

# Custom Fonts / Domain Management / Setting up a Domain

Essentials of Web Development  
CSCI 1210

*East Tennessee State University  
Department of Computing*

*CSCI 1210  
Essentials of Web Development*

1

## Fonts

By now, hopefully, we all appreciate the fact that web browsers' customary default font, Times New Roman, is pretty boring

We've seen how to change that font family using CSS

But we're still pretty limited in our selection

# TNR / Arial

*East Tennessee State University  
Department of Computing*

*CSCI 1210  
Essentials of Web Development*

2

# Fonts

## One catch to the font-family property

The display font must be present on the client machine to work

This is why we've been specifying a 'fallback' font when we use the font-family property - e.g.,

`font-family: Arial, Helvetica, sans-serif`

If Arial and Helvetica aren't installed on the client's computer (i.e., Mac & Linux), the browser will pick the first sans-serif font it finds that is

# Fonts

There are a couple of ways to change this, however

CSS3 includes functionality to 'serve up' a custom font from the server, but, being CSS3 and not fully adopted yet, we can't count on it working for all browsers

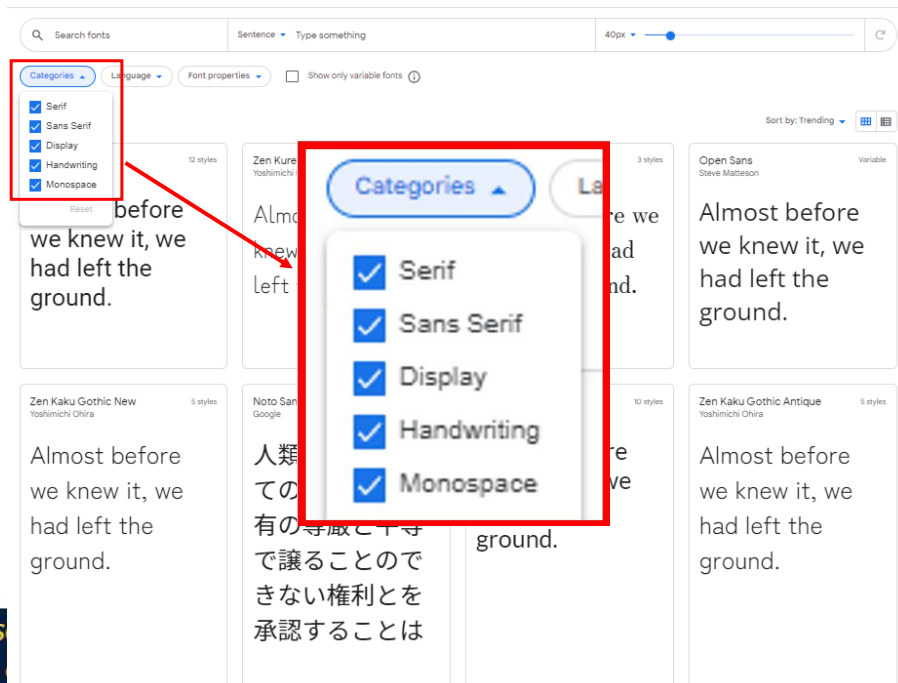
[Google Fonts](#) is another option

*\* If using the 'custom font' option, make sure it's a (copyright) free font!*

# Google Fonts

## *Five steps:*

1. Navigate to Google Fonts - <https://www.google.com/fonts>
2. Select the font(s) you want to use
3. Click on 'Use'
4. Copy the link into your HTML document's head element
5. Add the font name's value to the font-family property in your CSS





Search fonts | Sentence ▾ Type something | 40px

**Noto Sans Japanese** 6 styles  
Google  
人類社会のすべての構成員の固有の尊厳と平等で譲ることのできない権利とを承認することは

**Lato** 10 styles  
Łukasz Dziedzic  
Almost before we knew it, we had left the ground.

**Zen Kaku Gothic Antique** 5 styles  
Yoshimichi Ohira  
Almost before we knew it, we had left the ground.

**Montserrat** 18 styles  
Julieta Ulanovsky, Sol Matas, Juan Pablo del Peral, Jacques Le Bailly  
Almost before we knew it, we had left the ground.

Pick a font. Any font

**East Tennessee State University**  
**Department of Computing**

**CSCI 1210**  
**Essentials of Web Development**

7



**Montserrat**  
Designed by Julieta Ulanovsky, Sol Matas, Juan Pablo del Peral, Jacques Le Bailly

Select styles | Glyphs | About | License

Styles

Type here to preview text: Almost before we knew it, we had left the ground. 64px

Thin 100  
Almost before we knew it, we had left the ground. + Select this style

Thin 100 italic  
*Almost before we knew it, we had left the ground.* + Select this style

Extra-light 200  
Almost before we knew it, we had left the ground. + Select this style

Extra-light 200 italic  
*Almost before we knew it, we had left the ground.* + Select this style

Light 300  
Almost before we knew it, we had left the ground. + Select this style

Light 300 italic  
*Almost before we knew it, we had left the ground.* + Select this style

Regular 400  
Almost before we knew it, we had left the ground. + Select this style

It is best to pick one or two from light, regular, and heavy

Too many options can have a negative effect on page download time

**East Tennessee State University**  
**Department of Computing**

**CSCI 1210**  
**Essentials of Web Development**

8

## Use on the web

To embed a font, copy the code into the <head> of your html

☒ <link> ☐ @import

```
<link rel="preconnect" href="https://fonts.googleapis.com">
<link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
<link href="https://fonts.googleapis.com/css2?family=Montserrat:wght@200;400;700&display=swap" rel="stylesheet">
```

Copy/past into the <head> element of your document



IF THE FONT'S NAME HAS SPACES IN IT, BE SURE TO ENCLOSE IT IN QUOTES, E.G., 'Times New Roman'

## CSS rules to specify families

```
font-family: 'Montserrat', sans-serif;
```

Copy/past into the <head> element of your document



**BEFORE****Google Custom Fonts**

First Name:

Last Name:

Username:

Password:

*East Tennessee State University*  
*Department of Computing*

*CSCI 1210*  
*Essentials of Web Development*

11

**AFTER****Google Custom Fonts**

First Name:

Last Name:

Username:

Password:

*East Tennessee State University*  
*Department of Computing*

*CSCI 1210*  
*Essentials of Web Development*

12

## *A note of caution*

You should use external fonts like this sparingly as they introduce performance overhead

The browser has to pull the font information from an external source

On a high-traffic site, this could become a noticeable issue

# Purchasing and Configuring a Domain

Setting up your own website

# Domain Management

Your domain name is the core component of your online presence -- the address of a piece of online real estate that belongs only to you or your business

Choosing the right domain name and registering it are essential first steps for securing your company's online home, but they're not the only ones

To stay updated and secure, a domain needs ongoing management, whether it's a single domain owned by a new entrepreneur or part of a large portfolio of domains owned by a large corporation

# Domain Management

Domain management, or domain name management, refers to the ongoing tasks of keeping a personal or corporate domain (or domains) stable, secure, and able to support related websites

The domain name not only establishes its owner's presence on the Internet, it also serves as a portal to a business or personal website designed to serve that owner's unique needs

Site owners may be tempted to focus all their attention on setting up and maintaining the website itself, but managing the domain is a key factor in keeping the website live and accessible



# Domain Management

Securing a domain requires only a few steps

Finding the right domain name can take some time and thought, plus the help of online tools to perform a domain name search and check availability, but once a name has been picked, all that's needed is to register it either with an independent registrar or a web hosting company for a term of one or multiple years

Once registered, the name is assigned to a host's primary and secondary nameservers, which point the domain to a website

# Domain Management

Individual users and small businesses might find that a single domain name is all that's needed to establish an online presence and develop a brand

Larger corporations and those with a number of different business interests may need multiple domains

Many registrars recommend buying as many related domain names as possible to keep them from being used by competitors and to capture all possible variants that might be typed in during a search—including misspellings

That can result in a large portfolio of domain names, some of which may never be used

Whether a user buys one domain or many, though, ongoing management keeps them updated and working to support the websites they serve

## Domain Management - How it Works

Domain management can take various forms, depending on a domain owner's individual goals and needs

In general, a domain owner needs to be able to perform essential tasks such as renewing or terminating domain name registration, determining nameservers and hosting providers, and making changes to domain names if needed

## Domain Management - How it Works

Because a domain establishes its owner's online identity, managing that domain can also include checking for similar names that might be harmful to a brand's reputation or authority, or tracking analytics to see how it performs in searches

Another key part of domain management involves security—validating IP addresses associated with the domain and checking for suspicious access to the domain

## Domain Management - Tools & Options

Essential domain management tools are available either through the registrar, or they can be integrated into the control panel provided by a web hosting service

These tools offer a graphical, non-technical way to manage settings related to maintaining all the domains on a user's account

These DIY management tools allow users to handle key tasks such as renewing or terminating domain registrations, validating IP addresses, and configuring nameservers

## Domain Management - Tools & Options

A variety of paid and free domain management tools online can also handle essential tasks such as registering and renewing domains, managing multi-domain portfolios, and tracking domain performance

Some may also include domain name generators and other tools for managing multiple registrars and nameservers, and for keeping domains secure

## Domain Management - Tools & Options

Available through the cloud or downloadable to a user's own desktop, these tools allow users to control all aspects of domain management on their own

Domain management can also be outsourced—this is an appealing option for users with multiple domains or corporations with a large domain portfolio

## Domain Management - Services

Because businesses of all sizes often buy multiple related domain names with different extensions, they can end up with a large portfolio of domains, some of which may lie dormant for long periods of time or never be used at all

Others may be associated with different nameservers or with hosting accounts that have varying terms of renewal

To manage a large and diverse collection of domains, corporate users may turn to domain management services, which offer a variety of service plans for tracking and maintaining all the active and inactive domains in the portfolio

## Domain Management - Services

Domain management services use their own suite of domain management tools to handle domain registrations and renewals, review the portfolio and delete unused and unneeded domains, and maintain domain security

With sophisticated analytics for tracking unauthorized uses, site performance, and other key metrics, these services can work with clients to address issues and make changes to existing domains or the portfolio as a whole

While domain management services are widely used by larger businesses, they can also be a useful solution for busy domain owners running small- or medium-sized – businesses, or even individuals who don't want to manage domains themselves

## Purchasing Your Own Domain

## Your Own Domain

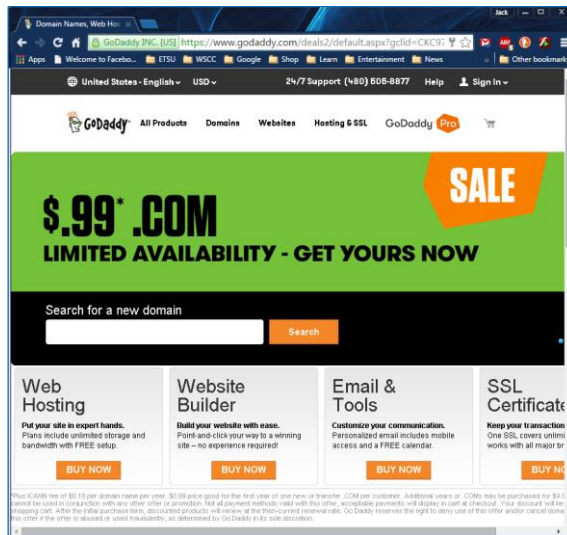
There are many companies from whom you can purchase a domain

The Internet Corporation for Assigned Names and Numbers (ICANN) is the agency that is actually responsible for, among other things, domain registration

Other companies, such as GoDaddy, act as middlemen between their customers and ICANN

## Your Own Domain

The following slides use illustrations from GoDaddy, but it is not, by far, the only company out there that will (for a fee) register an available domain name for its customers

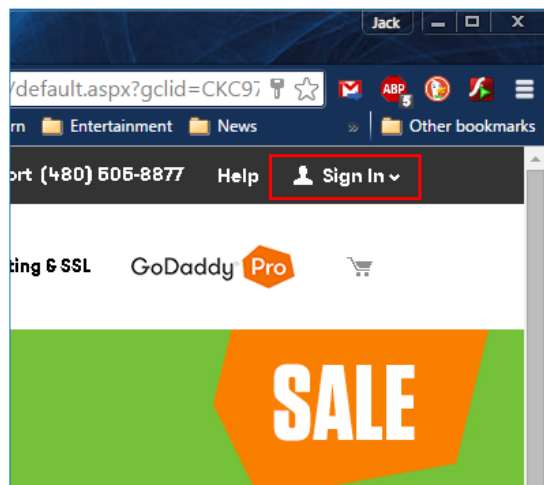


These screen shots are a little dated, but the links are still the same

*East Tennessee State University  
Department of Computing*

*CSCI 1210  
Essentials of Web Development*

29

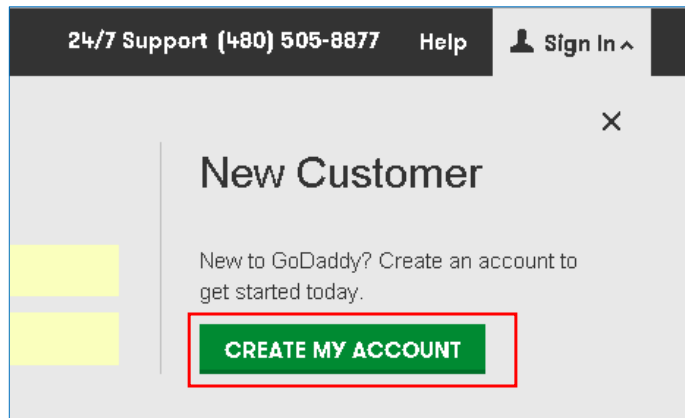


These screen shots are a little dated, but the links are still the same

*East Tennessee State University  
Department of Computing*

*CSCI 1210  
Essentials of Web Development*

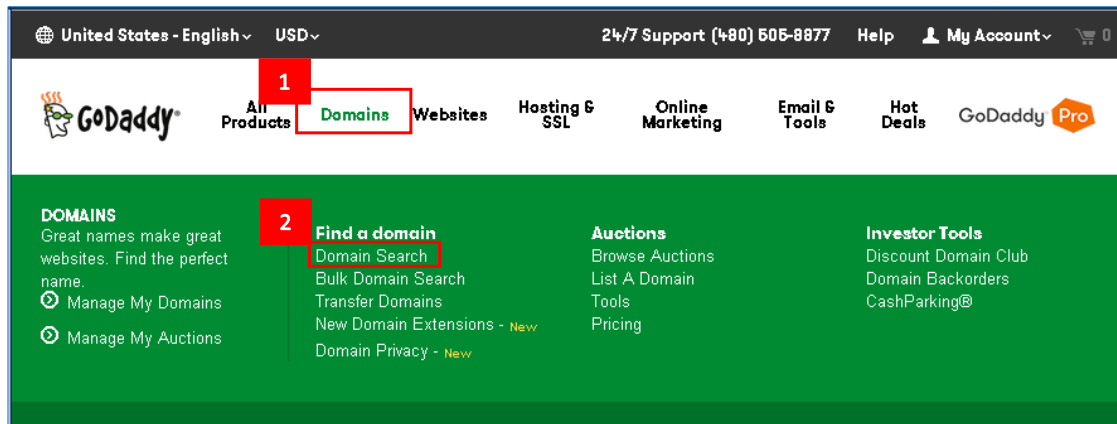
30



These screen shots are a little dated, but the links are still the same

These screen shots are a little dated, but the links are still the same



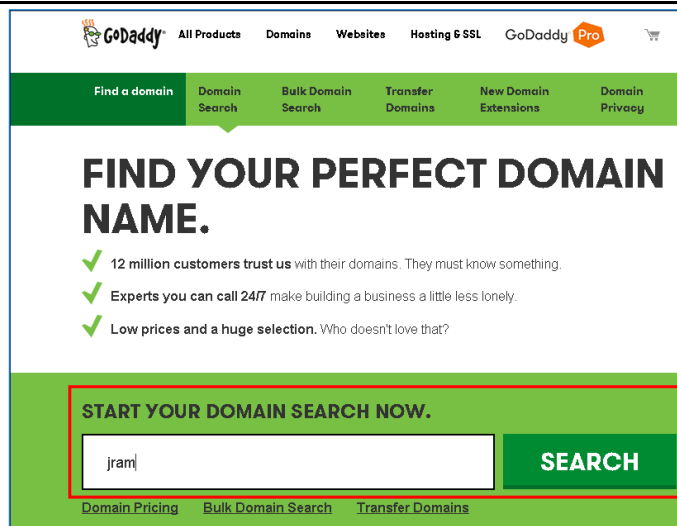


These screen shots are a little dated, but the links are still the same

East Tennessee State University  
Department of Computing

CSCI 1210  
Essentials of Web Development

33



These screen shots are a little dated, but the links are still the same

East Tennessee State University  
Department of Computing

CSCI 1210  
Essentials of Web Development

34

Search: jram [SEARCH AGAIN] [CONTINUE TO CART]

**YES! YOUR DOMAIN IS AVAILABLE. BUY IT BEFORE SOMEONE ELSE DOES.**

**jram.com** Learn More **AUCTION** Current bid **\$18,500.00\*** **GET IT**

**SELECTED JUST FOR YOU:**

**EXTENSIONS**

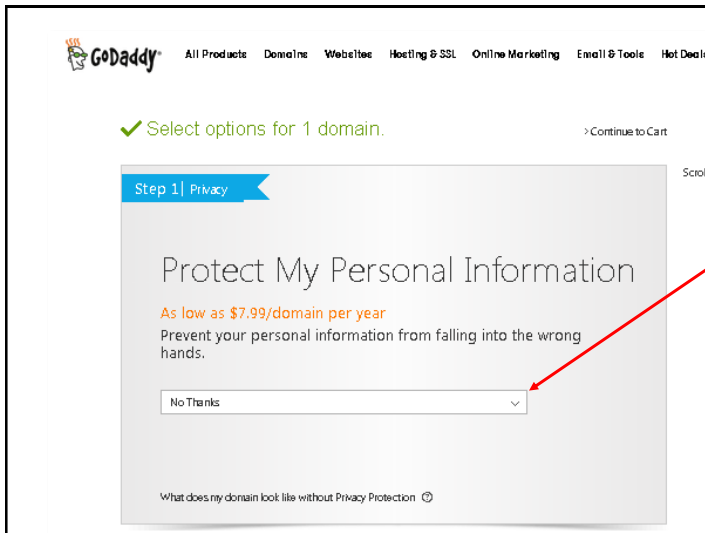
- ☒ All extensions
- ☐ .guru
- ☐ .com
- ☐ .photography
- ☐ .yoga

jram.guru	<del>\$39.99</del> <b>\$27.99*</b>	<b>SELECT</b>
jram.photography	<del>\$24.99</del> <b>\$17.49*</b>	<b>SELECT</b>
jram.co	<del>\$29.99</del> <b>\$9.99*</b>	<b>SELECT</b>
jram.com	<del>\$44.99</del> <b>\$9.99*</b>	<b>SELECT</b>

These screen shots are a little dated, but the links are still the same

jram.guru	<del>\$39.99</del> <b>\$27.99*</b>	<b>SELECT</b>
jram.photography	<del>\$24.99</del> <b>\$17.49*</b>	<b>SELECT</b>
jram.co		<b>✓ SELECTED</b> <b>✕ REMOVE</b>

These screen shots are a little dated, but the links are still the same



It's a good idea to invest a little additional money into obscuring your personal information through a third party

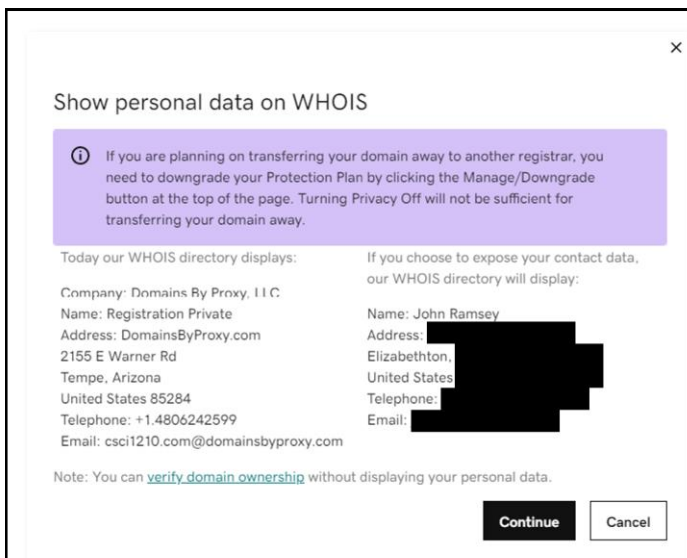
Otherwise, your PII will be visible to anyone on the Internet!

These screen shots are a little dated, but the links are still the same

East Tennessee State University  
Department of Computing

CSCI 1210  
Essentials of Web Development

37



It's a good idea to invest a little additional money into obscuring your personal information through a third party

Otherwise, your PII will be visible to anyone on the Internet!

East Tennessee State University  
Department of Computing

CSCI 1210  
Essentials of Web Development

38

Step 4| SSL Certificates

## SSL Certificates

As low as \$55.99/mo

Protect your customers' private data with the toughest encryption in the world.

No Thanks

\*, \*\*, 1, 2, 3, \*\*, 1, \*\*, ## Click here for product limitations.

Continue to Cart

SSL Certificates secure your site

Providers like GoDaddy will add them for a fee

A system administrator can add them for free ([LetsEncrypt.org](https://letsencrypt.org))

Just about everybody is locking their sites, these days, thanks to LetsEncrypt

These screen shots are a little dated, but the links are still the same


East Tennessee State University  
Department of Computing

CSCI 1210  
Essentials of Web Development

39

1 Cart 2 Billing & Payment 3 Thank You

You qualified for multiple money-saving offers! We've automatically applied the best offer, giving you the lowest price.

Product	Term	Unit Price	Subtotal
 jram.co .CO Domain Registration	5 Years	\$9.99/yr	\$129.95
	1st year	\$29.99/yr	@ Remove
	2+ years		

Protect your personal information. ?

☒ Keep my personal info public

☐ Make my domain private for \$7.99/yr! SAVE \$2.00!

! Matching Domains Available (.info, .mobi)

jram.info - \$16.99 \$2.99 + Add

jram.mobi - \$17.99 \$6.99 + Add

Add All Domains for \$23.98 \$9.98 + Add All

Subtotal \$129.95

Promotional code: GOFD2003AC Applied [EDIT](#)

Total \$129.95

Round up for charity (optional)

Round up to the nearest dollar and we'll donate 100% of the difference to the charity you choose.

☐ Select a Charity + \$0.05

Proceed to Checkout

These screen shots are a little dated, but the links are still the same

East Tennessee State University  
Department of Computing

CSCI 1210  
Essentials of Web Development

40

# Managing Your Domain

(On GoDaddy)

East Tennessee State University  
Department of Computing

CSCI 1210  
Essentials of Web Development

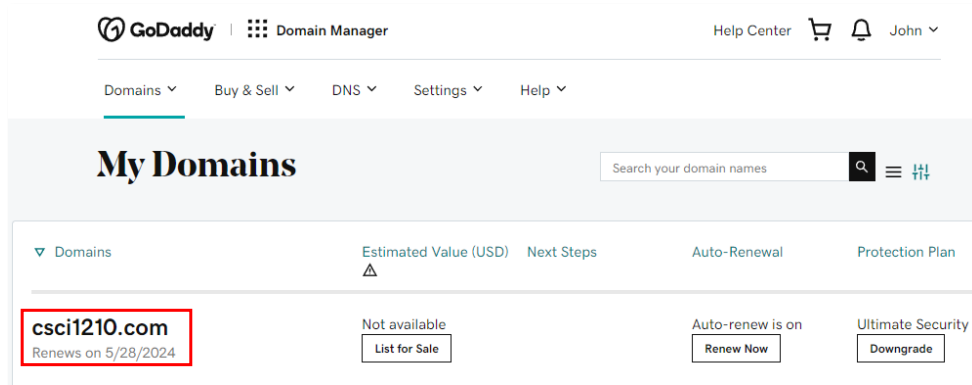
41



East Tennessee State University  
Department of Computing

CSCI 1210  
Essentials of Web Development

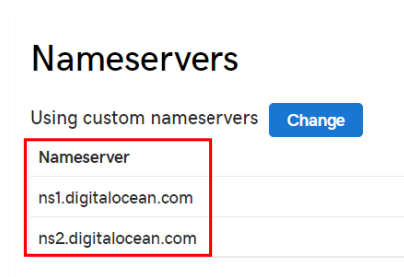
42



East Tennessee State University  
Department of Computing

CSCI 1210  
Essentials of Web Development

43



Here, we're using a third party (DigitalOcean) as home to the actual servers that host the site

So, GoDaddy provides the domain name-to-IP address mapping, but 'points' to DigitalOcean's nameservers

When someone looks up 'csci1210.com,' GoDaddy redirects the search to DigitalOcean, which resolves the IP address - 192.34.56.101

East Tennessee State University  
Department of Computing

CSCI 1210  
Essentials of Web Development

44

Services like GoDaddy are perfectly willing and able to provide a complete website solution, including design, deployment, SEO (Search Engine Optimization), and marketing

For \$\$

We prefer to do a lot of the above work ourselves and just use GoDaddy for my domain name (e.g., csci1210.com) registration only

# Web Development

Important to Remember

# Web Development

We're spending a lot of our time this semester exploring the basics of web development

As such, we're doing a lot of 'one-off' labs to illustrate and practice different concepts (e.g., elements, structure, styling, etc.)

# Web Development

Beyond our class, however, it is important to remember that an effective, enterprise website includes a lot more

A web site can make (or break!) an organization

Creating an effective website requires a lot of different talents and skills

Not just Programming



# Web Development

Web sites are usually a result of teams of people working together toward a common goal

This is the reason for our semester project - working as part of a team

Each team member brings his or her own set of education, experience, skills, and knowledge to the project

Here, we see the 'Gestalt,' the whole being greater than the sum of its parts, in action

# Web Development

An effective web site is the result of a lot of different considerations, from

- Concept,
- Requirements gathering,
- Design,
- Media,
- Coding,
- Testing,
- Marketing,
- Re-Design, all the way to
- Maintenance,
- ...and more

# Web Development

The Department of Computing presents other classes that continue with the basics we're learning here, both directly and indirectly:

CSCI 1720 - Intermediate Web  
CSCI 2910 - Server Side  
CSCI 3110 - Advanced Web

CSCI 4250 - Software Engineering I  
CSCI 4350 - Software Engineering II  
CSCI 4417 - Introduction to System Administration  
CSCI 4927 - Human Computer Interaction

*East Tennessee State University*  
*Department of Computing*

*CSCI 1210*  
*Essentials of Web Development*

51

# Conclusion

Learning how to craft a full-blown website must begin with basics - the 'building blocks'

We can then use those to create more sophisticated solutions

Ultimately, we will possess the knowledge and skills to product effective, dynamic websites that fulfill our clients' and users' needs to make the web a productive part of clients' business practices

*East Tennessee State University*  
*Department of Computing*

*CSCI 1210*  
*Essentials of Web Development*

52



*East Tennessee State University  
Department of Computing*

*CSCI 1210  
Essentials of Web Development*

53

## Copyrights



Presentation prepared by and copyright of John Ramsey,  
East Tennessee State University, Department of  
Computing . ([ramseyjw@etsu.edu](mailto:ramseyjw@etsu.edu))



- Microsoft, Windows, Excel, Outlook, and PowerPoint are registered trademarks of Microsoft Corporation.
- IBM, DB2, DB2 Universal Database, System i, System i5, System p, System p5, System x, System z, System z10, System z9, z10, z9, zSeries, pSeries, xSeries, zSeries, eServer, z/VM, z/OS, i5/OS, S/390, OS/390, OS/400, AS/400, S/390 Parallel Enterprise Server, PowerVM, Power Architecture, POWER6+, POWER6, POWER5+, POWER5, POWER, OpenPower, PowerPC, BatchPipes, BladeCenter, System Storage, GPFS, HACMP, RETAIN, DB2 Connect, RACF, Redbooks, OS/2, Parallel Sysplex, MVS/ESA, AIX, Intelligent Miner, WebSphere, Netfinity, Tivoli and Informix are trademarks or registered trademarks of IBM Corporation.
- Linux is the registered trademark of Linus Torvalds in the U.S. and other countries.
- Oracle is a registered trademark of Oracle Corporation.
- HTML, XML, XHTML and W3C are trademarks or registered trademarks of W3C®, World Wide Web Consortium, Massachusetts Institute of Technology.
- Java is a registered trademark of Sun Microsystems, Inc.
- JavaScript is a registered trademark of Sun Microsystems, Inc., used under license for technology invented and implemented by Netscape.
- SAP, R/3, SAP NetWeaver, Duet, PartnerEdge, ByDesign, SAP Business ByDesign, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and other countries.
- Business Objects and the Business Objects logo, BusinessObjects, Crystal Reports, Crystal Decisions, Web Intelligence, Xcelsius, and other Business Objects products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of Business Objects S.A. in the United States and in other countries. Business Objects is an SAP company.
- ERPsIm is a registered copyright of ERPsIm Labs, HEC Montreal.
- Other products mentioned in this presentation are trademarks of their respective owners.

*East Tennessee State University  
Department of Computing*

*CSCI 1210  
Essentials of Web Development*

54