FALL 2021 / ONLINE

INTERACTIVE DEVELOPMENT

Friday, December 3

WARM-UP QUESTION:

WHAT DO YOU WANT FROM SANTA?

A08.2 RECAP

WORDPRESS CONTACT FORM DEMOS + DISCUSSION

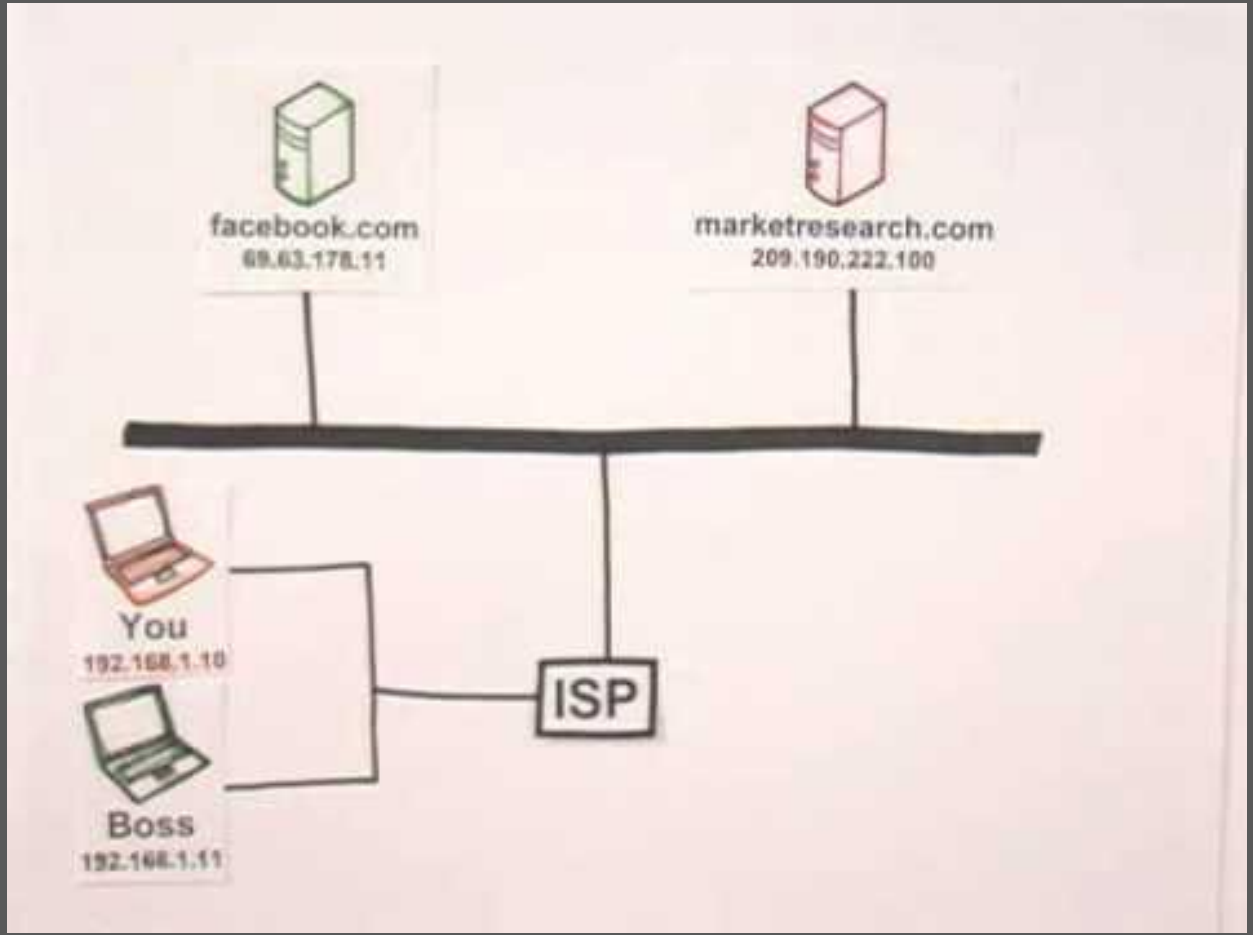
LET'S SCHEDULE A FINAL!

https://maxx.link/final-schedule

ADD MAXX AS AN ADMIN TO YOUR SITE.

- Go to Users > Add New
  - Email: maxx.crawford@gmail.com
  - Role: administrator
  - DM the generated password and the WP admin login url to me

HOW DOES THE INTERNET WORK?



Source: https://youtu.be/7_LPdttKXPc

WHAT IS A URL?

WHAT IS A URL?

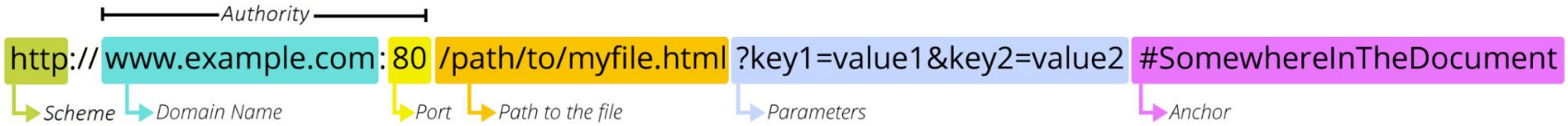
URL stands for **Uniform Resource Locator**. It is the mechanism used by browsers to retrieve any published resource on the web.

A URL is nothing more than the address of a given unique resource on the Web. In theory, each valid URL points to a unique resource.

Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_URL

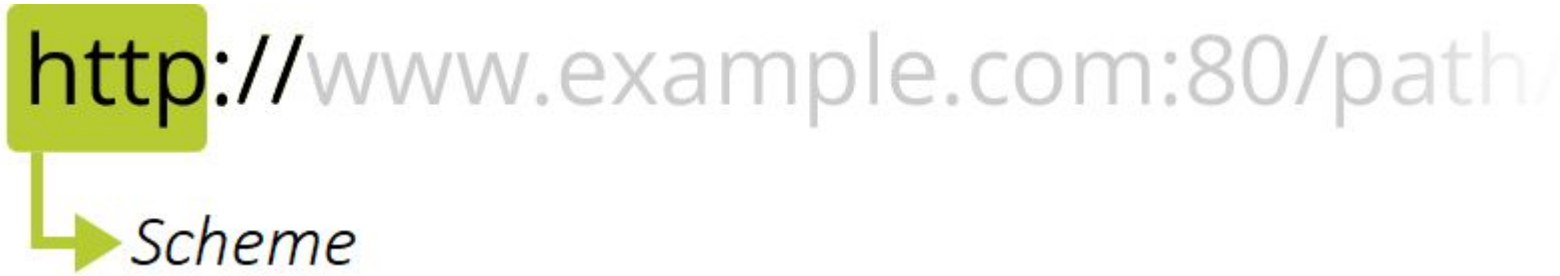
ANATOMY OF A URL

A URL is composed of different parts, some mandatory and others optional.



Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_URL#basics_anatomy_of_a_url

ANATOMY OF A URL



The first part of the URL is the **scheme**, which indicates the protocol that the browser must use to request the resource.

- HTTPS or HTTP
- mailto:

Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_URL#basics_anatomy_of_a_url

ANATOMY OF A URL

Next follows the **authority**, which is separated from the scheme by the character pattern ://. The **domain** indicates which Web server is being requested. The **port** indicates the technical "gate" used to access the resources on the web server.

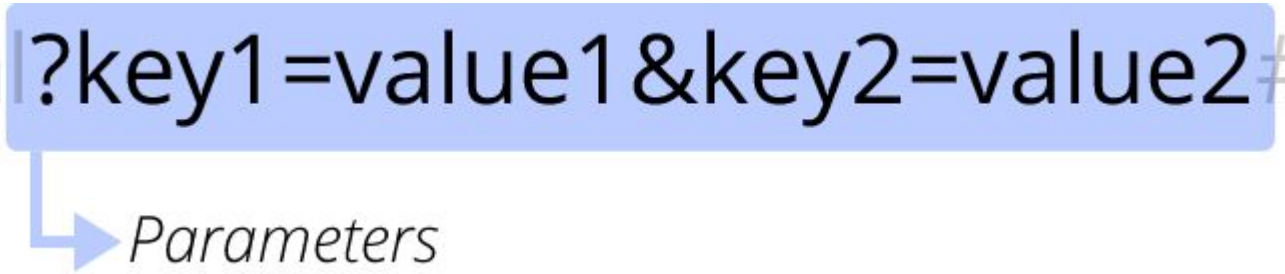
Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_URL#basics_anatomy_of_a_url

ANATOMY OF A URL

This is the **path to the resource** on the Web server. It represent a physical file location on the Web server

Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_URL#basics_anatomy_of_a_url

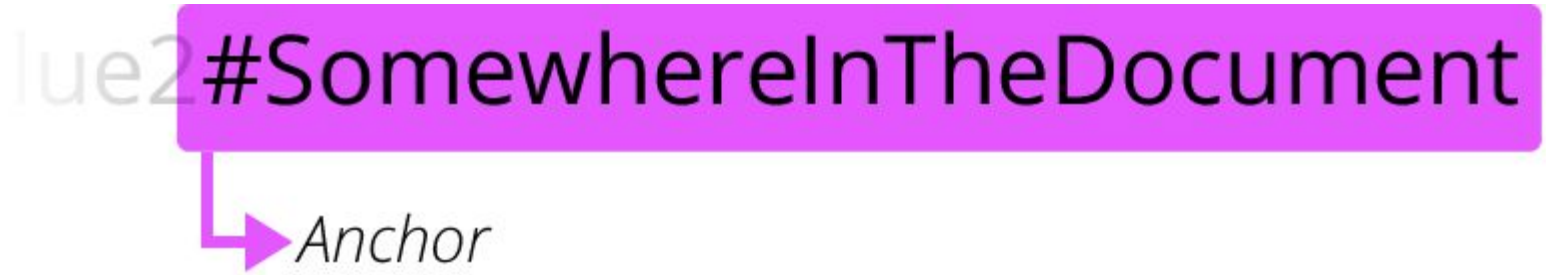
ANATOMY OF A URL



Extra **parameters** are a list of key/value pairs separated with the **&** symbol. The Web server can use those parameters to do extra stuff before returning the resource.

Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_URL#basics_anatomy_of_a_url

ANATOMY OF A URL



An **anchor** represents a sort of "bookmark" inside the resource, giving the browser the directions to show the content located at that "bookmarked" spot.

Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_URL#basics_anatomy_of_a_url

WHAT IS A DOMAIN NAME?

WHAT IS DOMAIN NAME?

Domain names are a key part of the Internet infrastructure. They provide a human-readable address for any web server available on the Internet.

Any Internet-connected computer can be reached through a public IP address.

Computers can handle such addresses easily, but people have a hard time finding out who's running the server or what service the website offers. IP addresses are hard to remember and might change over time.

To solve all those problems we use human-readable addresses — DOMAIN NAMES.

Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_domain_name

WHAT IS DOMAIN NAME?

A **domain name** is an identification string that defines a realm of administrative autonomy, authority or control within the Internet.

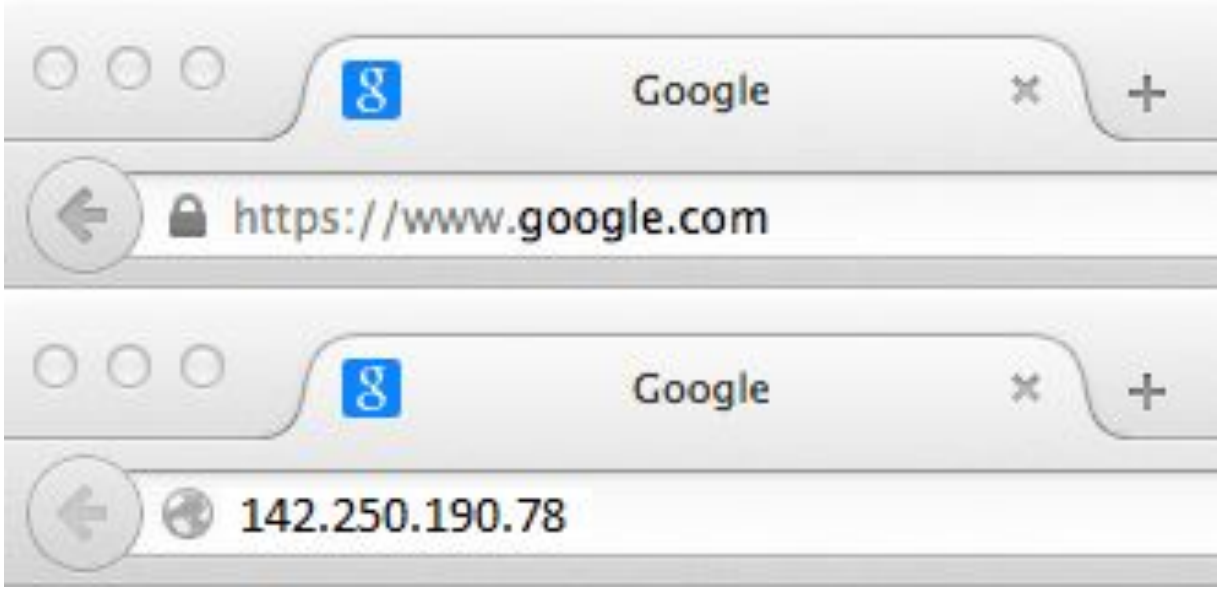
An **Internet Protocol (IP) address** is a numerical label such as 192.0.2.1 that is connected to a computer network that uses the Internet Protocol for communication.

An IP address serves two main functions:

- Network interface identification
- Location addressing.

Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_domain_name

WHAT IS DOMAIN NAME?



Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_domain_name

WHAT IS DNS?

The **Domain Name System** (DNS) is the phonebook of the Internet.

Humans access information online through domain names, like nytimes.com or espn.com. Web browsers interact through Internet Protocol (IP) addresses.

DNS translates domain names to IP addresses so browsers can load Internet resources.

Source: https://www.cloudflare.com/learning/dns/what-is-dns/

ANATOMY OF DOMAIN NAME

Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_domain_name

ANATOMY OF DOMAIN NAME

Top-Level Domains (TLDs) tell users the general purpose of the service behind the domain name.

The most generic TLDs (.com, .org, .net) don't require web services to meet any particular criteria, but some TLDs enforce stricter policies so it is clearer what their purpose is.

Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_domain_name

ANATOMY OF DOMAIN NAME

A **label** is a case-insensitive character sequence anywhere from one to sixty-three characters in length, containing only the letters A through Z, digits 0 through 9, and the - character (which may not be the first or last character in the label)

Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_domain_name

ANATOMY OF DOMAIN NAME

For any domain you control, you can create "**subdomains**" with different content located at each, like developer.mozilla.org.

Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_domain_name

HOW DO I BUY A DOMAIN NAME?

HOW DO I BUY A DOMAIN NAME?

Technically, you can't ***buy*** a domain. You're renting it.

Companies called **registrars** use domain name registries to keep track of technical and administrative information connecting you to your domain name.

Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_domain_name

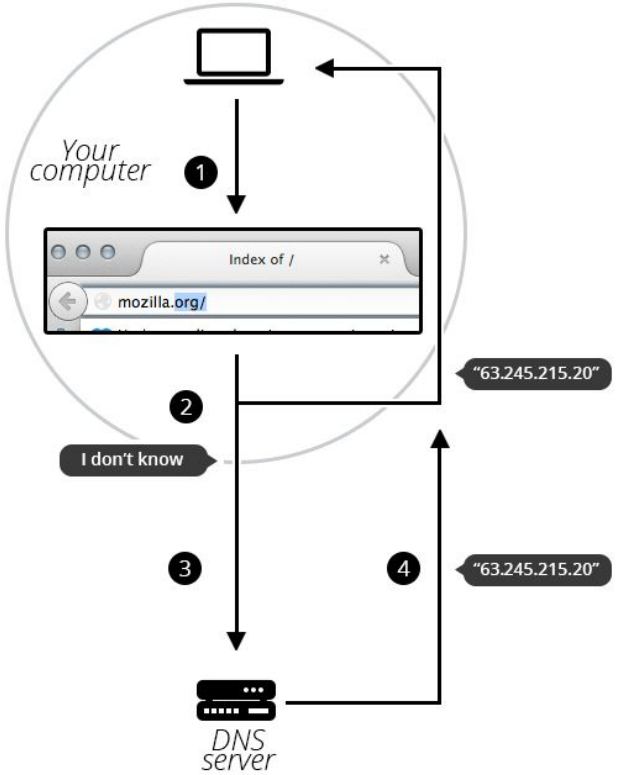
BUY IT.

1. Go to a registrar's website.
2. Usually there is a prominent “Get a domain name” call to action. Click on it.
3. Fill out the form with all required details. Make sure especially that you have not misspelled your desired domain name. Once it's paid for, it's too late!
4. The registrar will let you know when the domain name is properly registered. Within a few hours, all DNS servers will have received your DNS information.

Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_domain_name

DNS REQUEST

1. Type mozilla.org in your browser's location bar.
2. Your browser asks your computer if it already recognizes the IP address identified by this domain name (using a local DNS cache). If it does, the name is translated to the IP address and the browser negotiates contents with the web server. End of story.
3. If your computer does not know which IP is behind the mozilla.org name, it goes on to ask a DNS server, whose job is precisely to tell your computer which IP address matches each registered domain name.
4. Now that the computer knows the requested IP address, your browser can negotiate contents with the web server.



Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_domain_name#how_does_a_dns_request_work

DNS REFRESHING/CACHING

DNS databases are stored on every DNS server worldwide, and all these servers refer to a few special servers called "*authoritative name servers*" or "*top-level DNS servers*."

Whenever your registrar creates or updates any information for a given domain, the information must be refreshed in every DNS database.

Each DNS server that knows about a given domain stores the information for some time before it is automatically invalidated and then refreshed (the DNS server queries an authoritative server and fetches the updated information from it).

Thus, **it takes some time** for DNS servers that know about this domain name to get the up-to-date information.

Source: https://developer.mozilla.org/en-US/docs/Learn/Common_questions/What_is_a_domain_name#how_does_a_dns_request_work

DOMAIN SETUP

WPENGINE DEMO

ASSIGNMENT 8.2
WORDPRESS PORTFOLIO

Continue building on your WordPress site.

- Create a gallery page of your graphic design projects
  - Create a new page, “Gallery” or “Portfolio” (and add a link in your nav)
  - Install/activate a gallery/lightbox plugin of your choice, and set it up per the instructions.
  - URL/Link to this page must be `/gallery` or `/portfolio`
- Assignment due Tuesday, November 19, 5 PM (Last day of class)

Late submissions will be deducted -10% of the overall grade for each day the assignment is late unless arrangements are made with Maxx or Bryan.

CLASS FINAL
WORDPRESS: PUT IT ALL TOGETHER.

The WordPress site you've been working on will serve as your final.

- A well-designed fully functional WordPress site
  - Navigation should at least include: Portfolio, About Page, Contact
  - Feel free to change the theme to whatever you decide but make the design YOUR OWN.
  - Add custom domain to this site (instead of wpengine)
  - Freelance Mode: Submit time/work log, tracking your hours
- Final will be sometime between Mon, Dec 13 - Fri, Dec 17. If you cannot make the final presentation, make plans to meet with me for an alternate time to record it (via Zoom).

Submissions WITHOUT a presentation/critique will be docked 25% from the total.

Late submissions will be deducted -10% of the overall grade for each day the assignment is late unless arrangements are made with Maxx or Bryan.