HTML, CSS, & Fundamentals of Development

School of Visual Concepts
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Week 2

- Review
- What is CSS?
- CSS Syntax
- CSS Properties
- Using Web Fonts
- Browser Developer Tools
- Getting on the Web

HTML
Review

HTML Tags

```
<p>Some content</p>

<p><em>Some</em> content</p>

<ul>
    <li>Item 1</li>
    <li>Item 2</li>
</ul>
```

HTML Attributes

```
<a>Non-working link</a>

<a href="page2.html">Great!</a>
```

HTML Tags

`<h1>`   `<strong>`   `<ul>`

`<h2>`   `<em>`   `<ol>`
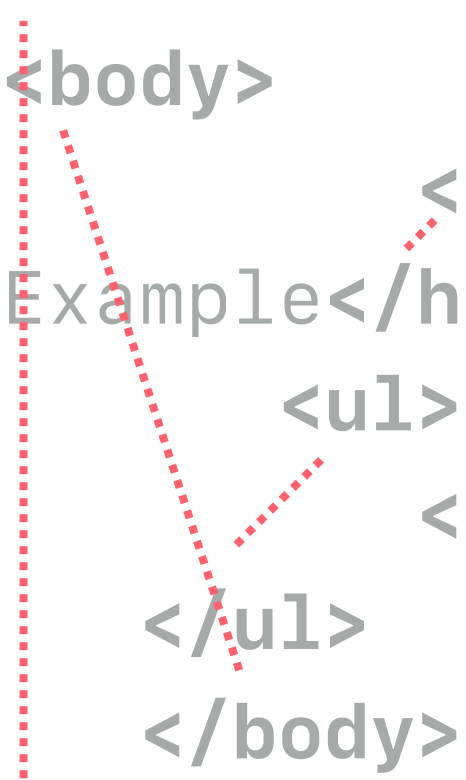
`<h3>`   `<li>`

             `<a href="">`

`<p>`   `<img src="">`

Comment tag

```
<!-- This is a comment -->
```

Indenting HTML

```
<html>
<body>
        <h3>
Example</h3>
    <ul><li>Item 1</li>
        <li>Item 2</li>
    </ul>
    </body>
</html>
```

Indenting HTML

```
<html>
<body>
          <h3>
Example</h3>
        <ul><li>Item 1</li>
          <li>Item 2</li>
    </ul>
    </body>
</html>
```

Indenting HTML

```
<html>
    <body>
        <h3>Example</h3>
        <ul>
            <li>Item 1</li>
            <li>Item 2</li>
        </ul>
    </body>
</html>
```

Naming Your Files

– Lowercase, no spaces, dashes
– Your main HTML file should be called index.html

What
is CSS?

What CSS Does

Defines rules for the presentation of your website

What CSS Does

Defines rules for the presentation of your website

- Typography
- Color
- Borders
- Backgrounds

- Alignment
- Positioning
- Spacing
- Transparency

What is CSS?

CSS File

```html
<!DOCTYPE html>
<html>

<head>
  <title>My Page</title>
</head>

<body>
  <p>Hello World!</p>
</body>

</html>
```

HTML

```css
body {
  font-family: sans-serif;
  background-color: white;
}

p {
  color: gray;
  font-size: 18px;
}

a {
  color: red;
}
```

CSS

CSS File

```html
<!DOCTYPE html>
<html>

<head>
  <title>My Page</title>
</head>

<body>
  <p>Hello World!</p>
</body>

</html>
```

HTML

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  color: gray;
  font-size: 18px;
}

a {
  color: red;
}
```

CSS

<link rel="stylesheet" href="style.css">

CSS
Syntax

CSS Syntax

```css
h1 {
    font-size: 32px;
}

body {
    background-color: black;
    font-family: serif;
    color: white;
}
```

CSS Syntax

```css
selector {
    property: value;
}
```

CSS Syntax

```css
selector {
    property: value;
}
```

The selector chooses which
HTML element to style

CSS Syntax

```css
h1 {
    property: value;
}


strong {
    property: value;
}
```

```
selector {
    property: value;
}
```

A property is the style attribute
we want to change

CSS Syntax

```css
selector {
    font-size: value;
    color: value;
    background-color: value;
    margin-bottom: value;
}
```

CSS Syntax

```
selector {
    property: value;
}
```

A value defines what the property should be changed to

CSS Syntax

```css
selector {
    font-size: 12px;
    color: blue;
    background-color: white;
    margin-bottom: 20px;
}
```

CSS Syntax

```css
selector {
    property: value;
}


selector {
    property: value;
    property: value;
    property: value;
}
```

CSS Syntax

```css
h1 {
    font-size: 32px;
}

body {
    background-color: black;
    font-family: serif;
    color: white;
}
```

Linking CSS to your HTML

```
<head>

    <meta charset="utf-8">

    <title>My website</title>

    <link rel="stylesheet" href="style.css">

</head>
```

CSS
Properties

Properties

- There are LOTS of them! Keep a reference handy.
- Always lowercase, with hyphens between words
  - e.g., **font-size**, **margin-top**

font-size

```css
font-size: 12px;
font-size: 12;


h1 {
    font-size: 32px;
}
```

font-family

```css
font-family: Georgia, serif;
font-family: Helvetica, sans-serif;
font-family: "Courier New", monospace;


p {
    font-family: Georgia, serif;
}
```

color

```css
color: blue;
color: #0000ff;
color: rgb(0, 0, 255);

strong {
    color: #ccff00;
}
```

Additive Color
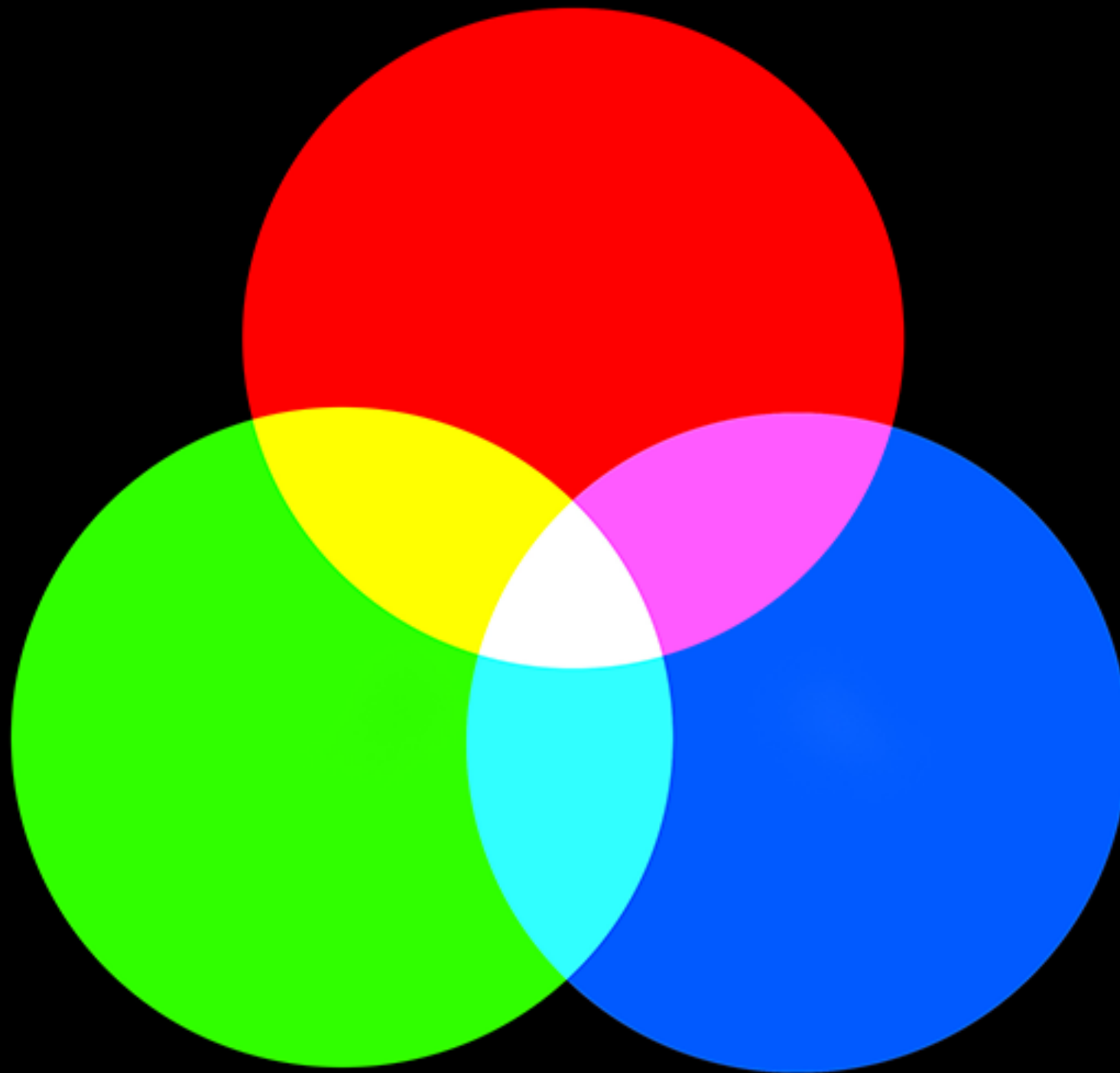
Additive Color
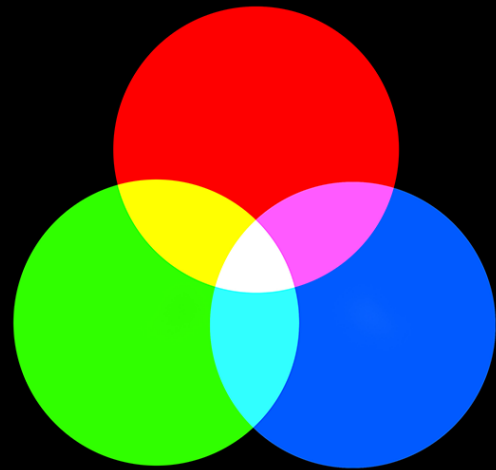
Name	Hex	RGB
red	#FF0000	rgb(255, 0, 0)
green	#00FF00	rgb(0, 255, 0)
blue	#0000FF	rgb(0, 0, 255)
cyan	#00FFFF	rgb(0, 255, 255)
magenta	#FF00FF	rgb(255, 0, 255)
yellow	#FFFF00	rgb(255, 255, 0)

Additive Color

	Name	Hex	RGB
	black	#000000	rgb(0, 0, 0)
		#333333	rgb(51, 51, 51)
		#666666	rgb(102, 102, 102)
		#999999	rgb(153, 153, 153)
		#CCCCCC	rgb(204, 204, 204)
	white	#FFFFFF	rgb(255, 255, 255)

CSS Properties

Typography

color
font-family
font-size
line-height
letter-spacing

font-style
font-weight

text-align
text-transform
text-decoration

Sizing

width
height

Spacing

★ margin
★ padding

Backgrounds

background-color
★ background-image
background-repeat
★ background-size

Borders

★ border
border-radius

Special Selectors

:hover
:active

Browser
Developer Tools

Browser Developer Tools
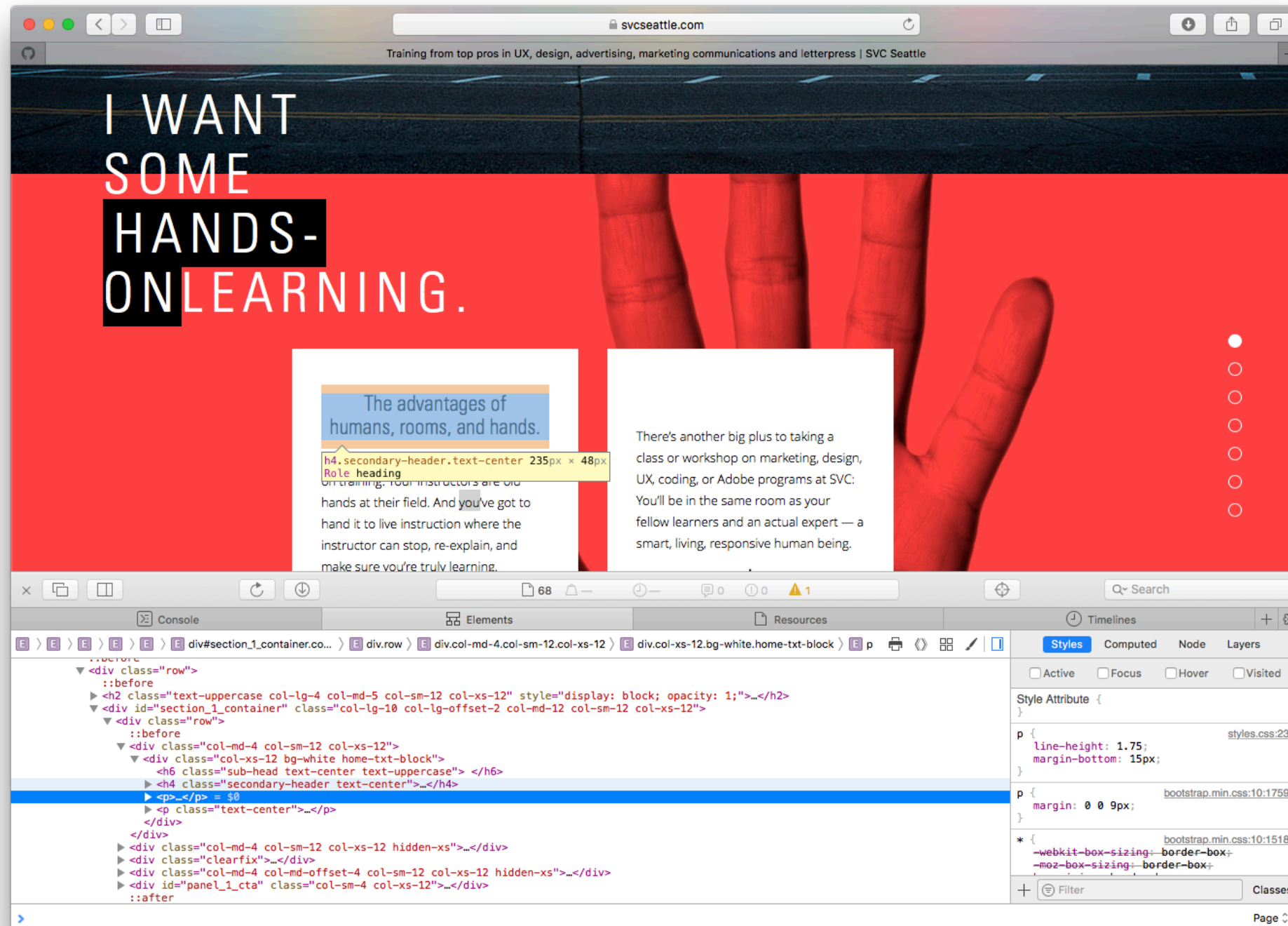
Browser Developer Tools

– Right click > Inspect
– View > Developer > Developer Tools
– ⌘⌥I

Preferences… > Advanced > Show Develop Menu
– Right click > Inspect Element
– Develop > Show Web Inspector
– ⌘⌥I

F12

Useful features

– View the source of any webpage
– Tweak CSS rules of specific elements
– See the assets loaded from a page
– Test a website at different device sizes

More info...

– <u>Safari Web Inspector</u>
– <u>Google Chrome DevTools</u>
– <u>Microsoft Edge Developer Tools</u>

Using
Web Fonts

What are Web Fonts?

Web fonts are fonts you can use on your websites that are stored on the internet.

Because they're stored on the internet, visitors don't have to have the font installed on their computers to see them.

What are Web Fonts?

Note: you must be connected to the internet for the fonts to show up.

Web Font Resources

For this class we will use Google Fonts, available at http://fonts.google.com/, as all the fonts are free!

Other paid resources include TypeKit and Typography.com.

Using Google Fonts

1. Find the font(s) you want to use, and add with the plus button

Roboto
Christian Robertson (12 styles)   ⊕   ←——————

All their equipment and instruments are alive.

Using Google Fonts

2. Use the panel at the bottom of the page to get the HTML & CSS
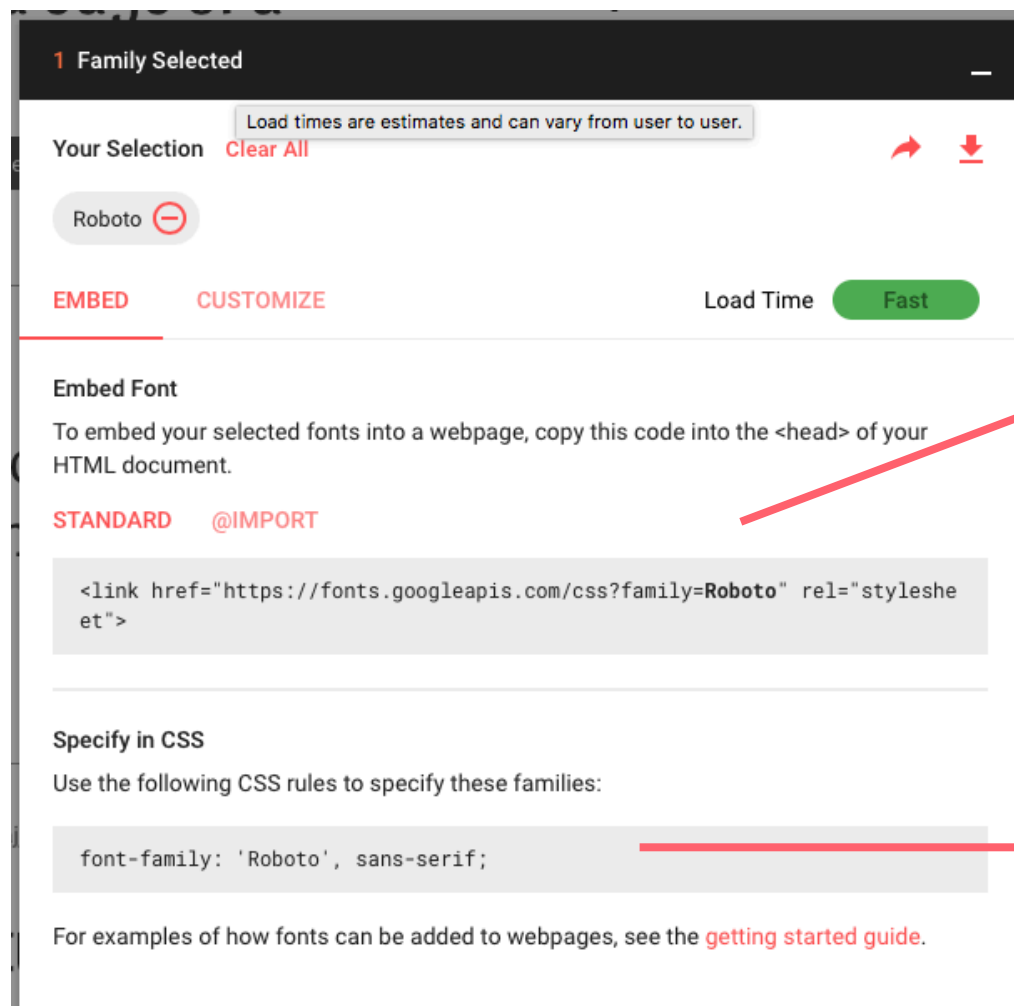

```
<head>
    <title>My website</title>
    <link href="style.css">
    <link href="https://fonts...
</head>


p {
    font-family: "Roboto", s...
    font-weight: 400;
}
```

Getting
on the Web

What is the Web?

A bunch of connected computers that have websites on them.

A server is a computer that is "serving" the websites to other computers.

What is the Web?

To get your website on the internet, you need to upload it to a server computer.

Web Hosting vs Domains

Web Hosting is the file space used to store your website files on a server

A **Domain** is the address for accessing those website files on the web

Web Hosting vs Domains

Cheap web hosting costs about $5/mo

A cheap domain name costs about $5/yr

Web Hosting

Almost all cheap hosting companies are owned by the same company: EIG.

🤷‍♀️

Domain names

Once you register a domain name, it is yours for as long as you keep renewing it!

Go get a cool domain name!

Domain names

There are now hundreds of TLDs (the part of the domain after the dot):

mycooldomain.**com**

mycooldomain.**website**

mycooldomain.**pizza**

mycooldomain.**io**

FTP

File Transfer Protocol is used to transfer files between your computer and your web hosting server.

You can use an FTP application to make this process nice and easy.
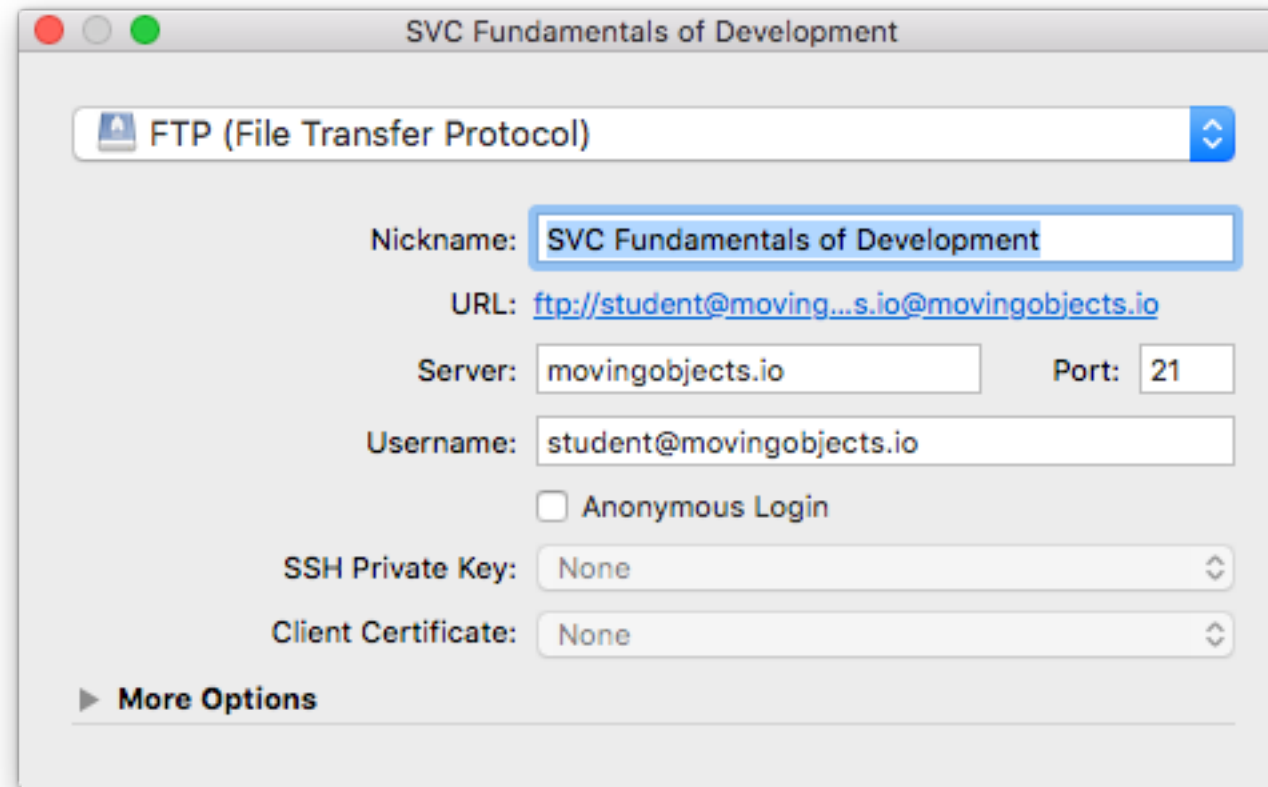
Cyberduck

Cyberduck is a free FTP application available at http://cyberduck.io.
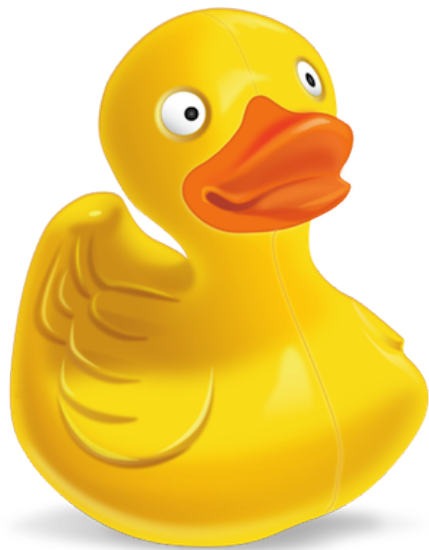
Info you need to upload

- Protocol (typically FTP or SFTP)
- Server address
- Username & password

Getting on the Web

Getting on the Web

What you upload here shows up at:
http://movingobjects.io/svc/students/...
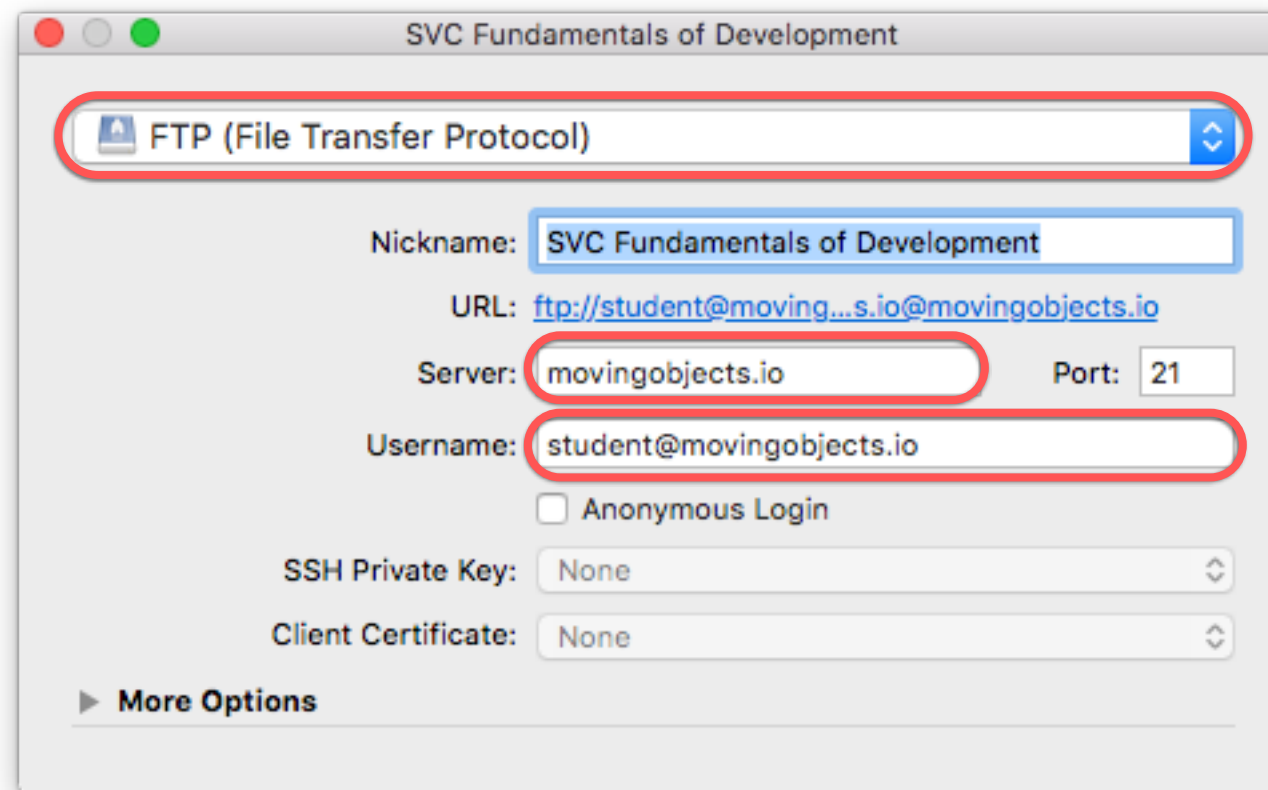
What you upload here shows up at:
http://movingobjects.io/svc/students/...

Uploading Strategies

When you've logged in, the file folder you see is just a folder on another computer that you can drag files into.

Uploading Strategies

Always keep your original web files on your own computer.

Think of your web files only as a COPY of these original files.

Uploading Strategies

Double check folder and file names:

– lowercase

– no spaces

– no special characters

Other relevant services

GitHub

Code sharing and version control

CODEPEN

Code snippet sharing

Homework

Adding Some Style

Use CSS to style up your Favorite Animal Website

Adding Some Style

– Use the `<link>` tag to link your CSS file (named `style.css`) to all pages of your website

– Use the CSS properties we covered in class to style all the elements of the page, including the `<body>` element.

Adding Some Style

– Upload your site to <u>your own folder</u> on the class website using provided FTP credentials

e.g.,
http://movingobjects.io/svc/students/scott/

EXTRA: Two styles

- Make a copy of your project folder, and try adding a completely unique style to your site, but without altering the HTML in any way

Recommended Resource

- Go through the <u>Khan Academy Intro to CSS</u> tutorial for review and to get a preview of the topics we'll be covering next week

Questions? Comments?

- Visit http://movingobjects.io/svc for class slides, code samples, resources

- Email me: scott@movingobjects.io