



CSCI-UA-4-005

Intro to Web Design + Computer Principles

Web Hosting + Domain Names

Professor Emily Zhao

M/W 12:30PM – 1:45PM



Agenda

- Lecture
 - Domain Names
 - Web Hosting
 - Search Engine Optimization
 - Website Analytics
- Github Pages
- Open Workshop / Study / Mock Final

Domain Names

Domain Names

- Domain names serve as a more memorable reference to Internet resources.
- Domain names are used to identify Internet Protocol (IP) addresses.
- An IP address is an identifier for a node—a computer or device on a network.

Top Level Domain

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 (.com .org .net)
- Country-code top-level domains (.us .uk .jp)
- Infrastructure top-level domain (.arpa)
- Sponsored top-level domain (.museum .cat .post)
- Special-use top-level domain (.localhost .example)

Generic TLDs

Generic TLDs Generic top-level domains initially consisted of:

- GOV: Government agencies
- EDU: Educational institutions
- ORG: Nonprofit organizations
- MIL: Military
- COM: Commercial business
- NET: Network organizations

Some of these, such as .com and .net, are no longer restricted to their original intended usage.

More generic TLDs have since been added and are being added today.

Selecting a Domain Name

When you register a domain name, you are not its owner, rather you have the exclusive right to use it.

Some factors to consider when selecting a domain name:

- Relevance to site
- Communicability
- Availability

Here is a list of all domain name registrars:

www.internic.net/alpha.html



DOMAIN FOR SALE

Computers.com

The domain computers.com presents the opportunity for a brand, product, or service in any market segment to leverage a powerful and identifying domain name as a vehicle for growth and development.

The current asking price for this premium domain name is \$3,000,000 USD.

For more information, please fill out the form. To see other domains for sale, [click here](#).

Opportunity

This is a rare opportunity to own a highly desirable .com with tremendous branding potential and unparalleled marketing potential for any brand or product.

First Name*

Last Name*

Phone Number*

Email*

Company Name*



<https://www.sometimesredsometimesblue.com>



Domain Name Registrars

- [Network Solutions](#)
- [Google Domains](#)
- [GoDaddy](#)

Whois

Whois is a protocol used for querying databases to obtain information about the registration of domain names and IP addresses, revealing details like ownership and registration dates.

ICANN

Internet Corporation for Assigned Names and Numbers is a nonprofit organization responsible for coordinating the global Internet's systems of unique identifiers, including managing the domain name system and IP address allocation.

Web Hosting

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.

Selecting a Web Host

- Dedicated vs. shared server space
- Disk space
- Bandwidth (data transfer)
- Up time (reliability)
- Overage
- Extras: databases, mailboxes, and types of customer support

Web Hosting Services

Free:

- [GitHub Pages](#)
- [Glitch](#)

Paid:

- [Pair Networks](#)
- Media Temple (now [GoDaddy](#))
- [Reclaim Hosting](#)

Search Engine Optimization

Search Engine Optimization (SEO)

- Search engine optimization (SEO) 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 Techniques of 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.

1. Page title
2. URL
3. Headings
4. Text
5. Link text
6. Image alt text
7. Page descriptions

Rangefinder Site

```
<!-- descriptive text for SEO -->  
    <meta name="description" content="History and distinctives of rangefinder cameras">  
<!-- keywords for SEO -->  
    <meta name="keywords" content="rangefinder, SLR, vintage, film, camera">
```

Off-Page Techniques of 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.

Semantic URLs








Semantic URLs, also known as "Clean URLs" or "SEO-friendly URLs," refer to web addresses that are designed to be easily readable and understandable by both humans and search engines.

For example, a non-semantic URL might look like www.example.com/page?id=123, whereas a semantic version of the same URL could be www.example.com/products/. The latter is more descriptive and user-friendly.










"Pretty" URLs

You can organize web pages into directories and rename them as `index.html` so that the URL becomes cleaner and more semantic:

[example.com/about.html](#) → [example.com/about/](#)

< >  ghibli	
Name	
	filmmakers.html
	films.html
> 	images
	index.html
> 	starter-files
	styles.css



< >  ghibli	
Name	
▼ 	filmmakers
	index.html
▼ 	films
	index.html
> 	images
	index.html
> 	starter-files
	styles.css

Website Analytics

Website Analytics

Once people start visiting your site, it's helpful to know!

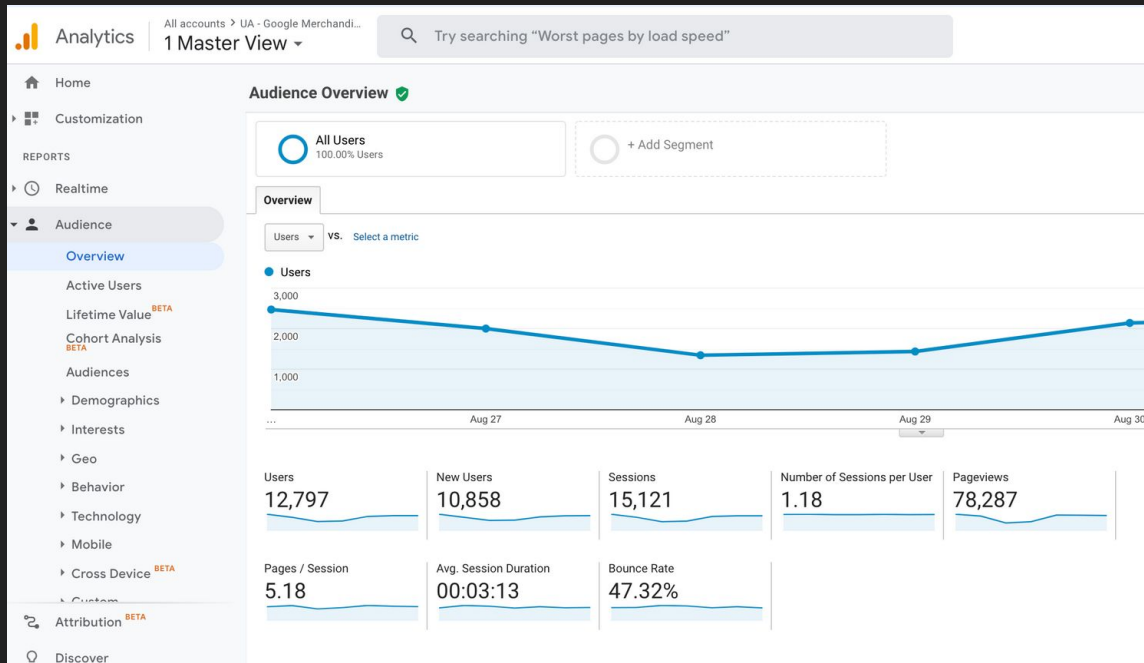
Analytics tools allow you to observe data about the traffic your site receives.

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

Google Analytics

<https://analytics.google.com/>



[Demo] Github Pages

Homework

- Final Website (due tonight)
- Complete Mock Final
- Bring review questions