



HTTP and Cool Stuff

ACM Dev



What is HTTP?

- HTTP is the Hypertext Transfer Protocol, which is just a fancy way of saying a way of sending and receiving information
- It's used to serve websites and communicate between servers on the internet

http://





Your First HTTP Request (kinda)

Let's make your first HTTP request, although you've probably already made a lot even if you weren't aware.

Go to <httpie.io/app> and set your URL to <httpbin.org>

What happens when you try this URL?





Try Out Other Routes

You can see that the server responded with a web page, let's take a look.

Check out the Status Codes dropdown, and look at the GET route. The {codes} at the end means that we can pass it a number, so try <https://httpbin.org/status/200>

Try out a bunch of numbers and see which ones are which!

(Check 402 or 418 if you're lost 😬)

Http cheat sheet



HTTP Status Codes						javaconceptoftheday.com
1xx : Informational Purpose		4xx : Client Errors		5xx : Server Errors		
100	Continue	400	Bad Request	500	Internal Server Error	
101	Switching Protocols	401	Unauthorized	501	Not Implemented	
102	Processing	402	Payment Required	502	Bad Gateway	
103	Early Hints	403	Forbidden	503	Service Unavailable	
2xx : Success		404	Not Found	504	Gateway Timeout	
200	Ok	405	Method Not Allowed	505	HTTP Version Not Supported	
201	Created	406	Not Acceptable	507	Insufficient Storage	
202	Accepted	407	Proxy Authentication Is Required	508	Loop Detected	
203	Non-Authoritative Information	408	Request Time Out	510	Not Extended	
204	No Content	409	Conflict	511	Network Authentication Required	
205	Reset Content	410	Gone			
206	Partial Content	411	Length Required			
207	Multi Status	412	Precondition Failed			
208	Already Reported	413	Payload Too Large			
226	IM Used	414	URI Too Long			
3xx : Redirection		415	Unsupported Media Type			
300	Multiple Choices	416	Range Not Satisfiable			
301	Moved Permanently	417	Expectation Failed			
302	Found	421	Misdirect Request			
303	See Other	422	Unprocessable Entity			
304	Not Modified	423	Locked			
305	Use Proxy	424	Failed Dependency			
306	No Longer Used	425	Too Early			
307	Temporary Redirect	426	Upgrade Required			
308	Moved Permanently	428	Precondition Required			
		429	Too Many Requests			
		431	Request Header Fields Too Large			
		451	Unavailable For Legal Reasons			



HTTP Headers

Now that you've made a request, let's look into what they return:

Request GET

Response 200

▼ HTTP/1.1 200 OK

Access-Control-Allow-Credentials	true
Access-Control-Allow-Origin	*
Connection	close
Content-Length	0
Content-Type	text/html; charset=utf-8
Date	Thu, 23 Feb 2023 01:58:08 GMT
Server	unicorn/19.9.0



POKEMON API

Let's say you want to get some cool pokemon data but you're too lazy to hard code everything, what should you do? USE A GAH DAMN API ofc

Try this out: <https://pokeapi.co/api/v2/pokemon/ditto>

What happens when you try this URL?

More on here: <https://pokeapi.co/>



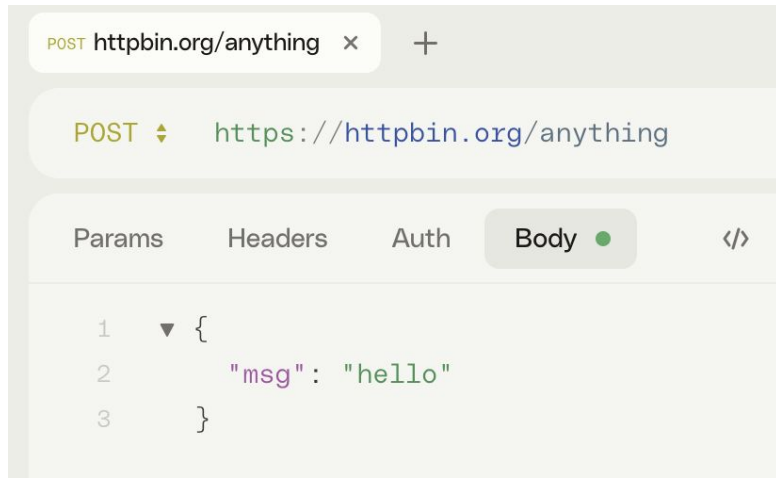


GET/POST Requests

So far we've been making GET requests, which is only one type of request that you can make. There are a few options, but the most common are GET, POST, PUT, PATCH, and DELETE.

Let's try to make a POST request, which basically just means we are giving information to the receiver.

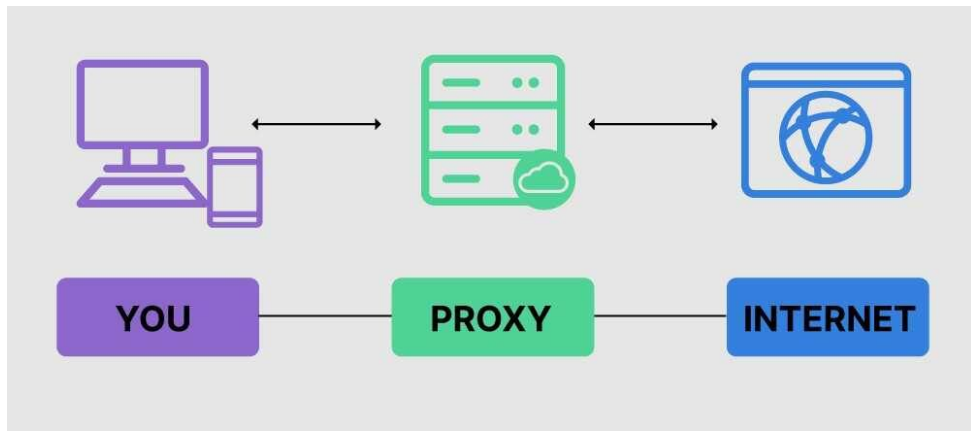
Try out this request!





What is a Proxy?

A proxy is just a server that takes your request, and forwards it to an intended destination.





MITM Proxy

Check out <https://mitmproxy.org/> to have a tool to intercept HTTP requests

DEMO TIME

POST (🗿 🗿 🗿 hahaHAHAHA 🤣 🤣 💀 💀 💀) Demo



Which one from the demo did you like best?

Put your favorite demo here:

a.libdb.so/http-poll





Projects (So Far)

Live websocket analysis tooling

Generate Sandwiches

Sudoku Solver

Employee manager web application

Javascript browser game

Quiz game (kahoot clone with functionality)

Fantasy Football app

Habit Tracker

Paper trading crypto app

High quality vertically spinning rat



If you're **new** and want to add your **project proposal** to the list fill out this form:

a.libdb.so/dev-proposal