

HTML & CSS Level 1: Week 1

May 5 - June 2, 2015

Instructor: Devon Persing

What we'll cover in this class

- Major **HTML** elements
- Major **CSS** for look and feel
- Website **structure and navigation**
- **Best practices** for writing code
- Overview of **related technologies and issues**

How we'll cover it

- How-to lectures
- Writing code in class
- Building on concepts week by week to build a small website
- Practice, practice, practice
- Online resources and optional reading

Class details

- Tuesdays, May 5 - June 2
- 6:30-9:30pm (with a break!)
- No grades, no tests, no requirements
- Participate, ask questions, practice

Class resources

- Slides
- Code samples
- Tools
- Online resources, articles, and videos

<http://dpersing.github.io/svc/>

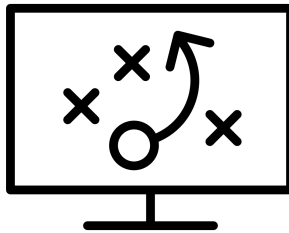
Introductions!

- Who are **you**?
- What do you **do/make/study/etc.**?
- What do you **want to get out of class**?
- A **fun fact** about you!

Tonight

- Planning web pages
- Tools for writing code
- Writing HTML
- Managing and naming your files

Planning web pages





Content, design, and 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
- Links
- Captions
- Listicles

Media

- Images
- Videos
- Podcasts
- Games



Design second

User experience and information architecture

- Layout
- Navigation
- User flows
- Labeling

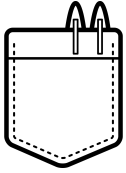
Graphic design

- Colors
- Fonts
- Backgrounds
- Borders
- Icons



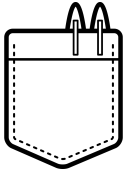
Code third

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



NerdFacts™: Facts for nerds

- The World Wide Web Consortium (**W3C**) makes the rules for how the web works
- HTML5 is a joint project of the W3C and the Web Hypertext Application Technology Working Group (**WHATWG**)
- HTML5 is simply **the most recent version of HTML**



Syntax and language alert

The modern web as we know it was designed in a time and place (the 1990s!) where **computers were tiny, filenames were short, and code was cryptic.**

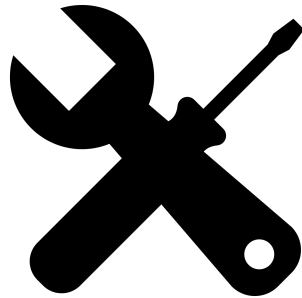
As a result, some of the HTML and terms we'll learn are just **weird and clunky.**



Practice, practice, practice

- Learning how to write code is hard
- Sometimes I'll ask you to type things that won't quite make sense yet
- Use **practice** and the **vocabulary terms** we use in class to look up and ask questions about concepts you don't understand

Tools for writing code



Toolset designed by [Calvin Goodman](#) from the [Noun Project](#)



Web browsers

- **Internet Explorer** on Windows
- **Safari** on Macs, iPhones, and iPads
- **Chrome** across platforms
- **Firefox** across platforms
- And others!



Types of code editors

- **What you see is what you get editors**
 - Appear in publishing platforms like WordPress
 - Work like Word or similar program
 - Make the code for you
- **Text editors**
 - Blank slate
 - Let you have full control over your code
 - We'll be using Sublime Text



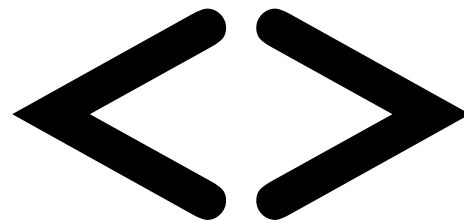
Let's get started!

```
index.html -- svc
index.html
README.md

1 <!DOCTYPE html>
2
3 <html lang="en">
4   <head>
5     <!-- here's some metadata! -->
6     <meta charset="UTF-8">
7
8     <meta name="viewport" content="width=device-width, initial-scale=1">
9
10    <meta name="author" content="Your Name">
11    <meta name="description" content="A description of your page">
12
13    <title>Your First HTML Page</title>
14  </head>
15
16  <body>
17
18    <h1>Your First HTML Page</h1>
19
20    <p>Whoa, it's some HTML.</p>
21
22  </body>
23
24 </html>
```

Line 24, Column 8 Tab Size: 4 HTML

Intro to HTML elements



<> Anatomy of an HTML element

- HTML elements have tags in <> brackets
- Usually an HTML element will have an **opening** tag and a **closing** tag

`<p>I 'm a paragraph!</p>`

<> HTML attributes

- Some HTML elements have **attributes** that provide more information or meaning
- Attributes have **names** and **values** joined with an = sign
- Attributes go in the opening tag

```
<a href="http://google.com">I 'm  
a link!</a>
```

<> The "rules" for writing tags

- Tags are written in lower case

`<a>` not `<A>`

- Tags must be closed

`<p>Stuff</p>` not `<p>Things`

- Attribute values go in quotes

`` not ``

- Indent tags nested in other tags

<> <!DOCTYPE html>

- Tells the browser what kind of document it's being served to give to you
- **Always comes first** in an HTML file
- Older but still very common version:

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


<> `<html>` element

- The `<html>` element opens after the DOCTYPE declaration and closes at the end of your document

```
<html>
```

```
  <!-- everything else -->
```

```
</html>
```

<> <head> element

- The **<head>** element contains:
 - information about the document
 - styles in the form of CSS (optional)
 - Javascript (optional)

<head>

<!-- metadata and resources -->

</head>

<> <meta> elements

- <meta> elements describe things like:
 - what character set to use
 - who authored the page
 - a description of the page for search engines

```
<head>  
  <meta charset="UTF-8">  
  <meta name="author" content="Your Name">  
  <meta name="description" content="A thrilling page  
of HTML.">  
</head>
```

<> <title> element

- The <title> element contains the page title to display in the browser title bar or page tab

```
<head>
```

```
  <title>My Page</title>
```

```
</head>
```

<> HTML comments

- **HTML comments:**
 - can be placed anywhere within an HTML document
 - are invisible in the browser
 - are great for leaving yourself (or others!) notes

```
<!-- a comment -->
```

<> <body> element

- The <body> element contains everything that will be visible in the browser

```
<head>
```

```
  <!-- all my metadata! -->
```

```
</head>
```

```
<body>
```

```
  <!-- all my content! -->
```

```
</body>
```

<> Major <body> elements

- **Headings** for dividing up your page into logical sections
- **Paragraphs** of text
- Bulleted and numbered **lists**
- **Images**
- **Links** to go to other pages or sites

<> Headings

- **Headings** range from most important (<h1>) to least important (<h6>)
- **Search engines and other technologies** use the <h1> to help decide what the page is about
- Headings provide an **outline** for pages

```
<h1>I'm Kind of a Big Deal</h1>
```


<> Paragraphs

- **Paragraphs** are exactly what they sound like!
- Paragraphs structure most text in the document with **<p>** tags

```
<p>Hi, I'm a paragraph. You may remember me from the slide about closing your tags.</p>
```

<> Lists

- The most common types of lists are:
 - **Unordered** (aka bulleted): ``
 - **Ordered** (aka numbered): ``
- These always contain list items (``)

```
<ul>  
  <li>Puppies</li>  
  <li>Kittens</li>  
</ul>
```

<> Images

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

```

```

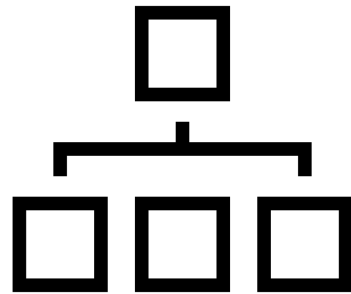
<> Links

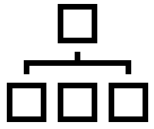
- **Anchor** (<a>) elements create paths that connect pages and files together
- Links have a **required href** attribute that says where the link should send you
- Anything inside the <a> tags is clickable

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

```
<a href="index.html">Home</a>
```

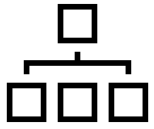
Managing your files





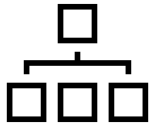
Types of files

- For our purposes, we'll be using:
 - HTML files (`.html`)
 - CSS files (`.css`)
 - Javascript files (`.js`)
 - Image files (`.png`, `.jpg`, `.gif`, etc.)



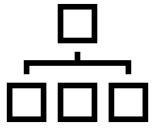
Rules for naming your files

- No spaces
- Capitalization matters (`kittens.png` is *not* the same as `Kittens.PNG`)
- Use only letters, numbers, hyphens (-), and underscores (_)
- Must start with a letter
- Your homepage should be **`index.html`**



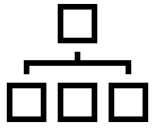
File naming recommendations

- Use meaningful filenames to make it easier to identify what's in a file
- Be consistent with how you name and group files
- Standardize your naming to prevent typing errors
- Current standard uses lower case and hyphens (e.g., **adorable-kittens.png**)



File structures

- On the web, folders of files are called **directories**, and help dictate paths between files
- Put your HTML files in the **main directory**
- Make **subdirectories** for your CSS and media files



Types of file paths

- On the web everything has a Universal Resource Locator (**URL**)
- **Absolute paths** are URLs that always go to exactly the same place (e.g., `http://google.com`)
- **Relative paths** are URLs that go to a place in relation to what page you're on (e.g., `css/layout.css`)



Good developer behavior

- Make it easier for **people navigating** your site with logical file organization
- Make it easier for **other developers** (and **Future You**) to read and edit your code with:
 - brief, helpful comments
 - logical indenting

Dropbox sharing



Dropbox housekeeping

1. Go to dropbox.com and create an account if you don't have one, or log in
2. Create a folder with a descriptive name
3. Upload the files and folders you made today to your new folder
4. Share the folder with me at **dropbox@dpersing.com**

Make a huge (tiny) mistake?

- Click on the "Events" link to see your upload, deletion, and change history
- Click on the link for a deleted file to restore it to a previous version
- View details on existing files to see (and restore) previous versions
- This is a primitive form of **version control**

"Homework" for next week

1. Find a restaurant website you hate and make notes about why.
2. Read [MDN Introduction to HTML](#).
3. Make a page with headings, paragraphs, lists, and at least one embedded image.
4. Make a second page and link to it from your first.
5. *Optional reading:* *HTML and CSS* ch. 1-4, *HTML5 for Web Designers* ch. 1-2

Next week

- Questions and review from Week 1
- Your restaurant website wishlists
- Making images web friendly in Photoshop and Illustrator
- Introduction to CSS
- Block versus inline HTML elements

Questions? Comments?

- Visit dpersing.github.io/svc for:
 - Class slides
 - Code samples
 - Resources
- Email me: dep@dpersing.com
- Tweet at me: [@devonpersing](https://twitter.com/devonpersing)