HTTP

Some of examples and definitions are from great web docs https://developer.mozilla.org/ or Wikipedia.

Hello!

I am Mateusz Choma

I am a scientific mind, passionate of technology, an engineer "squared" - a graduate of two universities in Lublin :)
As well, I am a JS developer, entrepreneur and owner of small software house - Amazing Design.

1.
What is HTTP?

What is HTTP?
Hypertext Transfer Protocol

HTTP is an protocol that is a high-level interface that we use to make request over the Internet.
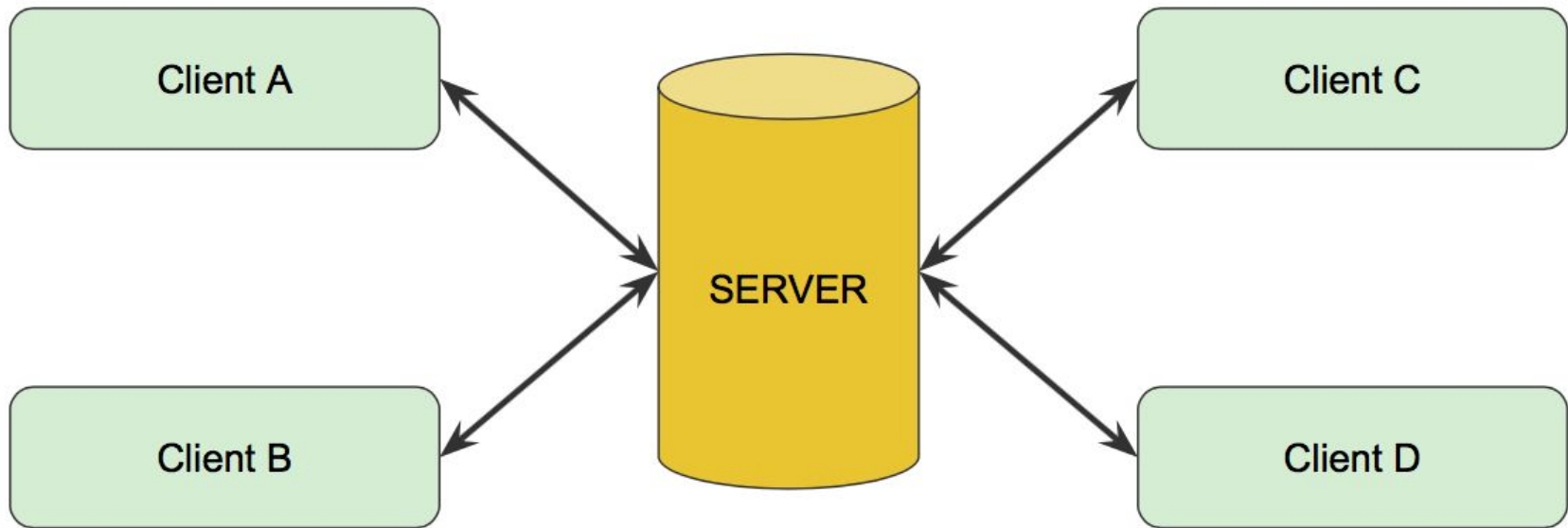Its definition presumes an underlying and reliable transport layer protocol - Transmission Control Protocol (TCP) and physical infrastructure..

HTTP is:
- text
- stateless
- slient-server architecture

What is HTTP?
Client-server architecture

What is HTTP?
URL

```
http://user:XYZ@example.com:3000/users/123?param=ABC&t=s
```

Protocol   Password   Port   Id

User   Host   Resource/path   Parameters

What is HTTP?
Parts of URL

Required:
a. Protocol (**http://**)
b. Host (**api.com**)
c. Resource (**/users**)

Optional:
a. User and password (http://**user:pass**@api.com/)
b. Parameters (/users**?s=word&limit=100**)
c. Version (/**v2**/users)
d. Port (http://localhost:**3000)**

What is HTTP?
HTTP request

The client and server communicate by **plain-text** messages.

The **client sends requests** to the server and the **server sends response.**

Request contains:
1. A request line (e.g. GET users/123 HTTP/1.1)
2. Request header fields
3. An empty line
4. An optional message body

What is HTTP?
HTTP status codes

Status codes are issued by a server in response to a browser's request made to the server.

1xx - informational
2xx - success
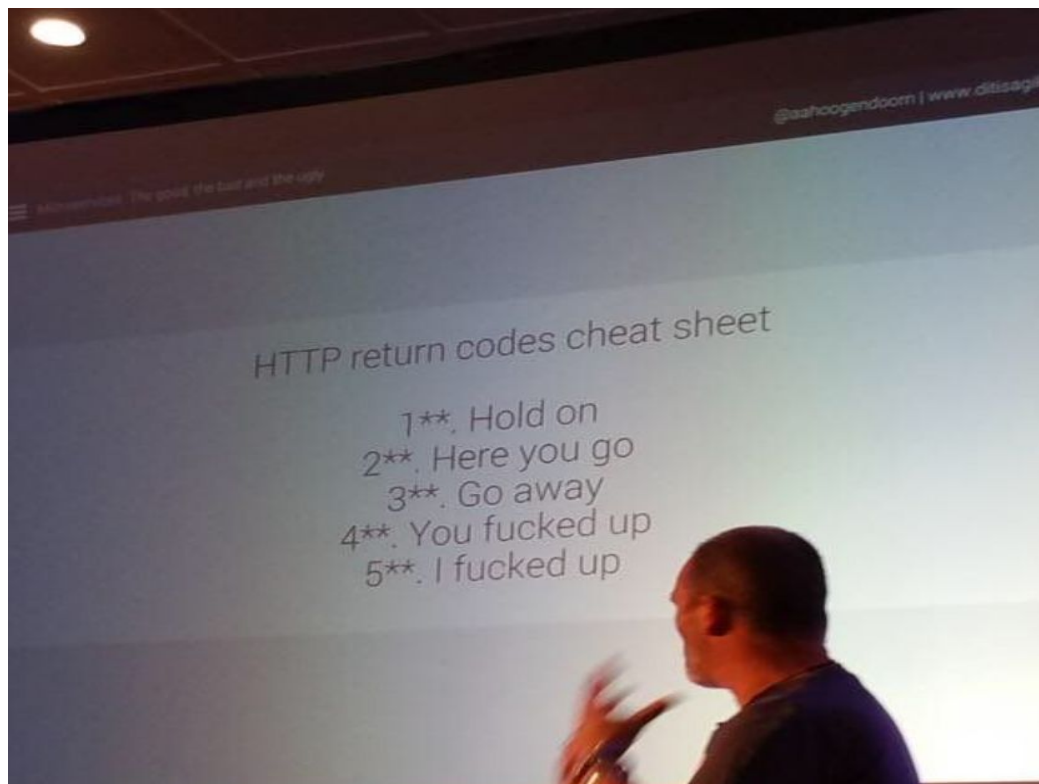**3xx** - redirections
4xx - client error
5xx - server error

https://en.wikipedia.org/wiki/List_of_HTTP_status_codes

What is HTTP?
HTTP status codes cheat sheet

What is HTTP?
Every enterprise-grade software has cats inside ;)

https://http.cat/

https://httpstatusdogs.com/

What is HTTP?
Headers

HTTP header fields are components of the header section of HTTP request and response.

They define the operating parameters of an HTTP transaction.

Headers can be checked here ->
https://en.wikipedia.org/wiki/List_of_HTTP_header_fields

What is HTTP?
Message body

HTTP Message Body is the data bytes transmitted in an HTTP transaction message immediately following the headers.

What is HTTP?
Sample HTTP response

HTTP/1.1 200 OK
Date: Sun, 10 Oct 2010 23:26:07 GMT
Server: Apache/2.2.8 (Ubuntu) mod_ssl/2.2.8 OpenSSL/0.9.8g
Last-Modified: Sun, 26 Sep 2010 22:04:35 GMT
Accept-Ranges: bytes
Content-Length: 13
Connection: close
Content-Type: text/html

Hello world!