

#### What we'll cover in this course

- Major HTML/HTML5 elements
- Major CSS properties and capabilities
- Web site structure and navigation
- Prepping images for the web
- Overviews of related technologies, issues, and techniques

#### How we'll cover it

- "Lecture"
- Discussion and questions
- Writing and editing code
- Building a small website on a topic of your choosing
- Optional reading

#### Class details

- Tuesdays, January 7-February 4
- 6:30-9:30pm (with a break!)
- No grades, no tests, no requirements
- Participate, ask questions, practice

#### Class resources

Slides, code samples from class, tools, and online resources will be found at <a href="mailto:dpersing.github.io/svc/">dpersing.github.io/svc/</a>



#### Introductions

- Who are you?
- What do you do/make/etc.?
- What do you want to get out of this class?

# Tonight

- Components and planning of web pages
- Code editing tools
- Basic HTML elements
- File structures and conventions
- Storing class files in Dropbox

Components of a web page

# Content. Design. Code.

- Content is the reason we make web pages
- Design is how we create user experiences and emotional responses
- Code is how we deliver content and experience

#### **Content first**

#### **Text**

- Articles
- Blog posts
- Links
- Captions
- Etc.

#### Media

- •Images
- Video
- Audio
- Interactive experiences

# Design second

# Experience design and information architecture

- Layout
- Navigation
- User flows
- Labeling

#### **Graphic design**

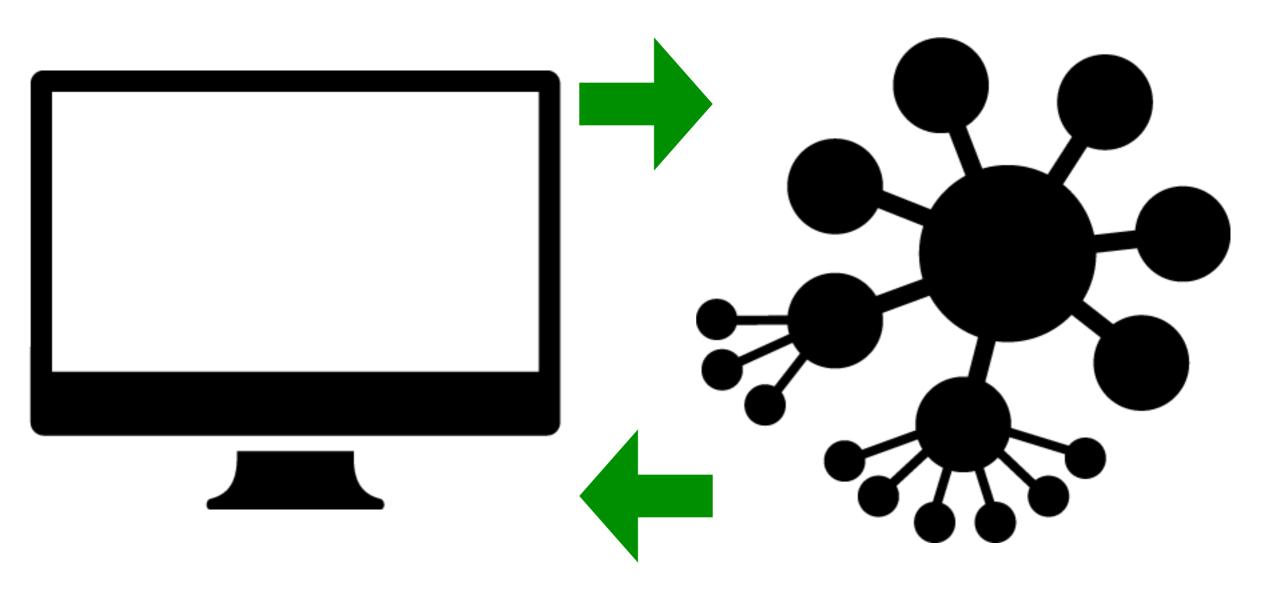
- Colors
- Fonts
- Backgrounds
- Borders
- Icons

#### Code third

- HTML\* structures content
- CSS\* creates style and layout
- Javascript adds extra interactivity

\*We'll be focusing on HTML and CSS.

#### From the web with love



(the internet)

# A brief history of HTML

- HTML was proposed in 1991 and revised until 1999 by the WC3

  your law to be a consortium.
- XHTML was specced in 2000
  - Good news: CSS and separation of content and style
  - Bad news: Became almost too theoretical and impractical

# A brief history of HTML (con't.)

- W3C continued to work on XHTML
- WHATWG started to work on what we now know as HTML5
- These two groups now work together (sort of) with different processes
  - WC3 = Let's Plan Very Carefully
  - WHATWG = Let's Try It and See

# Is HTML5 ready to use?



# Major browsers

- Internet Explorer on Windows
- Safari on OSX and iOS
- Chrome across platforms
- Firefox across platforms

# Types of editors

what you see is what you get

**WYSIWYG** editors

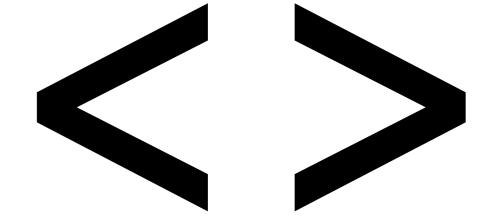
- Dreamweaver
- CMS and blogging editors

**Text** editors

- Sublime Text\*
- TextMate
- BBEdit
- Notepad

\*We'll be using Sublime Text in class.

## **Basic HTML elements**



# Let's get started!

#### <!DOCTYPE html>

- Always comes first
- Tells the browser that this is an HTML document
- Older but very common XHTML DOCTYPE:

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://
www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

# Anatomy of an HTML element

HTML elements almost always have opening and closing tags.

#### Element attributes

<a href="index.html">I'm a link!</a>
<a href="index.html">I'm a link!</a>

Some HTML elements will have additional attributes that give them more meaning.

#### The "rules"

Tags are lower case\*

```
 not <P>
```

Tags must be closed\*\*

```
foo not foo
```

Attributes must have values in quotes\*\*\*

```
<img src="img.png"> not <img src=img.png> or <img src>
```

- \* HTML5 technically allows uppercase tags, but it's considered bad form.
- \*\* We'll break this rule for some elements.
- \*\*\* HTML5 breaks this rule sometimes, but we probably won't get that far.

#### <ht>tml> element

```
<html lang="en">
  <!-- everything else -->
  </html>
```

The html element starts right after the DOCTYPE and closes at the very end of your document.

#### <head> element

```
<head>
    <meta charset="UTF-8">
     <title>Page Title</title>
</head>
```

- Contains metadata about the document, scripts and styles
- Contains the page title that displays in the browser
- Is required!

#### <meta> elements

```
<head>
     <meta charset="UTF-8">
     <meta author="Devon Persing">
     <meta description="This page is an example to show how meta elements work.">
     <title>Page Title</title>
</head>
```

The meta elements describe the document with information like character set, author, and description.

#### <title> element

```
<head>
     <title>Page Title</title>
</head>
```

- Tells the browser what to display in the title bar or page tab
- Important for usability, accessibility, and SEO
- Is required!

## HTML comments

```
<head>
     <meta charset="UTF-8">
     <meta author="Devon Persing">
     <meta description="This page is an example to show how meta elements work.">
     <title>Page Title</title>
     <!-- comments go in here -->
</head>
```

HTML comments can be placed anywhere in the HTML document, and are great for leaving yourself and others notes.

## Indentation

```
<head>
     <meta charset="UTF-8">
     <meta author="Devon Persing">
     <meta description="This page is an example to show how meta elements work.">
     <title>Page Title</title>
     <!-- comments go in here -->
</head>
```

Indenting child elements helps keep your code clean and easy to read.

## <br/>body> element

```
<body>
 <!-- all your visible content -->
</body>
```

- Comes right after the head element
- Wraps all of the visible content
- Is required!

#### <h1> element

```
<body>
    <h1>Page Title</h1>
</body>
```

- Most important element in the body
- Typically will match the title element of the same page
- Used by search engines and assistive technologies to identify the page

#### More header elements

- Range from <h1> (most important) to
   <h6> (least important)
- Lesser headers should always come after more important ones (h1, h2, h3, etc.)
- Provide structure and semantic meaning to HTML pages

# element

Here's a paragraph. You may remember it from the slide about closing your tags.

- Paragraph elements are exactly what they sound like!
- Used to structure text in the document
- When in doubt, put a around it

#### List elements

```
     Here's a list item.
     Here's another list item.
```

- Most lists are of two main kinds:
  - Unordered: ul>
  - Ordered: <0l>
- Lists always contain list items: li>
- Lists can be nested within each other

### <img> element

<img src="filename.png" alt="a picture of kitten">

- Image elements do not have closing tags
- Images have two required attributes:
  - src is where the file lives
  - alt is a text description of the image

#### <br/>br> element

```
Here's a paragraph.
<br/><br>
It has an arbitrary, visual break between sentences.
```

- Break elements create visual line breaks in the browser
- Do not have closing tags
- Use with caution!\*

\*Next week we'll talk about separating style from content.

#### <a>> element

<a href="http://google.com">Google</a>

- Anchor or link elements create paths that connect HTML pages together
- Link elements are required to have an href element to tell them where to go
- Content inside the element will be clickable

## Types of file paths

#### **Absolute** paths

 Full URL of the page or file

http://google.com

http://
dpersing.github.io/svc/
img/svc-logo.png

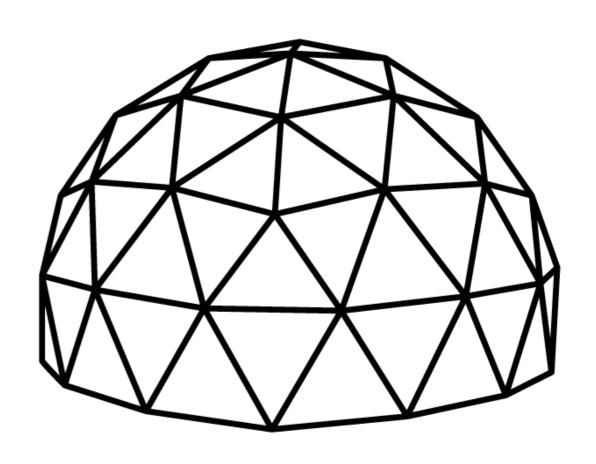
#### **Relative** paths

URL in relation to the file you're in

/svc/img/svc-logo.png

../svc/img/svc-logo.png

#### File structure and conventions



## Rules of file naming

- No spaces in file names
- Capitalization matters
- Use only letters, numbers, hyphens (-), and underscores (\_)
- Filenames must start with a letter
- Your homepage will usually be index.html

## Recommendations for file naming

- Be consistent
- Use meaningful filenames
- Standardizing your filenames will help prevent errors
- Current standard:

```
svc-logo-small.png
photo-gallery.html
shoes-i-have-loved.html
```

#### File structure

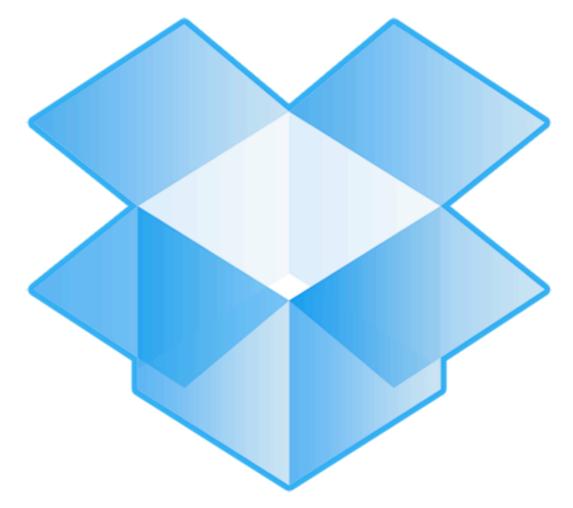
- Make subdirectories for CSS, JS, and media files
- Start with HTML files in the main directory
- Standardizing your structure:
  - Makes updates faster
  - Makes links easier
  - Prevents needing to move files around

## Organization isn't just for you!

Other people might need to find or edit your files and media, and other people will navigate your site.

- Standardized file structure
- Standardized filenaming
- Comments in code (<!-- these! -->)
- Indenting your code so it's readable

# Storing files with Dropbox



## Dropbox? Really?

- Dropbox is a free file hosting/sharing service
- Dropbox has some basic version control
  - Takes snapshots of files periodically
  - Keeps track when files are moved or deleted

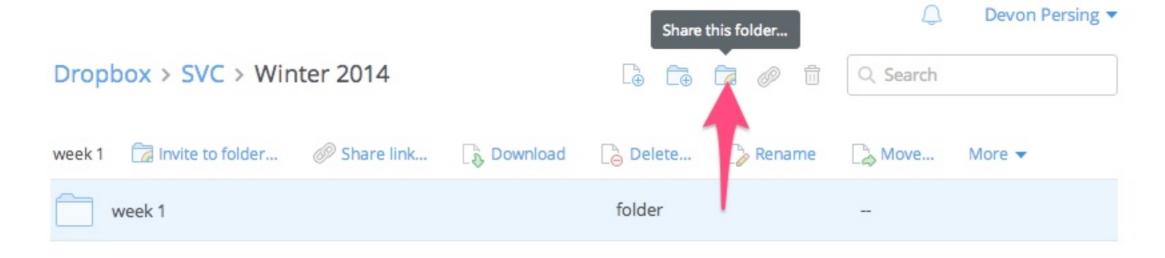
## Setting up a Dropbox account

- Go to <a href="http://dropbox.com">http://dropbox.com</a> and create an account if you don't have one
- Log in to your account

(If you want to have your Dropbox files locally <u>on your own machine</u>, click on the "Install" button in the Dropbox page footer to download the app.)

## Adding and sharing a folder

- Create a Dropbox folder called "yourname-svc"
- Upload your files to your new folder
- Share your folder with me: dep@dpersing.com



### Make a mistake with Dropbox?

- Click on the "Events" link to see uploads, deletions, and other changes to your files
- Click on the link for a deleted file to restore it to a previous version
- In your file folder, you can see (and roll back to) previous versions of your existing files

#### For next week

- Make a 3-5 page website (index.html and at least two other pages, linked together) with the elements we discussed today
- Upload your files to a Dropbox folder and share the folder with me
- HTML and CSS: ch. 1-4 (ignore pg. 45 and use pg. 51 instead)
- HTML5 for Web Designers: ch. 1-2

#### Next week

- Questions and review from week 1
- Prepping images for the web in Photoshop and Illustrator
- Introduction to CSS
- Styling HTML with CSS
- Validating HTML and CSS

#### Questions?

- Visit <a href="http://dpersing.github.io/svc">http://dpersing.github.io/svc</a>
  - Class slides
  - Code samples from class
  - General and class-specific resources
- Email me at <a href="mailto:dep@dpersing.com">dep@dpersing.com</a>