



Intro to Web Design and Computer Principles

CSCI-UA 4 005

3:30 PM - 4:45 PM

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Web Hosting and Domain Names





Servers manage access to centralized resources or services in a network.

Everything on the web is hosted on a server



Domain Names

Domain names are easy-to-remember words that we can use to communicate to a DNS server the website we want to visit.

The Domain Name System (DNS) translates Internet domain and host names to IP addresses and vice versa.

IP Addresses are a unique string of numbers separated by periods that identifies each computer using the Internet Protocol to communicate over a network.



Domain Names TLD

Every domain name has a suffix that indicates which top level domain (TLD) it belongs to

Top-level domains today are grouped as follows:

- Generic top-level domains
- Country-code top-level domains
- Sponsored top-level domain



Generic Top-Level Domain Examples

.com (commercial)

.org (organization)

.net (network)

.name (name)

.biz (business)

.info (information)



Country Code Top-Level Domain Examples

List available from ICANN here:

[https://icannwiki.org/Country code top-level domain#Current ccTLDs](https://icannwiki.org/Country_code_top-level_domain#Current_ccTLDs)



Sponsored Top-Level Domain Examples

.edu (post-secondary institutions, operated by EDUCAUSE)

.gov (United States government)

.museum (sponsored by Museum Domain Management Association)

Longer list available here:

[https://icannwiki.org/STLD#List of Sponsored Top Level Domains](https://icannwiki.org/STLD#List_of_Sponsored_Top_Level_Domains)



Non-Traditional Domains:

Geographic:

.capetown

.nyc

Brands:

.audi

.amex

Generic:

.pizza

.beer



What is a Domain Name?

More explanation on LifeWire:

<https://www.lifewire.com/what-is-a-domain-name-2483189>



Second-Level Domains (SLD)

Directly below a top-level domain

Example:

Sarahdahnke.co.uk

Indicates the type of entity intended to register an SLD under it. In this example, “sarahdahke” would be a company (.co) registered under the UK’s TLD (.uk).



A Domain is Not a URL

A URL gives very specific information about where files are located, in a specific folder on the server.

Example:

https://cs.nyu.edu/courses/spring18/CSCI-UA.0004-004/common_syllabus/

This points to a folder on cs.nyu.edu called spring18, with two subfolders that direct to the common syllabus for this class.



Registering a Domain

ICANN is in charge of managing which domains exist:

<https://www.icann.org>

Anyone can register their own domain through a number of services that charge for users to “park” their information at a specific domain. Services such as Google Domains, Bluehost, Godaddy, Squarespace, etc. do this.

When you register a domain, you are not the owner of the domain, rather you are paying for the exclusive rights to it. Domains can expire and be available for registration by others.



Web Hosting

A Web hosting service allows individuals and organizations to make their website accessible to others.

The host usually provides storage space on a server as well as Internet connectivity.

Theoretically, any computer can serve as a Web host, but it needs to always be on and implement measures for security and stability.



Common Hosting Services

- Bluehost
- Dreamhost
- GoDaddy
- Amazon Web Services (S3 serves up static sites)



Hosting Considerations

Some hosting services charge a flat yearly or monthly rate, while others charge you for the amount of space you use

Hosting services can also provide email mailboxes, databases, content management systems and more



Search Engine Optimization (SEO)

Search engine optimization is the process of making your site easy for others to locate

The more thoughtfully and selectively you add keywords to your pages, the better your search rankings

There are several factors that help your website to rise in search results



On-Page SEO

On-page techniques are the methods you can use to improve search results for your site

This involves identifying and implementing keywords in seven particular places in your page:

- Page title
- URL
- Headings
- Text
- Link text
- Image alt text
- Page descriptions



Off-Page SEO

Search engines also look at the number of other sites that link to yours to determine search ranking

This is especially so when the content of a referring site is similar to yours

It's ideal when the words that appear in links to your site also appear in the text of the page that the site links to

Finally, as more people visit your site, the search ranking will also improve



Analytics

Analytics tools allow you to observe data about the traffic your site receives

This can include the following information:

- Number of visits
- Geographic location of visitors
- Time spent on pages
- Referring web page
- Browser information
- Real-time activity



Final Notes

Final review study guide has been published

There will be 2 final review sessions on Monday: 12:30 and 3:30.
Please come prepared with questions and topics you'd like to review.

There will be no office hours next week, but you can make an appointment for Monday after class.

Final websites are due May 7 at 3:30pm. They will only be accepted until May 9 in order to have them graded in time to post final grades. Extensions will only be granted for emergency situations.