

HTML & CSS Level 1: Week 1

February 10 - March 10, 2015

Instructor: Devon Persing

What we'll cover in this class

- Major **HTML5** elements
- Major **CSS** properties and capabilities
- Website **structure and navigation**
- Overview of related **technologies, issues, and best practices**

How we'll cover it

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

Class details

- Tuesdays, February 10 - March 10
- 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/>

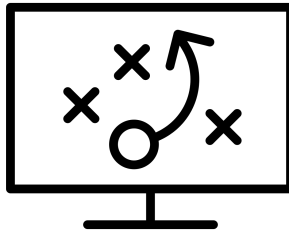
Introductions!

- 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
- Storing and sharing class files in Dropbox

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



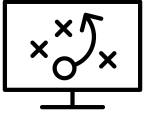
Content first

Text

- Articles
- Links
- Captions
- Listicles

Media

- Images
- Videos
- Podcasts
- Games



Design second

User experience and information architecture

- Layout
- Navigation
- User flows
- Labeling

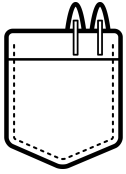
Graphic design

- Colors
- Fonts
- Backgrounds
- Borders
- Icons



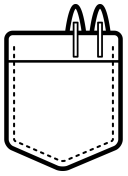
Code third

- **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

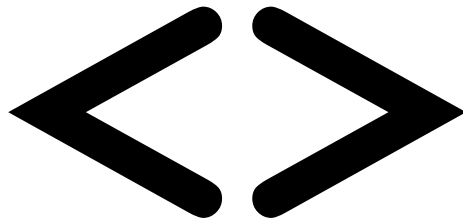


Let's get started!

```
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>
```

The screenshot shows a code editor window titled 'index.html — svc'. The left sidebar shows a file tree with folders 'code', 'css', 'img', 'js', and 'slides', and files 'index.html' (selected) and 'README.md'. The main editor area displays the HTML code above. The status bar at the bottom indicates 'Line 24, Column 8', 'Tab Size: 4', and '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

```

```

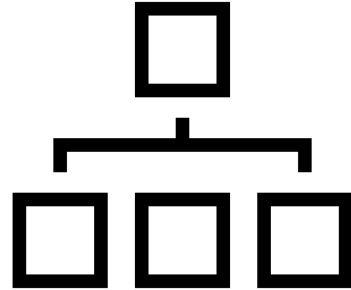
<> Links

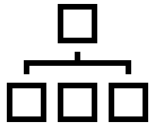
- **Anchor** (<a>) elements create paths that connect pages and files together
- Links have a **required href** attribute that says where the link should send you
- Anything inside the <a> tags is clickable

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

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

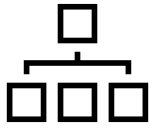
Managing your files





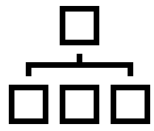
Types of files

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



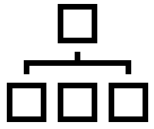
Rules for naming your files

- 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`**



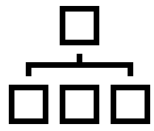
File naming recommendations

- 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. Practice your HTML tags
2. Make 2 pages and link them together
3. Read the [MDN Introduction to HTML](#)
4. *Optional reading:*
 - a. *HTML and CSS* ch. 1-4 (ignore page 45!)
 - b. *HTML5 for Web Designers* ch. 1-2

Next week

- Questions and review from Week 1
- Making images web friendly in Photoshop and Illustrator
- Introduction to CSS
- Block versus inline HTML elements
- Validating your HTML and CSS

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)