

Custom Fonts / Domain Management / Setting up a Domain

Essentials of Web Development
CSCI 1210

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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

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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

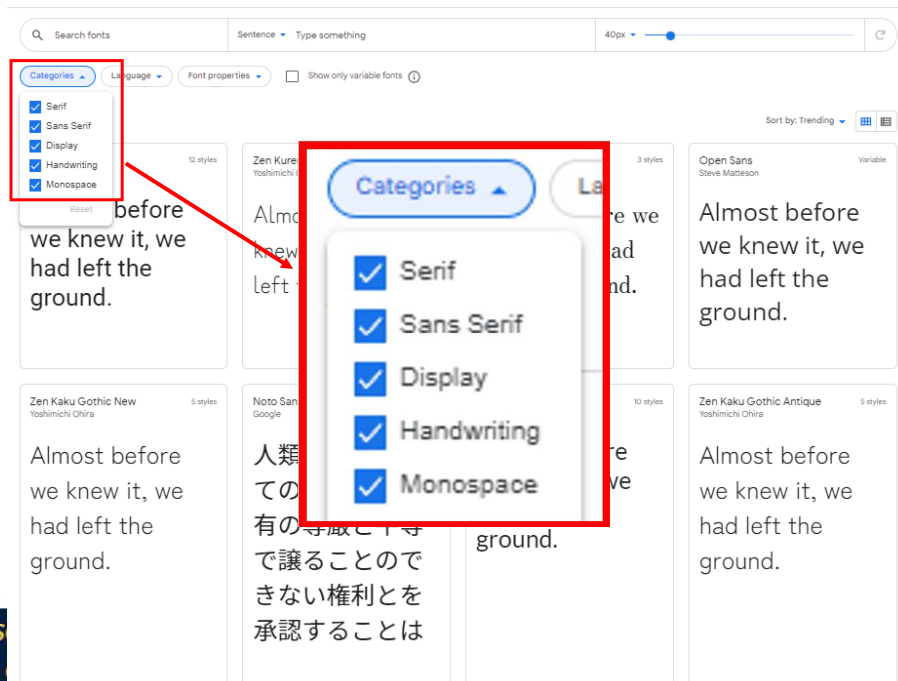
[Google Fonts](#) is another option

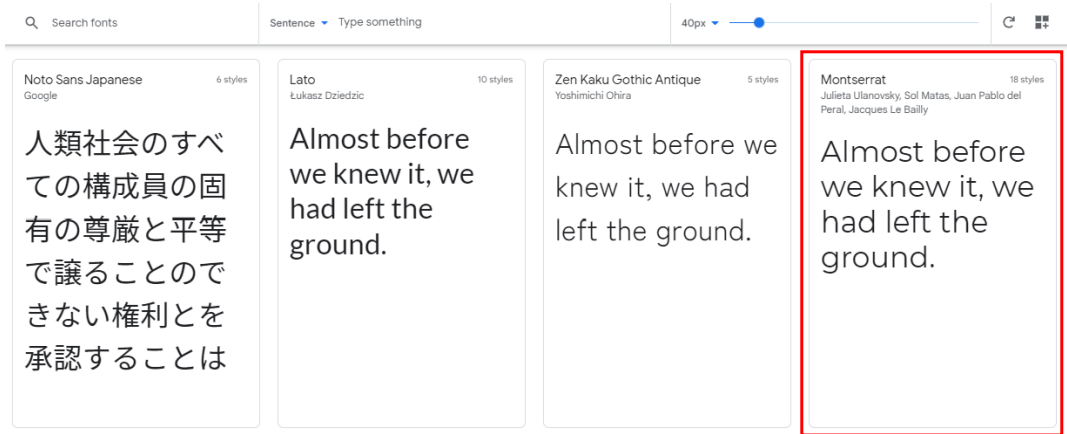
** If using the 'custom font' option, make sure it's a (copyright) free font!*

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 Dziedzić
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.

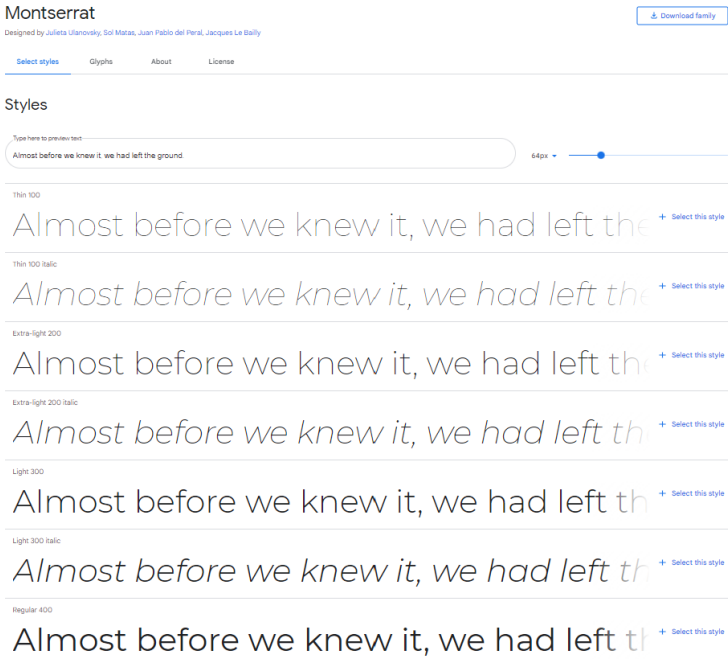
Montserrat 18 styles
Julieta Ulanovsky, Sol Matas, Juan Pablo del Peral, Jacques Le Bailly
Almost before we knew it, we had left the ground.

Pick a font. Any font

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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

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Use on the web

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

☒ <link> ☐ @import

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

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-se
rif;
```

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



BEFORE**Google Custom Fonts**

First Name:

Last Name:

Username:

Password:

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AFTER**Google Custom Fonts**

First Name:

Last Name:

Username:

Password:

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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

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

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

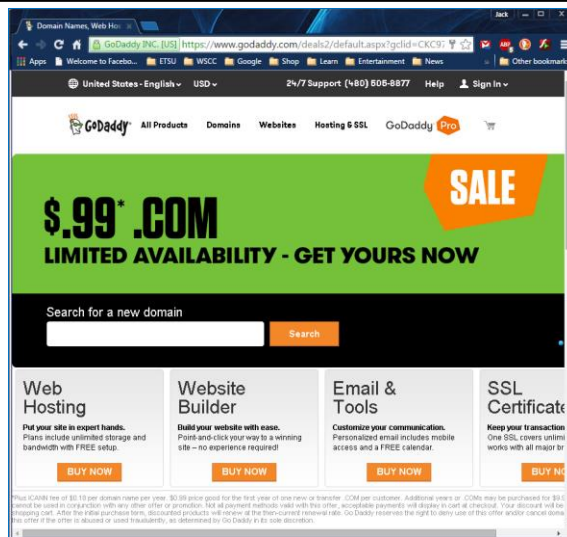
There are many companies from whom you can purchase a domain

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

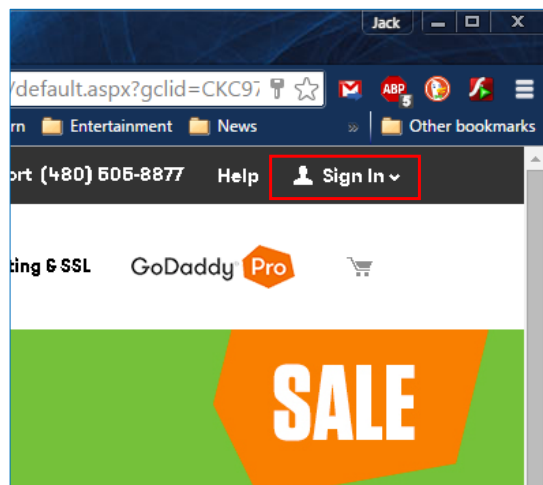


These screen shots are a little dated, but the links are still the same

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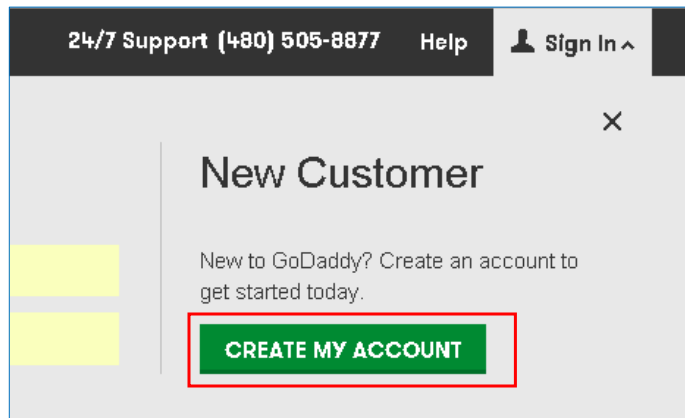


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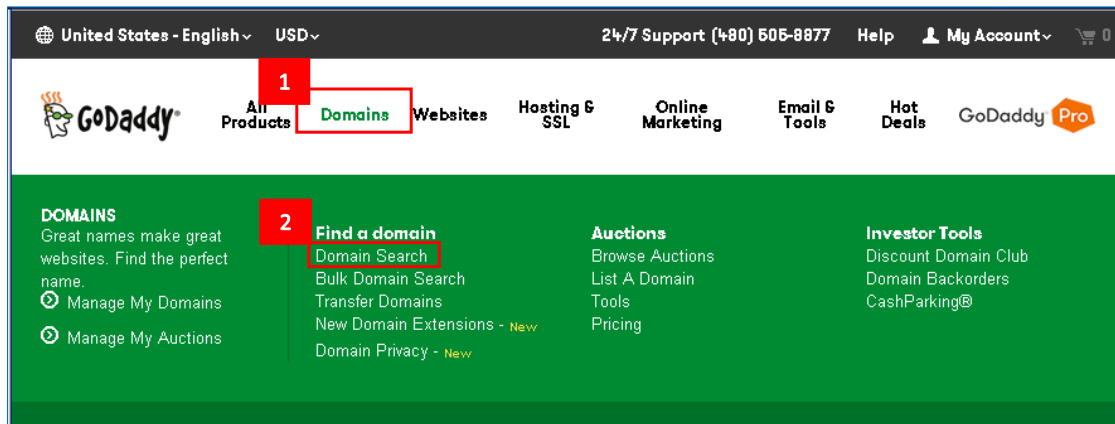
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Universal Terms of Service [Privacy Policy](#)'. There is also a 'BUY NOW' button on the left side of the page."/>

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

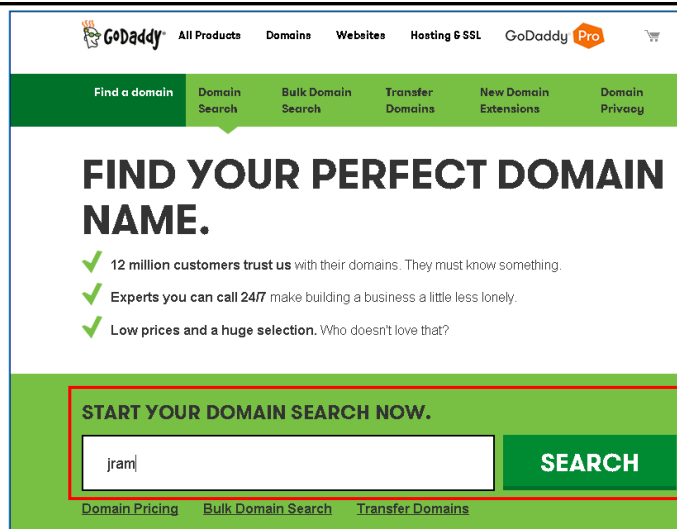


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Search: jram [SEARCH AGAIN] [CONTINUE TO CART]

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

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

SELECTED JUST FOR YOU:

EXTENSIONS

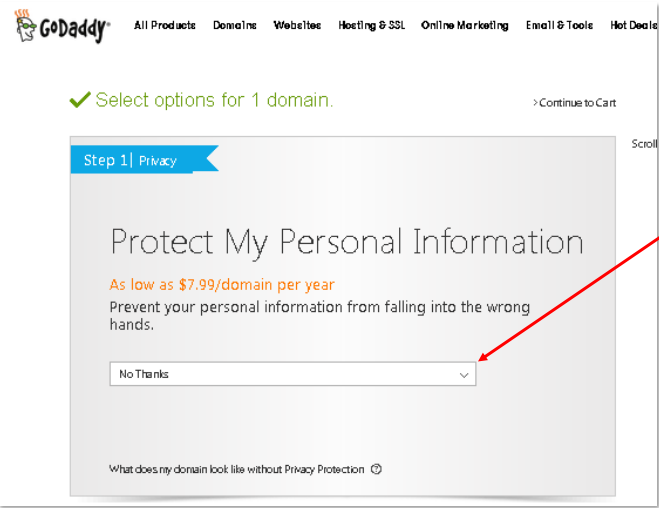
- ☒ All extensions
- ☐ .guru
- ☐ .com
- ☐ .photography
- ☐ .yoga

jram.guru	\$39.99 \$27.99*	[SELECT]
jram.photography	\$24.99 \$17.49*	[SELECT]
jram.co	\$29.99 \$9.99*	[SELECT]
jram.com	\$14.99 \$9.99*	[SELECT]

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jram.guru	\$39.99 \$27.99*	[SELECT]
jram.photography	\$24.99 \$17.49*	[SELECT]
jram.co	✓ SELECTED	[REMOVE]

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

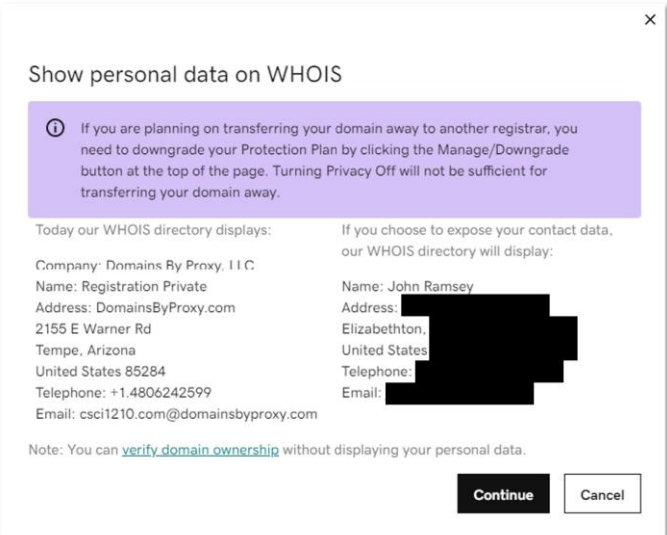
Otherwise, your PII will be visible to anyone on the Internet!

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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!

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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

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

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

Continue to Cart

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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
www Jram.co .CO Domain Registration	5 Years	\$9.99/yr 1st year \$29.99/yr 2+ years	\$129.95 @ Remove

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

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Managing Your Domain

(On GoDaddy)

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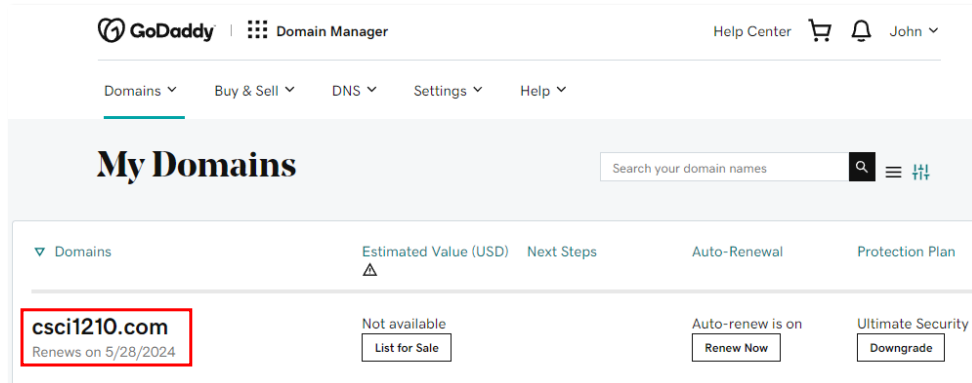
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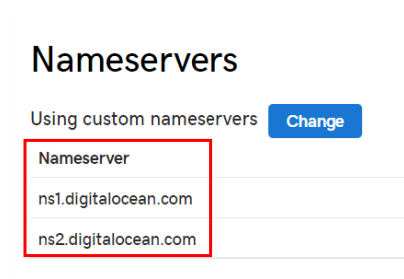
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Here, I'm using a third party (DigitalOcean) as home to the actual servers that host the site

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

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

For \$\$

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

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```

/var/www/html/csci1210/
├── PresentationRubric.docx
├── Your team for the CSCI 1710.docx
├── about.php
├── addons.php
├── assign.php
├── assignments
│   ├── hw0.1
│   │   └── hw0.1.php
│   ├── hw1
│   │   ├── form.php
│   │   └── hw1.php
│   ├── hw1.1
│   │   ├── debug.log
│   │   └── hw1.1.php
│   ├── hw2
│   │   ├── form.php
│   │   └── hw2.php
│   ├── hw3
│   │   ├── form.php
│   │   ├── hw3.html
│   │   └── index.php
│   └── hw4
│       ├── css
│       │   └── hw4.css
│       ├── form.php
│       ├── hw4.html
│       ├── hw4.zip
│       └── hw4template.html

```

You'll learn a lot more about this in
CSC 4417 - Intro to System
Administration

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Dep*

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```

<VirtualHost *:80>

    ServerName cscil210.com
    ServerAlias www.cscil210.com

    ServerAdmin ramseyjw@etsu.edu
    DocumentRoot /var/www/html/cscil210

    ErrorLog ${APACHE_LOG_DIR}/error.log
    CustomLog ${APACHE_LOG_DIR}/access.log combined

    RewriteEngine on
    RewriteCond %{SERVER_NAME} =www.cscil210.com [OR]
    RewriteCond %{SERVER_NAME} =cscil210.com
    RewriteRule ^ https://%{SERVER_NAME}%{REQUEST_URI} [END,NE,R=permanent]
</VirtualHost>

<Directory />
    Options Indexes FollowSymLinks Includes ExecCGI
    AllowOverride All
    Require all granted
</Directory>

<Directory /.well-known/acme-challenge/ >
    Order Deny,Allow
    Allow from All
</Directory>

```

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

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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

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