

# Recitation 3: DNS

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# Plan

- What is DNS for?
- How DNS works  
    ↖ Amit leads
- Hands-on with Dig
- Security issues

## Logistics

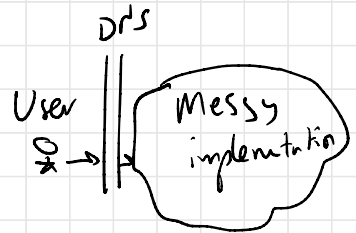
- Design project  
    → OUT NOW ←
- Reading: Unix

# What is DNS for?

Mapping hostnames  $\rightarrow$  IP addresses  
logical addr                      physical addr

Why would we want this?

- Clean UI
- Clean separation of concerns
- Fault tolerance
- Load balancing...



$\rightarrow$  Remember phone numbers? Phone books?

Why is it cool?

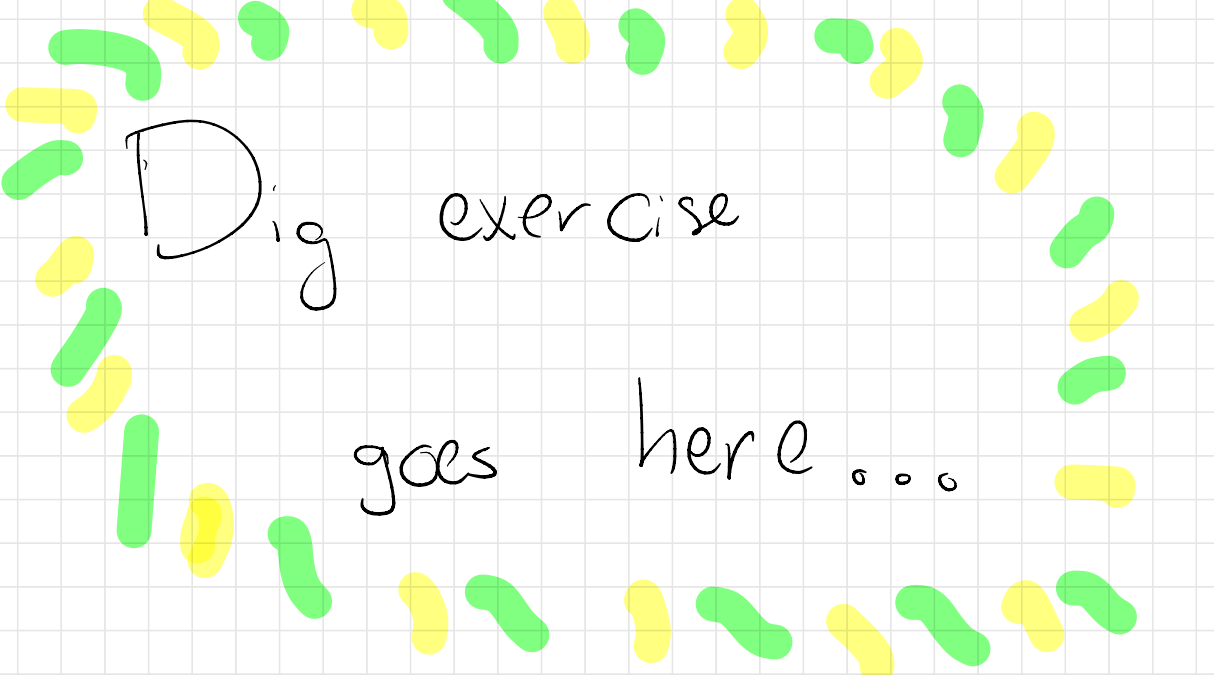
- decentralized
- Scalable ("Internet scale")
- Fault tolerant
- extensible

# How DNS works?

Amir's exercise goes here...

## Record types

- A - IPv4 address
- AAAA - IPv6 address
- CNAME - Alias "Common name"
- MX - mail
- NS - Name server
- ...
- many others, LOC



Dig

exercise

goes here ...

# Security issues

DO NOT TRY THIS AT HOME!

\* No privacy

\* No authentication (cache poisoning)

\* Censorship (see UK)

\* Anyone can register any name.

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IF time, mention DoH...