper Text Transfer Protocol
- Communication Between web servers and clients
- HTTP Requests / Responses

HTTP is STATELESS

- Every request is completely INDEPENDENT
- Similar to transactions
- Programming, Local Storage, Cookies, Sessions are used to create enhanced user experiences

What is HTTPS?

- Hyper Text Transfer Protocol Secure
- Data sent is encrypted
- SSL(Secure Socket Layer) / TLS(Transport Security Layer)
- Install certificate on web host

HTTP Methods

- GET : Retrieves data from the server (ex: Loading assets, Loading data, Loading a page)
- POST : Submit data to the server (ex: Submitting a form , Submitting A blog post)
- PUT : Update Data already on the server (ex: Editing a blog post, Changing an image)
- DELETE : Delete data from the server (ex: Deleting an image, Deleting anything)

HTTP Header Fields

General:	Response:	Request:
Request URL	Server	Cookies
Request Method	Set-Cookie	Accept-xxx
Status Code	Content-Type	Content-Type
Remote Address	Content-Length	Content-Length
Referrer Policy	Date	Authorization
		User-Agent
		Referrer

HTTP Status Codes

1xx : Informational

Request recieved / processing

2xx: Success

Successfully Recieved, understood and accepted

3xx: Redirect

Further action must be taken / redirect

4xx: Client Error

Request does not have what it needs

5xx: Server Error

Server failed to fulfil an apparent valid request

200 - *OK*

201 - *OK created*

301 - *Moved to new URL*

304 - *Not modified (Cached version)*
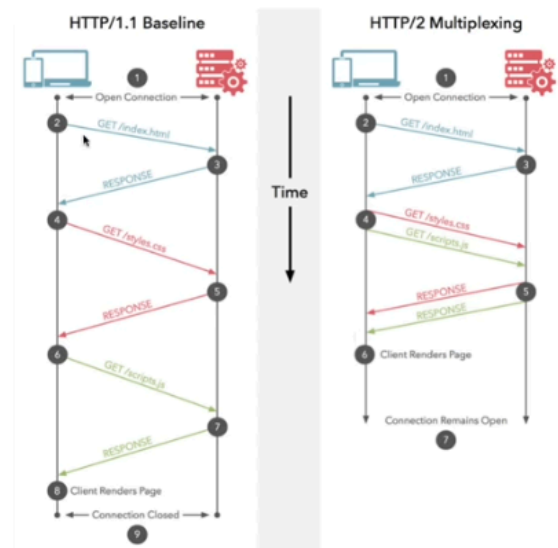
400 - *Bad request*

401 - *Unauthorized*

404 - *Not found*

500 - *Internal server error*

HTTP/2

‣ Major revision of HTTP

‣ Under the hood changes

‣ Respond with more data

‣ Reduce latency by enabling full request and response multiplexing

‣ Fast, efficient & secure

Supports Multiplexing