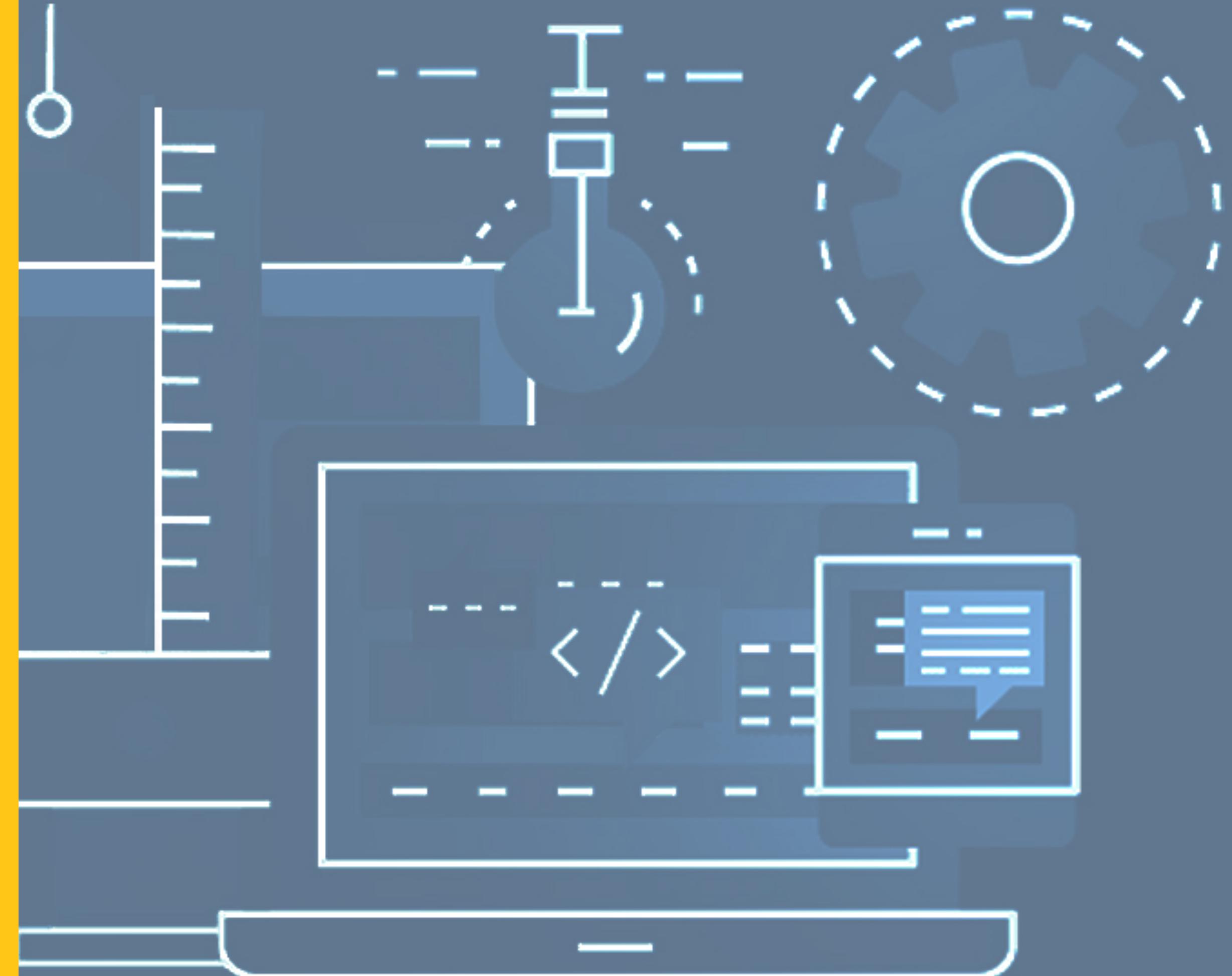


SHELLY GRAHAM, 07/20/2020

WEB DEV 4

SUMMER 2020

Week 3: Domains



WEEK 3: DOMAINS



AFTER ALL THIS HARD
WORK...

LET'S GO LIVE!

BUT HOW?

HOW TO GET A WEBSITE ON THE INTERNET

- Buy and register a domain
- Choose a hosting service and hosting plan
- Upload site

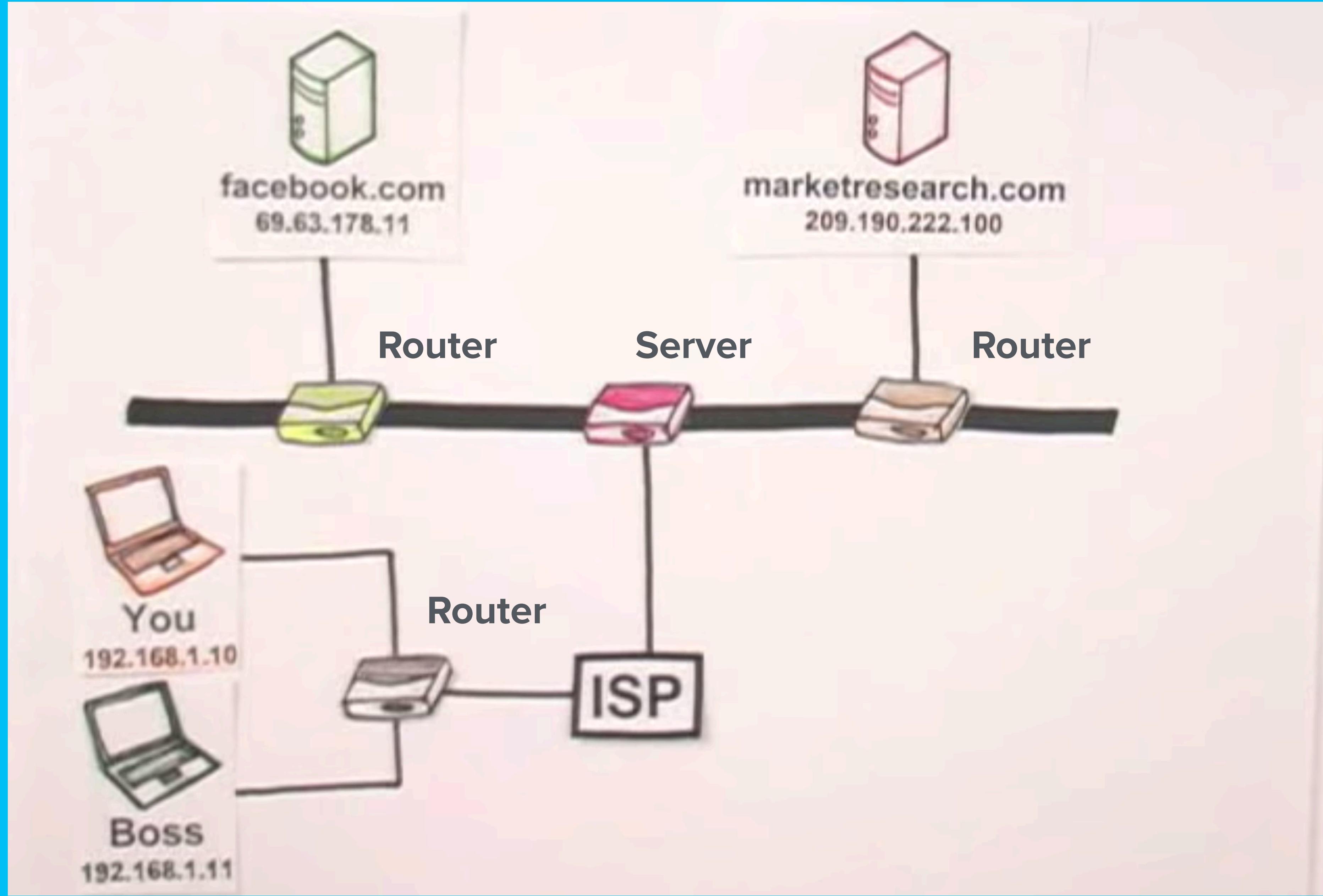


In 3...2...1...

FIRST THINGS FIRST...

HOW DOES THE INTERNET WORK?





The Basics

THE INTERNET

- Internet is a large wire, buried in the ground
- Usually made out of fiber or cooper
- Special computers directly connected to said wire and communicate with each other = SERVERS
- Personal computers are not connected to the wire (internet). They are called CLIENTS, and are indirectly connected to the wire through an internet service provider (ISP) —> ATT&T, Comcast, Google Fiber...
- A website essentially is a collection of files saved on the hard drive of a server
- Files shared over the internet are broken down into packages, to be able to send in smaller sizes and reassembled upon arrival —> leads to several server requests
- ROUTERS are the connecting puzzle pieces between your computer, and all other websites

1. DOMAINS

- Domain = domain name = web address = URL (uniform resource locator) = IP address (internet protocol address) = the address to/location of your website
- Numerical labels assigned to each device connected to a computer network that uses the internet protocol for communication —> coordinates to find a website
- Computers communicate in numbers - humans in words!
- Can be static or dynamic! —> incognito mode!
- Instead of remembering every websites IP address, we use catchy names to easily find a website
- Your website is content assembled into an orderly design, and ideally stored safely on large databanks called servers which are accessed through the domain name

IP ADDRESSES

INTERNET PROTOCOL ADDRESS

- THE STREET ADDRESS

Every machine connected directly or indirectly to the internet has an IP ADDRESS:
computers, servers, cell phones, tablets, Alexa, smart light bulb...and routers

IPv4

- 32-Bit IP address
- Stores 2^{32} addresses which is more than 4 billion addresses
- Numeric addressing method
- Binary bits are separated by a dot(.)
- Still the standard!

IPv6

- 128-Bit IP address
- Allows 340 undecillion unique addresses (that's 33 zeros!)
- Alphanumeric addressing method
- Binary bits are separated by a colon(:)

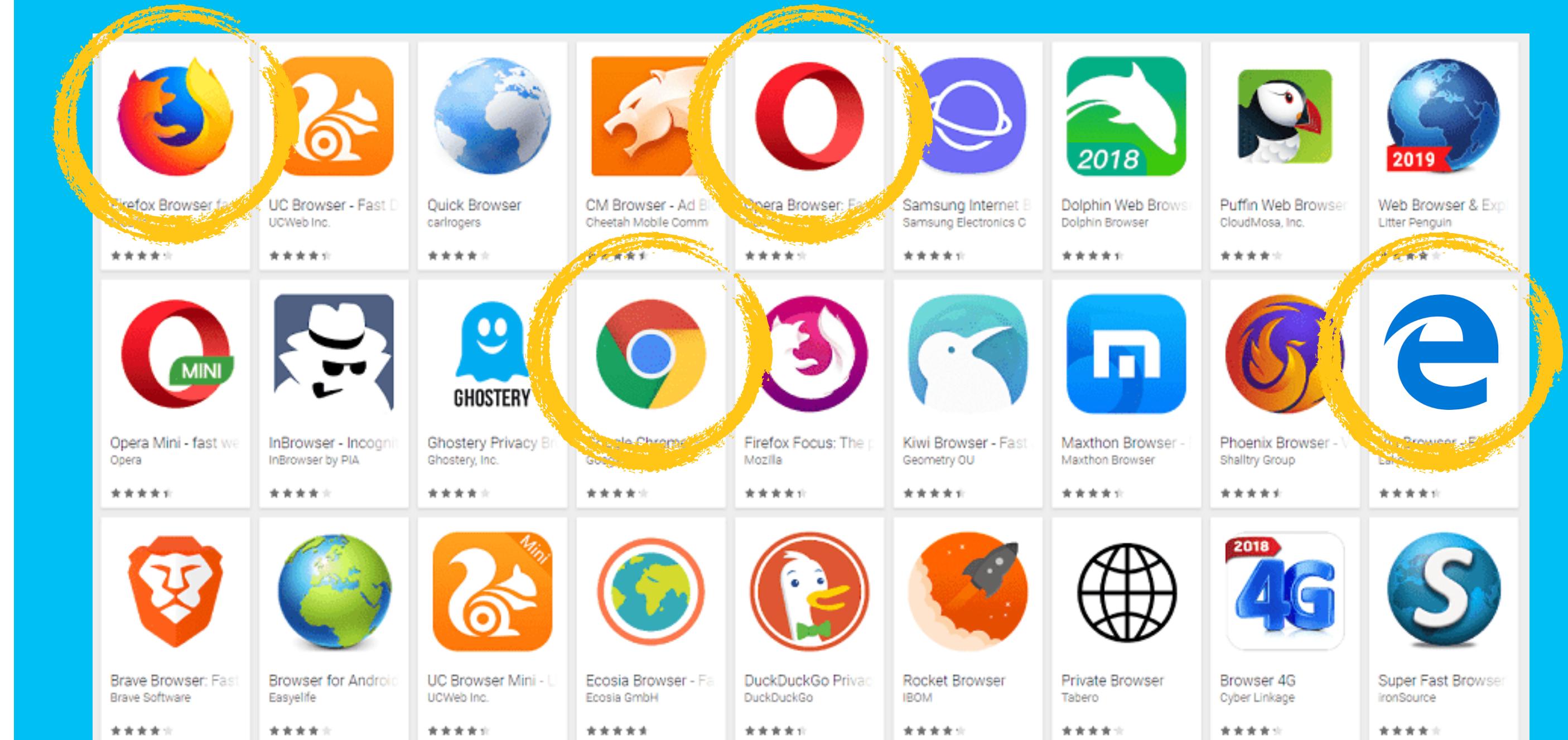
WHAT WE NEED TO GO LIVE

- Computer - check!
- Internet connection - check!
- Browser - check!
- Buy and register a domain name ?
- Select a hosting provider?
- Choose a hosting plan?



BROWSERS

- A program with a graphical user interface for displaying HTML files, used to navigate the World Wide Web
- Basically THE most important program on your computer
- Check: <https://caniuse.com/>



HOW AND WHERE TO BUY A DOMAIN



Domains

Websites + Marketing

Hosting

WordPress

More

Help Center

Sign In



pleasebeavailable



Continue to Cart

Domain Available

Call 480-505-8877 for buying assistance

Domain Only | Save 33%

pleasebeavailable.com

Includes Basic Privacy Protection

\$1.00/mo ~~\$1.50~~

annual purchase required

Add to Cart

Best Value

Essentials Plan | Save 45%

pleasebeavailable.com

- + Multi-Page Website
- + Full Domain Privacy & Protection
- + SEO & Marketing Tools
- + 1 Year of Professional Email

\$9.50/mo

annual purchase required | 30-Day Money-Back Guarantee

Add to Cart

Preview

Compare Plans

Can't believe this is still available...

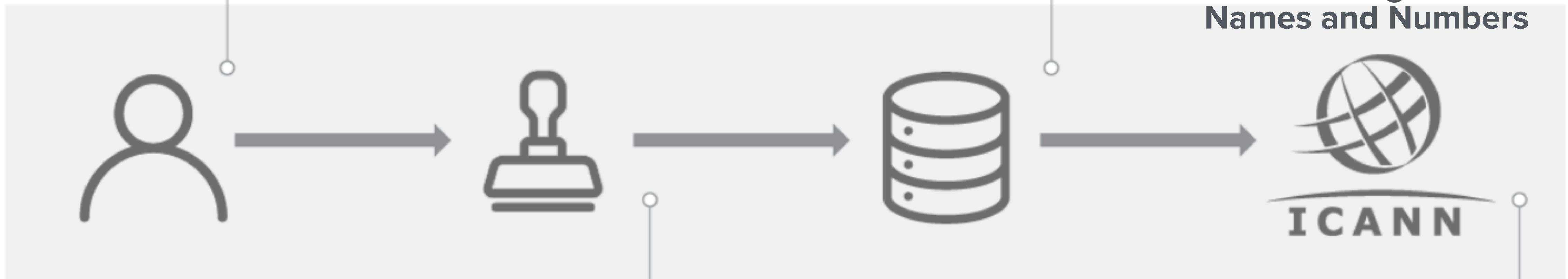
DOMAIN NAME REGISTRARS - THE HOME OWNER

- A business that handles the reservation of domain names as well as the assignment of IP addresses for those domain names
- GoDaddy
- Hover
- Namecheap
- Wix
- Squarespace
- domain.com
- GoogleDomains
- ...



Registrant

Individual or group who registers a domain name



Registry operators

Maintains the record of domain registrants and DNS settings

Internet Corporation for Assigned Names and Numbers



Registrars

Accredited by the registry and ICANN to take orders from a registrant

ICANN

Non-profit organization that helps coordinate the Domain Name System (DNS)

WHOIS PROTECTION

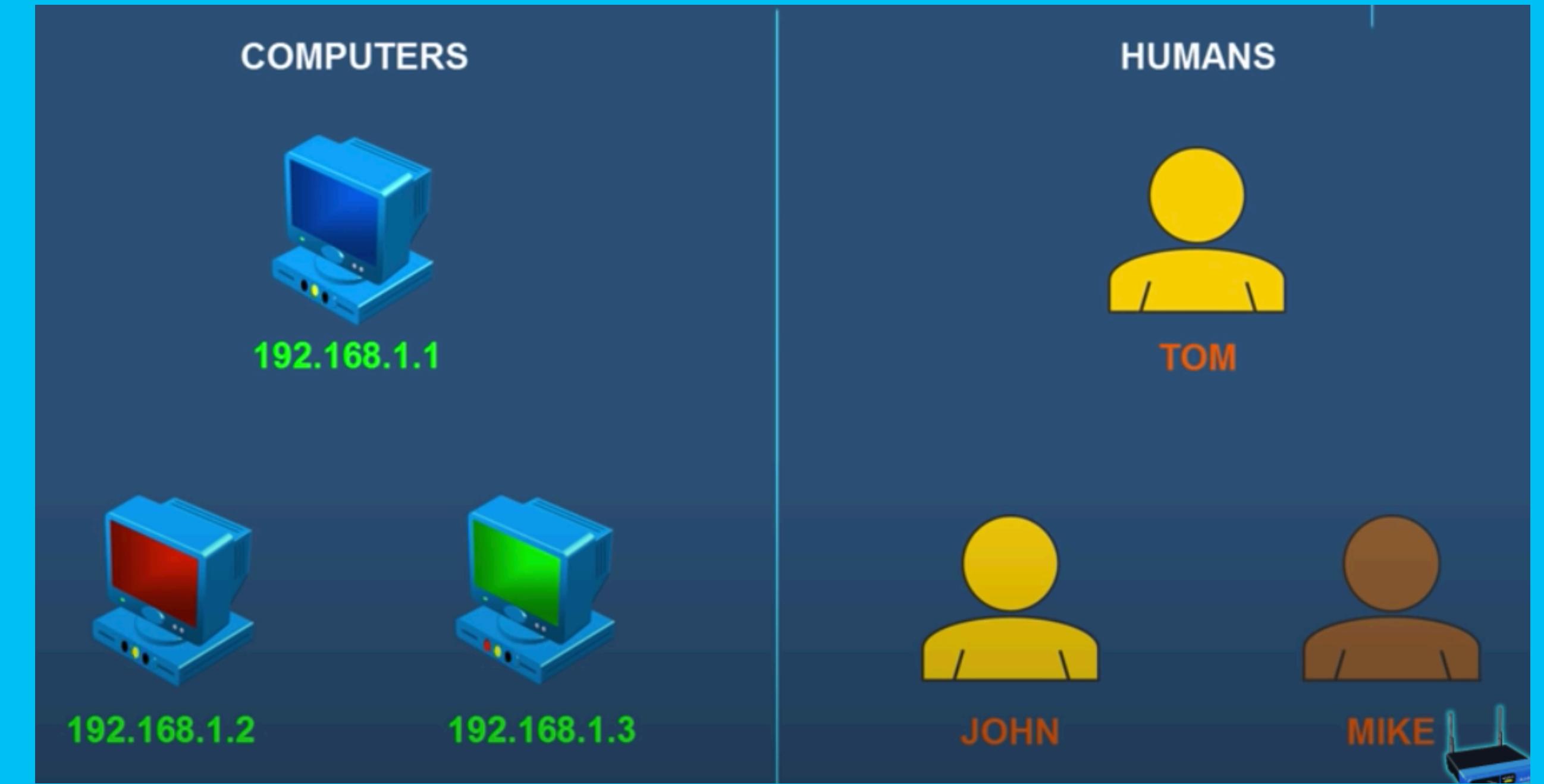
- Domain Privacy Service
- All registered websites are added into a database, called WHO.IS along with the owners information (name, phone#, email, etc.)
- That's a NoNo - too many creeps and hackers out there!
- You can “buy” privacy from the registrar you’re using, along with forwarding service
- www.who.is



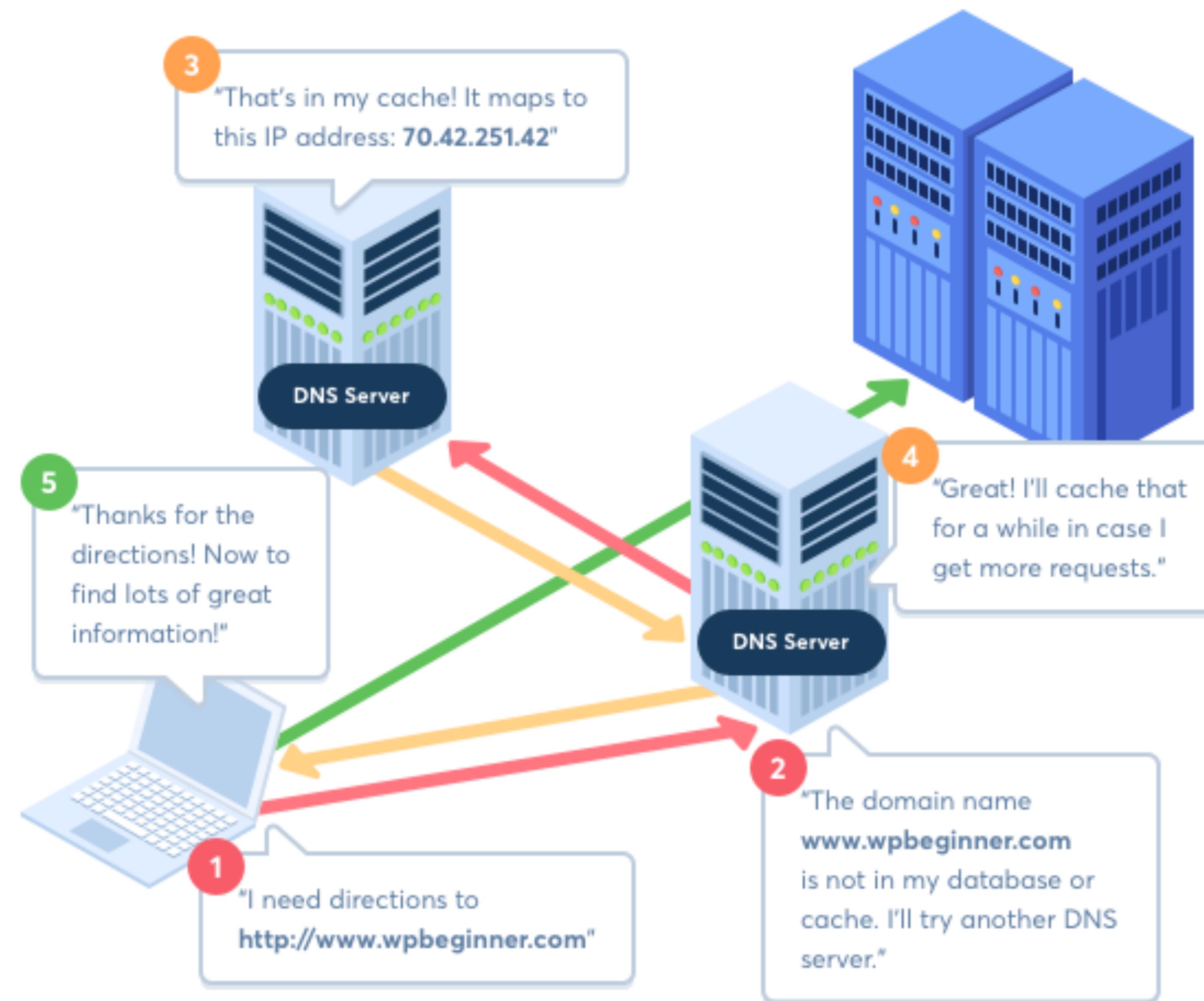
| | Overview | Price (for .com domain per year) | WHOIS | Additional |
|-------------------|--|---|--------------|---|
| GoDaddy | #1 Domain registrar & Walmart of domain | \$17.99 | \$10 extra | 24/7 customer service |
| Dynadot | Easy to use, inexpensive, nice interface | \$8.99 | Included | 24/7 customer service auto-renew off by default |
| Porkbun | Cheapest option | \$8.50 | Included | No 24/7 customer service |
| Hover | Well known but nothing special | \$12.99 | Included | 24/7 customer service |
| Namecheap | Offer Black Friday Deals | \$12.99 | Included | No 24/7 customer service Has App |
| GoogleDomains | Familiar Google Design, SEO Boost? | \$12 | Included | 24/7 customer service |
| <u>domain.com</u> | Uses Dark Patterns | \$9.99 | \$8.99 extra | Good SEO, that's it |

DNS

- Domain Name System
- Translates domain names to IP addresses
- Phonebook of the internet
- Complex sites may use several DNS lookups before site is completely loaded, all within a couple milliseconds
- You can choose your DNS!

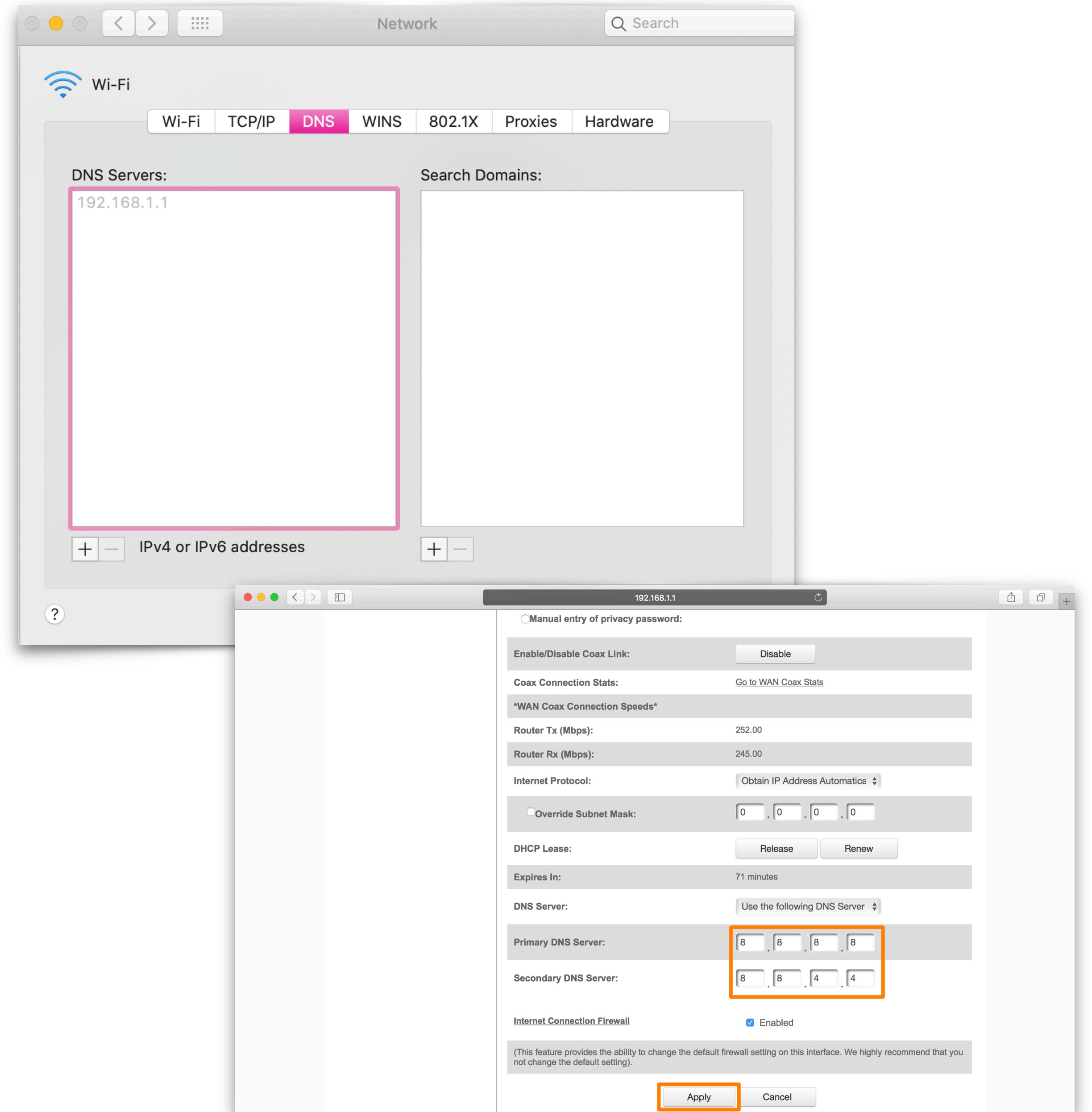


How Domain Name Works



WHY CHOOSE YOUR DNS

- To increase security —> DNS could be run by hacker and use redirects to fishing websites
- To increase speed —> Better surf experience
- 2 ways to change DNS:
 - Set on computer (System Preferences > Network > Advanced > DNS)
 - Set in router (access via IP of router)



QUESTIONS?

FIN