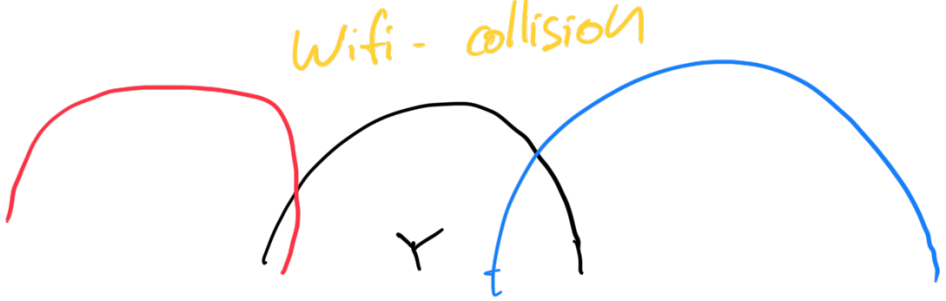
HTTP GET

Everything you need to know about the internet*

Internet is built on layered protocols



Protocols are abstractions but all abstractions leak

TCP — guarantees in order, confirmed delivery

3-way handshake to open a TCP connection

TLS

IP - identity

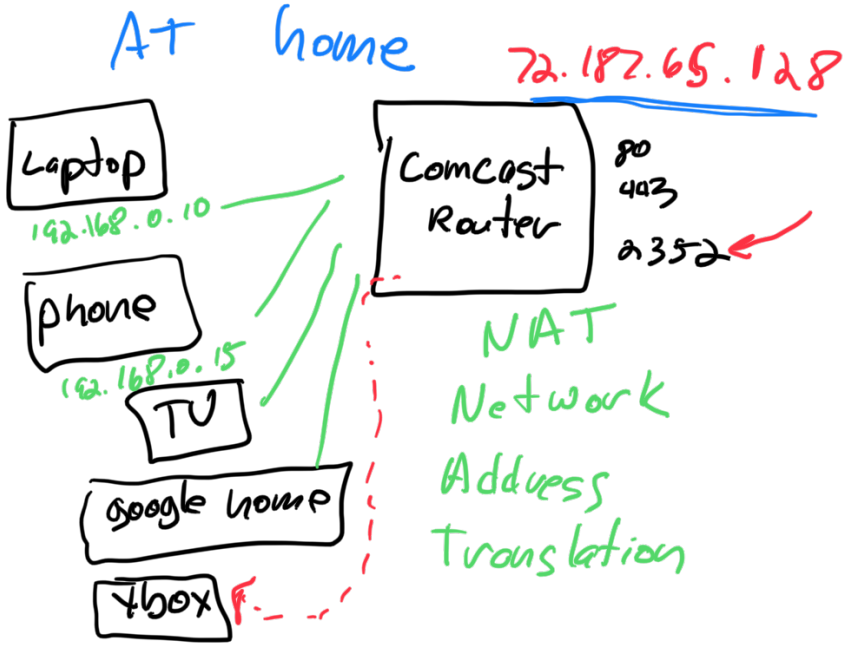
IP Address

2.4 -4 Billion addr

Most common IPV4 - 32 bit integer

Computer claims, is assigned an ip addr

192.168.0.101



IPV 6 is much longer

Ports - every computer has some ports - it's a number like a mail slot P.O Box

Only 1 program can use any inbound port at a time

[illegible] at a time

Known Port numbers

25	email
21	FTP
22	SSH
53	DNS
5432*	postgres
80	HTTP - insecure
443	SSL / Secure HTTP
8080	- developer http
8000	

HTTP → hyper text transfer protcol

protocol for sharing documents on top of ip protocol

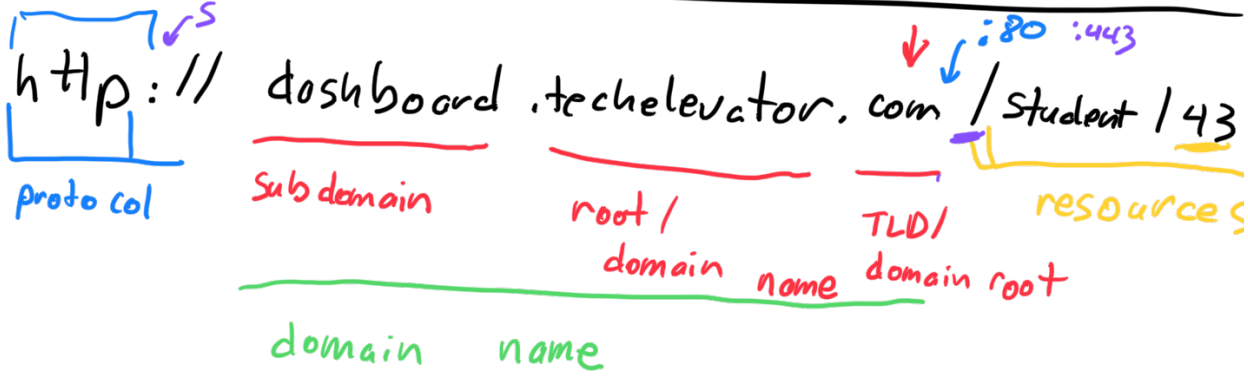
is a text protocol (e.g. plain text messages)

Detail to follow

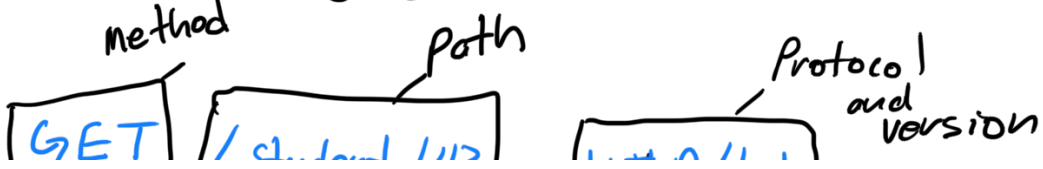
DNS — Dynamic Naming Service
Domain Name Service

google.com → 142.250.73.238

TLS — negotiate Secure "key exchange"
setting up Secure connections



HTTP Request



/ students/45 HTTP/1.1

Host: dashboard.techelevator.com

who we intended to get the message

Accept-Language: fr

Content-Type: application/json

Accept: ~~text~~/html

Status Codes

2xx - success codes

200 - success

201 - created

202 - Accepted

204 - No Content

206 - Partial content

3xx - redirect

301 - moved permanently

302 - Found "moved temporarily"

4xx - client

400 - client error

401 - unauthorized

403 - forbidden

404 - not found

405 - method not allowed

5xx - Server Errors

500 - internal Server error

501 - not impleted

502 - Bad Gateway

503 - Service not available

504 - Gateway Timeout