

HTTP

Hypertext Transfer Protocol

Protocol used to transfer Htext

↑
Set of rules

↑
Hypertext
↑
Web Docs

Human Readable

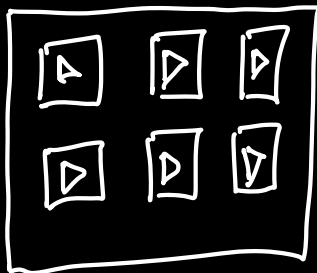
↳ Network tab visibility

↳ Inspect element

↳ Page Source

Stateless Protocol

Every time you visit a page, you are a new user.



Youtube

↳ No memory of Prev Req

Session

Stored state b/w
Frontend & Backend



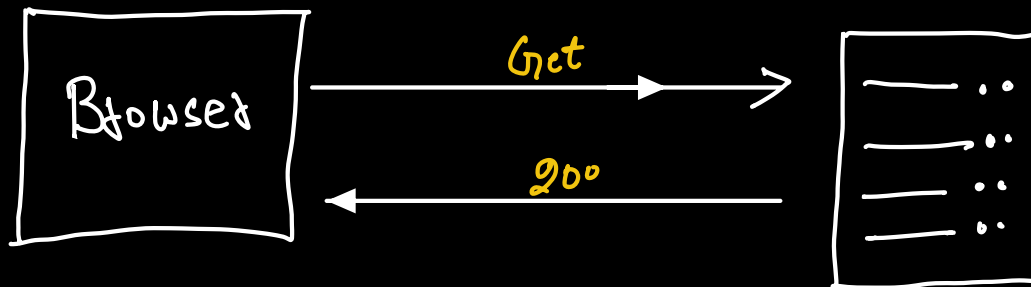
I need to send more Info from Server to Browser

HTTP Headers

- ↳ client
- ↳ Browser Info
- ↳ Date Time
- ↳ cookie to store

Request - Response Model

↑ ye model bs fun ke liye likh diya



Type of Request [Get, Post, Delete ...]

Response Code [200, 404, 500 ...]

↳ What action to perform Get Post

↳ Where to perform <http://api.hitesh.ai/auth>

↳ Was it done 200, 404 ...

← Verb

HTTP/2

↳ http means http 2

↳ http/1.1 is a fallback & is still used

↳ uses compression

↳ uses multiplexing (Many files at same time)

↳ uses encryption (https)

In AWS, we don't use https for internal communication

User Agent (Browsers)

TCP (Transmission Control Protocol)

FTP (File Transfer Protocol)

IP (Internet Protocol)

URL (Uniform Resource Locator)

DNS (Domain Name System **Server**)

↳ points URL to IP

Header (Pass **additional** Information)

Payload (Actual data — email, pass)

Cache (store the data)



- ↳ setup TCP connection
- ↳ exchange TLS certificate
- ↳ send Verb + URL + Data + more
 - ↑ yahi https hota h
- ↳ Gets the response back with status code & Data (Img, csv, text)
- ↳ TCP connection is closed (state less)
 - ↑ Bs itna hi h web

Name	×	Headers	Preview	Response	Initiator	Timing	Cookies
hitesh.ai							
66f30814ff6d7cdf.p...		▼ Request Headers					
a34f9d1faa5f3315-s...		:authority:		hitesh.ai			
d9396795aa5ec363-...		:method:		GET			
2421bcf0b7b00b99.c...		:path:		/			
4fa97b7dc634f169.c...		:scheme:		https			
webpack-0b0727325...		Accept:		text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/...			
01f950b4-2bb6194b...				,application/signed-exchange;v=b3;q=0.7			
4476-35bae581ee7a...		Accept-Encoding:		gzip, deflate, br, zstd			
main-app-e5262c9f0...		Accept-Language:		en-GB,en-US;q=0.9,en;q=0.8			
69bc96fe-d8001f90...		Cache-Control:		max-age=0			
49d5a48b-fd4a3a45...		Cookie:		dub_id=DxsXzq3RnhIHkyJT;			
7076-264ab5a0bf29...				ph_phc_949YeaY1xCSp9A5LO1ISmsE3ibNFWrCu6YeEjULzKEE_posthog			
4910-83e091b0bfa3...				%3A%2201943d30-f9a2-75cf-91cd-			
6109-afa19d616f6c5...				a6834e2f7875%22%2C%22%24sesid%22%3A%5B1736193407403%2			
4115-c09af62c6308...				75cf-91cd-a68161bc65bb%22%2C1736193407394%5D%7D			
		Priority:		u=0, i			
		Sec-Ch-Ua:		"Google Chrome";v="131", "Chromium";v="131", "Not_A Brand";v="24"			
33 requests		5.1 kB tran					

Name	Headers	Preview	Response	Initiator	Timing
hiteshchoudhary.com	▼ Request Headers				
button_style.css	:authority:	hiteshchoudhary.com			
css2?family=Victor+...	:method:	GET			
11613311?v=4	:path:	/			
Yq6Q-LGQWyfv-LGy...	:scheme:	https			
favicon.ico	:Accept:	text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7			
	Accept-Encoding:	gzip, deflate, br, zstd			
	Accept-Language:	en-GB,en-US;q=0.9,en;q=0.8			
	Priority:	u=0, i			
	Sec-Ch-Ua:	"Google Chrome";v="131", "Chromium";v="131", "Not_A Brand";v="24"			
	Sec-Ch-Ua-Mobile:	?0			
	Sec-Ch-Ua-Platform:	"macOS"			
	Sec-Fetch-Dest:	document			
	Sec-Fetch-Mode:	navigate			
	Sec-Fetch-Site:	none			
	Sec-Fetch-User:	?1			
6 requests	264 kB tran:				

`https://hitesh.ai/course/search?id=1234`

Protocol

Uniform Resource Name

↳ host

↳ connection Port (80 & 443 are invisible)

↳ Resource Path

↳ Query (Params)

Network Tab