

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

method	path	protocol
GET	/tutorials/other/top-20-mysql-best-practices/	HTTP/1.1
	Host: net.tutsplus.com	
	User-Agent: Mozilla/5.0 (Windows; U; Windows NT 6.1; en-US; rv:1.9.1.5) Gecko/20100313 Firefox/4.0.1	
	Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8	
	Accept-Language: en-us,en;q=0.5	
	Accept-Encoding: gzip,deflate	
	Accept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.3	
	Keep-Alive: 300	
	Connection: keep-alive	
	Cookie: PHPSESSID=2e25uvjq435r4q7ib3vtdjql20	
	Pragma: no-cache	
	Cache-Control: no-cache	
HTTP headers as Name:Value		

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 received / processing

2xx: Success

Successfully Received, 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