



The Zen of Coding

Web Development Boot Camp
Lesson 1.1



The Path of Learning

Your Goals

Basically, 100% of you said **new career**.



Your Goals

And why do you want a new career?

-  To pursue a **dream**
-  To escape a **dead-end job**
-  To be able to **create**
-  To follow a **fascination**
-  To attain **financial stability**
-  To obtain **financial freedom**
-  To **challenge yourself**
-  To be a **role model** to kids



Your Goal = Our Goal

As instructors, we take your goals
very, very seriously.

Support Team Promise

If you're willing to put in the time and take our advice, we're here to help you 100% of the way.

This goes for everyone working on this program:

- Instructors
- TAs
- Student Success Team
- Career coaches
- Everyone else!





But Remember:
Nothing good comes easily.

Our Keys to Success

Don't Be This Person:



A close-up photograph of a baby with light blue eyes and a wide-open mouth, appearing surprised or excited. The baby is wearing a bright pink, zippered jacket. The background is a dark, textured surface covered in numerous small water droplets, suggesting rain or condensation. The overall composition is a full-frame shot.

This Should Be You

Our Mantra for Today and Beyond

When it comes to web development...



I know nothing.



You.



To begin, take a few moments to assuage student fears of being a "beginner." Instead, let them know that having a humble attitude is the first requirement of being successful in this program. In a way, students should channel their inner toddler and recognize that "knowing nothing" and admitting such will allow them to dig their heels in and invest the time necessary to succeed. In a way, coding is like nothing else these students have attempted to do. Their mastery of other subjects, their educational backgrounds, and their professional successes do not guarantee that they will do well here.

The only thing that will guarantee success is hard work, humility, and a relentless desire to be better.

Recognizing how little you know is a first step towards creating that mentality.



IMPORTANT KEYS

- Go over the current module in **GitLab**.
- Do the **activities** in class, and go over the activities after class, **repetition** is key!
- Do the **home assignments** on time, you really learn only by doing it yourself in your own time
- **Make time**, work a couple of hours every day, so you are not rushing to complete but have the time to enjoy and deepen your research. Always be coding.
- **Communicate**. Utilize slack, ask the class, askBSC, and the instructional team.
- **Community**, join study groups, utilize your workgroups-houses, office hours, and us the instructional team.
- Follow **best practices** and guidelines
- Be responsible and **professional**, as if this your workplace.

The Path of Learning

Nothing comes easy.
As students, you face three
HUGE obstacles.

Obstacle #1: The Great Confusion

My code doesn't work and I don't know why.

My code works and I don't know why.



Obstacle #2: The Great Doubt

 What is a silly question?

“Maybe I’m just dumb.”



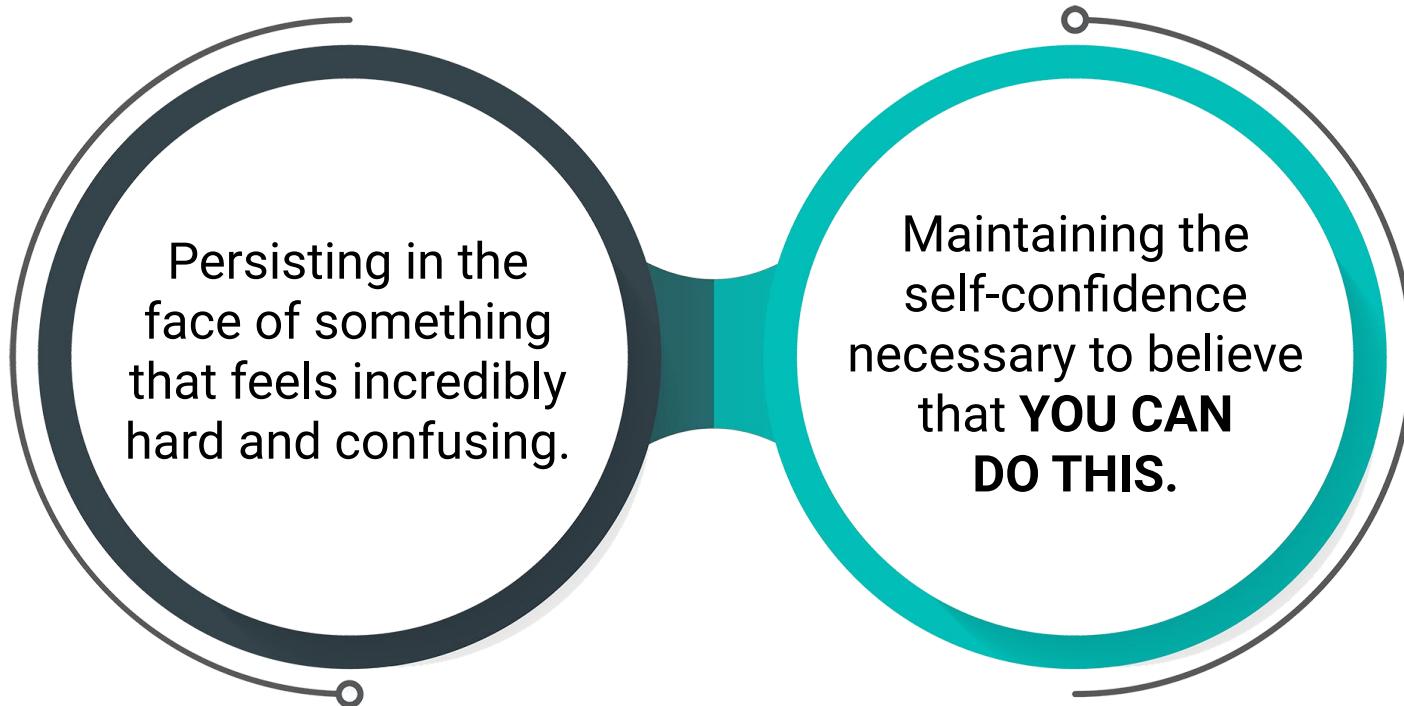
Obstacle #3: The Great Distance

 beginner?



Nothing Comes Easy

Learning to code requires two things:



Learning Can Be Frustrating



You can't tell whether you're learning something when you're learning it—in fact, *learning feels a lot more like frustration*.

What I've learned is that during this period of frustration is actually when people improve the most, and their improvements are usually obvious to an outsider. If you feel frustrated while trying to understand new concepts, try to remember that it might not feel like it, but you're probably rapidly expanding your knowledge.

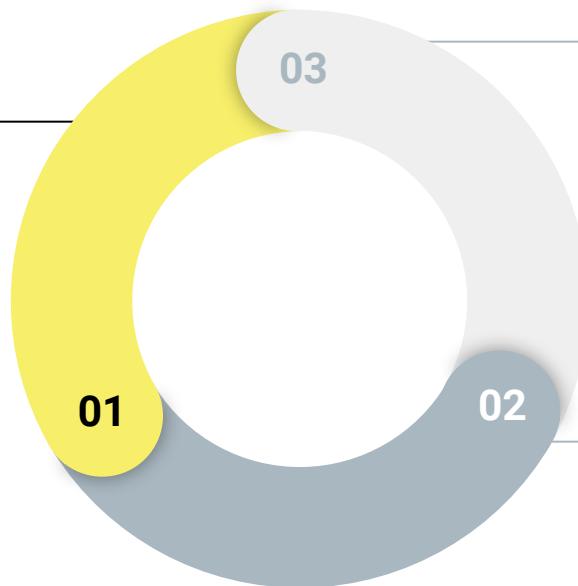


—Jeff Dickey, author of *Write Modern Web Apps with the MEAN Stack: Mongo, Express, AngularJS, and Node.js* (Peachpit Press, 2014)

Advice for the Journey

Throughout this course, always remember to:

Work hard!



Trust yourself

Appreciate your successes

Advice for the Journey

Throughout this course, always remember to:



Work hard!

Trust yourself

Celebrate your
successes

Advice for the Journey

Throughout this course, always remember to:



Work hard!

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successes

And Remember...

If you want to go fast, go alone. If you want to go far, go with a team.



Google Fu: The Most Important Skill of All

| What Is Google Fu?



Course Structure

Daily Schedule

In each class, we'll cover the following:

01

Set objectives

02

Brief background lecture

03

Watch me/coding demos

04

Code discussions

05

In-class exercises

06

Project work

Daily Schedule

In each class, we'll cover the following:

01

Set objectives

02

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Watch me/coding demos

04

Code discussions

05

In-class exercises + Home assignments!



06

Project work

This is the super important
stuff—ALWAYS BE CODING!

weekly Schedule (typically)

01

Day 01: intro to topic  in office hours: solving last weeks hw

02

Day 02: recap and deepening understanding

03

Day 03: advanced implementation  in office hours: introducing hw

04

05

This is the super important
stuff—ALWAYS BE CODING!

06



Prework

Software Checklist

At this point, you should have all of these installed:

- Slack
- Visual Studio Code
- Git
- Git Bash (Windows) or Terminal (Mac)
- Google Chrome

Accounts Checklist

You should also have accounts for:

- GitHub (with SSH Integration)
- LinkedIn
- Stack Overflow

Self-Check

Let's do some quick checks of the following:

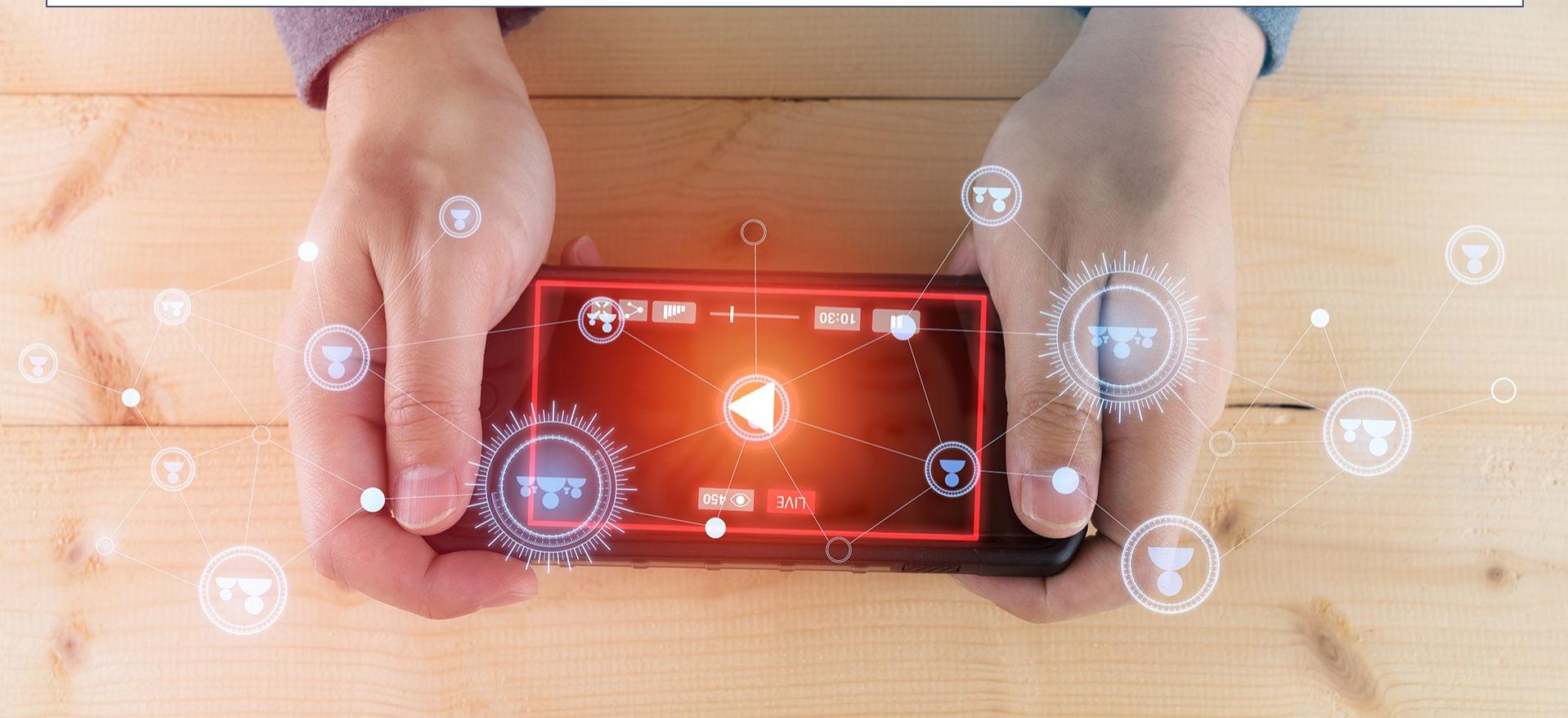
- Visual Studio Code Check
- Git Bash/Terminal Check
- Git Check

The Modern Web

What Exactly Is Full-Stack Development? (*WWW)



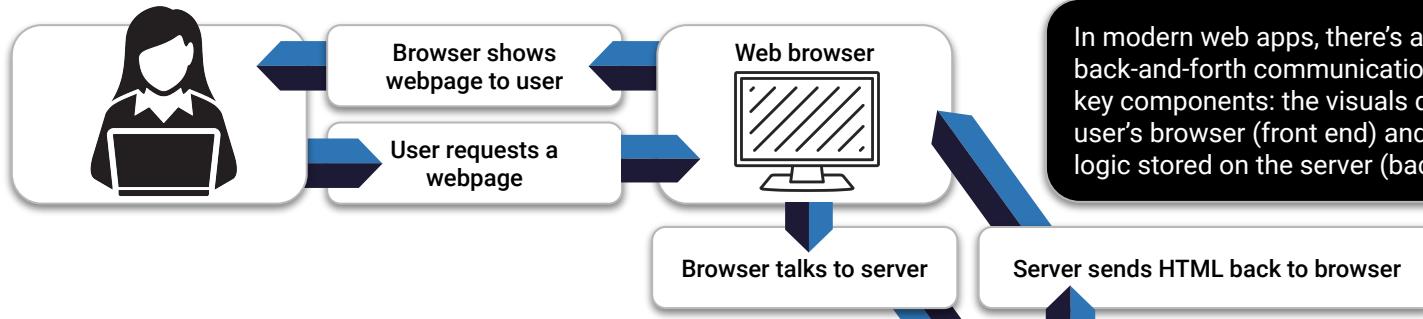
The “Magic” of YouTube



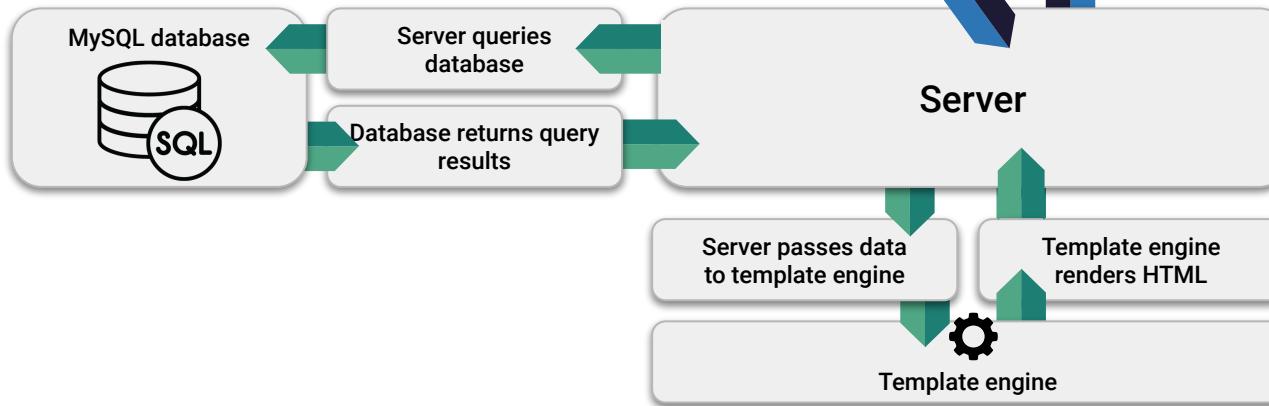
Full-Stack Development

Front end

FSF FLOW



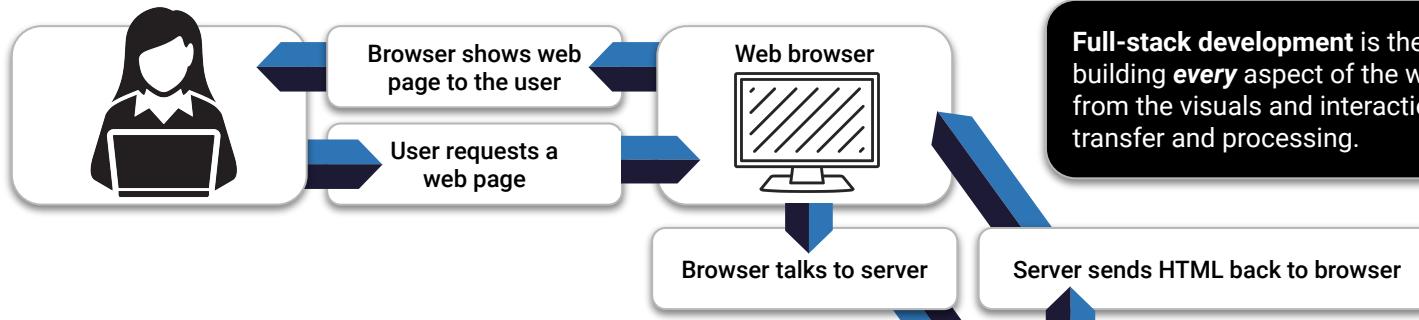
Back end



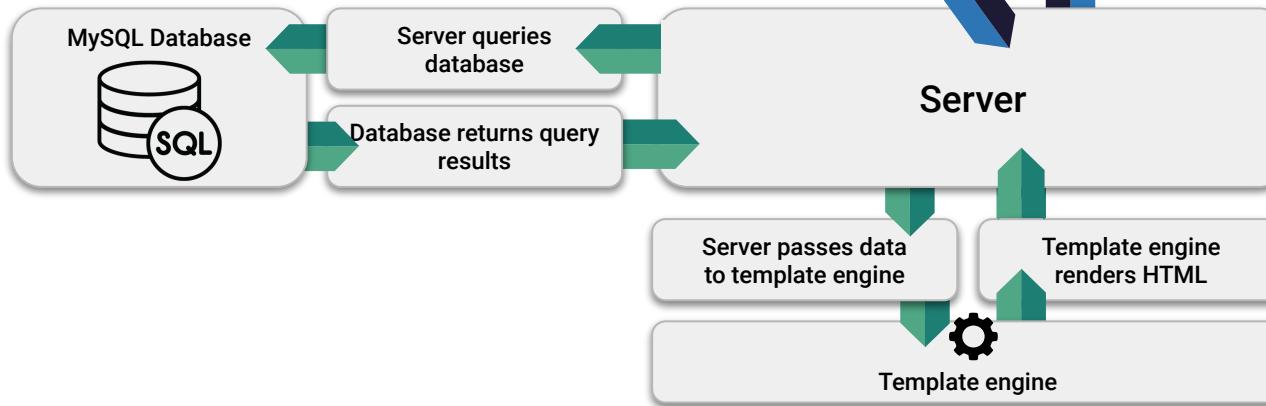
Full-Stack Development

FSF FLOW

Frontend

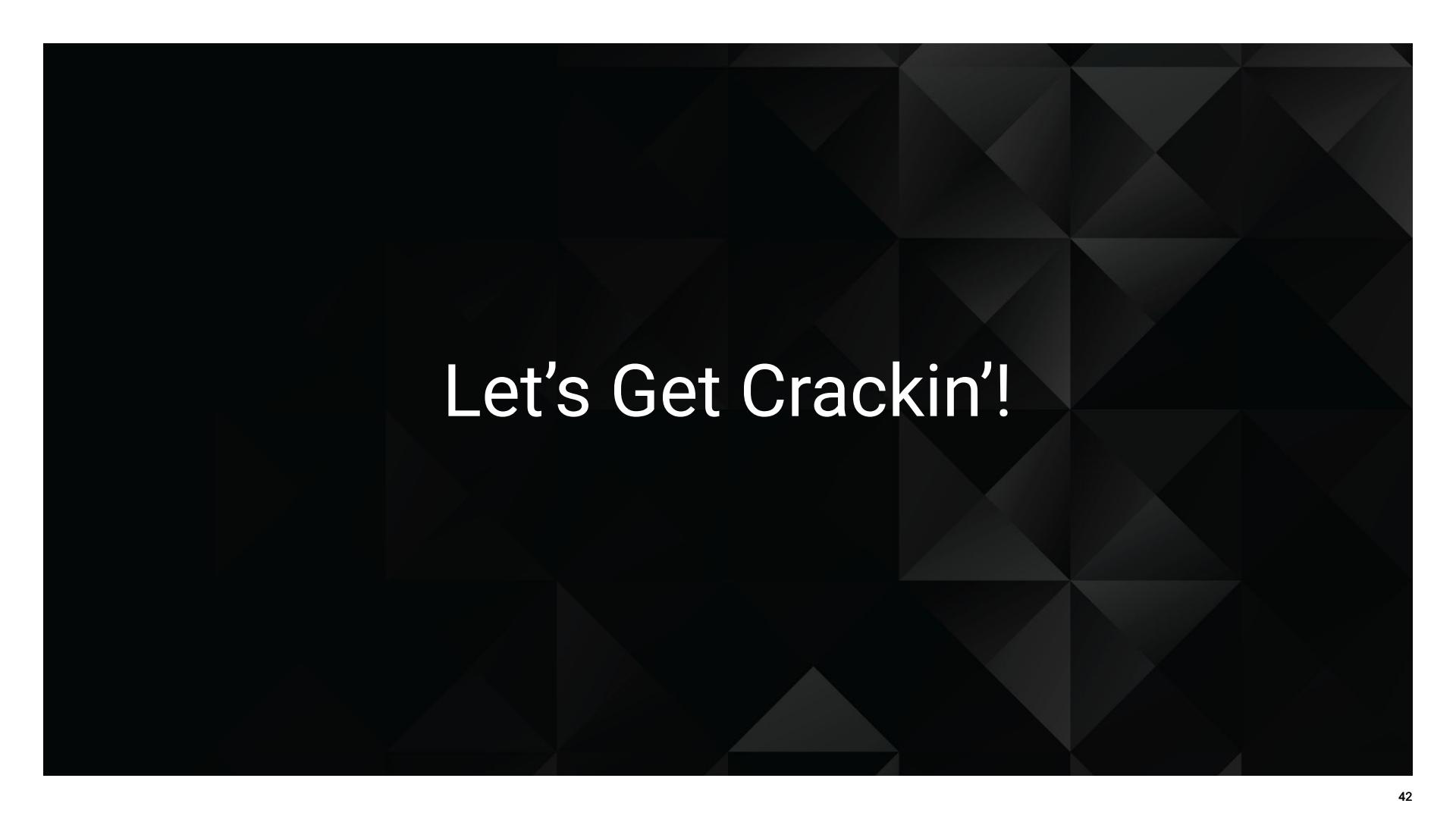


Backend



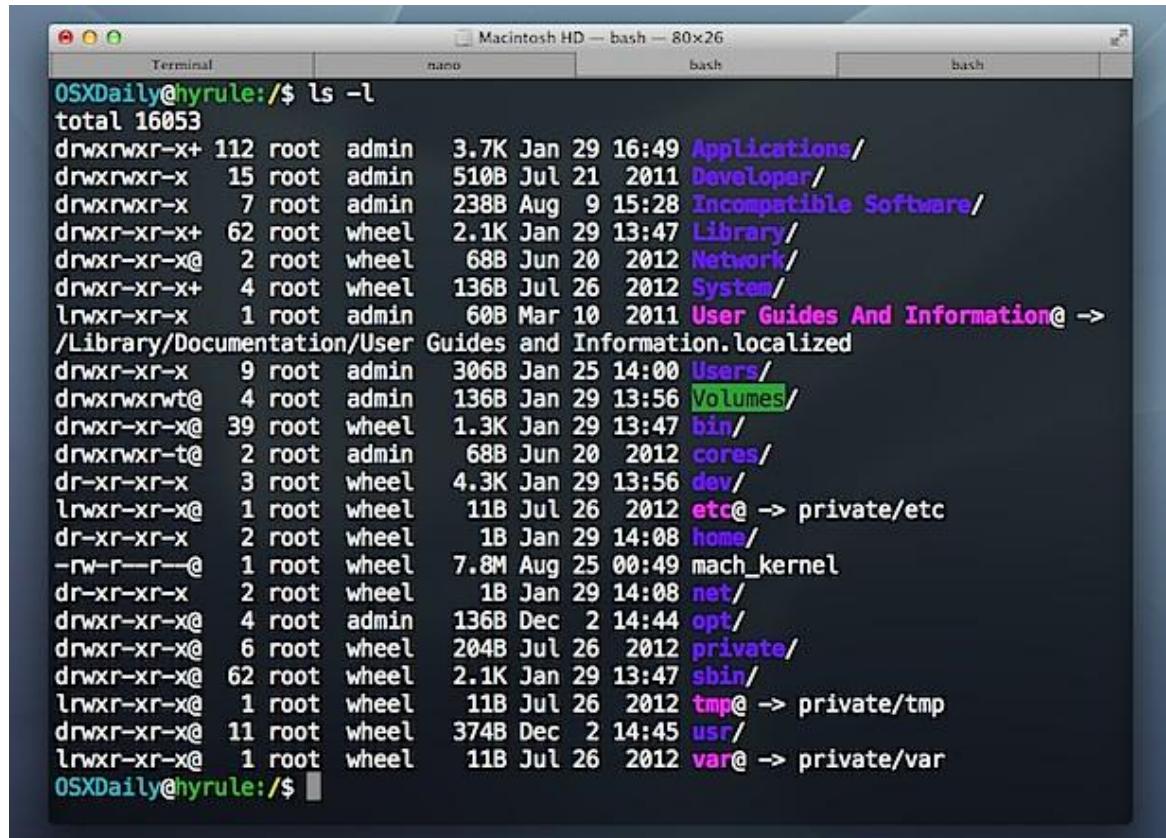
Full-Stack Development

The Browser	Dev Tools	Server Side	
HTML	Heroku	Templating engines	
CSS	Git	Sessions	
JavaScript	GitHub	Writing tests	
jQuery	Databases		
Bootstrap	MySQL	Express.js	
SEO	MongoDB	Creating APIs	
API Interaction		MVC	
APIs (Consuming)		User authentication	
JSON		ORM (Object-relational mapping)	
AJAX		CS Fundamentals	
Cutting-Edge Development		Design patterns	
Progressive Web Applications			
React.js			



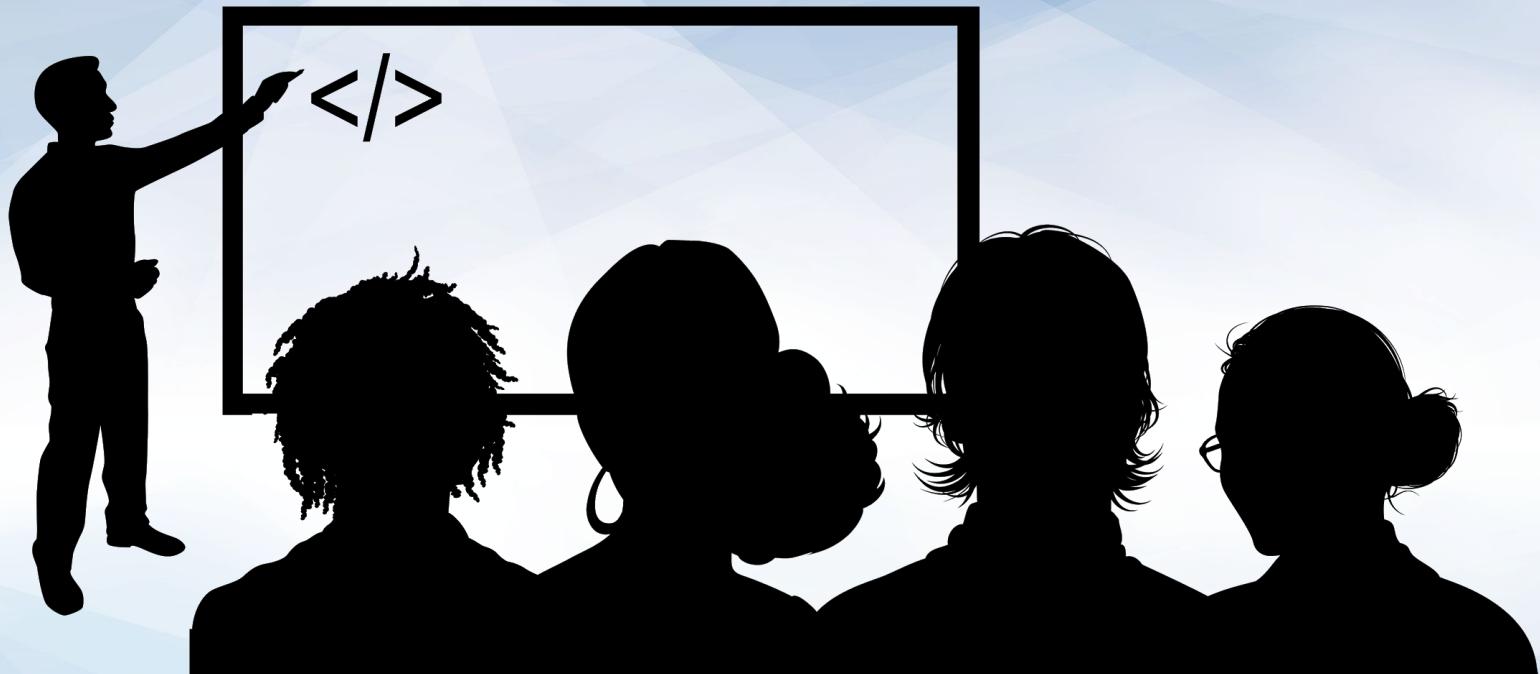
Let's Get Crackin'!

Intro to Console/Terminal



A screenshot of a Mac OS X Terminal window titled "Macintosh HD — bash — 80x26". The window shows the output of the command "ls -l". The output lists numerous files and directories in the root directory, including "Applications/", "Developer/", "Incompatible Software/", "Library/", "Network/", "System/", "User Guides And Information@ > /Library/Documentation/User Guides and Information.localized", "Users/", "Volumes/", "bin/", "cores/", "dev/", "etc@ > private/etc", "home/", "mach_kernel", "net/", "opt/", "private/", "sbin/", "tmp@ > private/tmp", "usr/", and "var@ > private/var". The file "Volumes/" is highlighted with a green rectangle. The terminal prompt at the bottom is "OSXDaily@hyrule:/\$".

```
OSXDaily@hyrule:/$ ls -l
total 16053
drwxrwxr-x+ 112 root admin 3.7K Jan 29 16:49 Applications/
drwxrwxr-x  15 root admin 510B Jul 21 2011 Developer/
drwxrwxr-x   7 root admin 238B Aug  9 15:28 Incompatible Software/
drwxr-xr-x+  62 root wheel 2.1K Jan 29 13:47 Library/
drwxr-xr-x@  2 root wheel 68B Jun 20 2012 Network/
drwxr-xr-x+  4 root wheel 136B Jul 26 2012 System/
lrwxr-xr-x@  1 root admin 60B Mar 10 2011 User Guides And Information@ >
/Library/Documentation/User Guides and Information.localized
drwxr-xr-x@  9 root admin 306B Jan 25 14:00 Users/
drwxrwxnwt@  4 root admin 136B Jan 29 13:56 Volumes/
drwxr-xr-x@  39 root wheel 1.3K Jan 29 13:47 bin/
drwxrwxr-t@  2 root admin 68B Jun 20 2012 cores/
dr-xr-xr-x@  3 root wheel 4.3K Jan 29 13:56 dev/
lrwxr-xr-x@  1 root wheel 11B Jul 26 2012 etc@ > private/etc
dr-xr-xr-x@  2 root wheel 1B Jan 29 14:08 home/
-rw-r--r--@  1 root wheel 7.8M Aug 25 00:49 mach_kernel
dr-xr-xr-x@  2 root wheel 1B Jan 29 14:08 net/
drwxr-xr-x@  4 root admin 136B Dec  2 14:44 opt/
drwxr-xr-x@  6 root wheel 204B Jul 26 2012 private/
drwxr-xr-x@  62 root wheel 2.1K Jan 29 13:47 sbin/
lrwxr-xr-x@  1 root wheel 11B Jul 26 2012 tmp@ > private/tmp
drwxr-xr-x@  11 root wheel 374B Dec  2 14:45 usr/
lrwxr-xr-x@  1 root wheel 11B Jul 26 2012 var@ > private/var
OSXDaily@hyrule:/$
```



Instructor Demonstration

Let's Get Crackin'—Intro to Console



Activity:

Console Commands

Suggested Time:
12 minutes



Activity: Console Commands

Create a folder on your desktop named code. You'll put all the code you write today inside that folder.

Best Practices:



Always use lowercase for folder and file names.



Never put spaces in folder and file names.



Use dashes to separate words in folder and file names.

Suggested Time: 1 min



Activity: Console Commands

From the Terminal/console and using only the command line:



Create a new folder with the name **first-day-stuff**.



Create a new HTML file with the name **first-day.html**.



Open the current folder containing the new HTML file.

BONUS!



Create multiple directories/folders with the names **one-folder** and **second-folder** with one command.



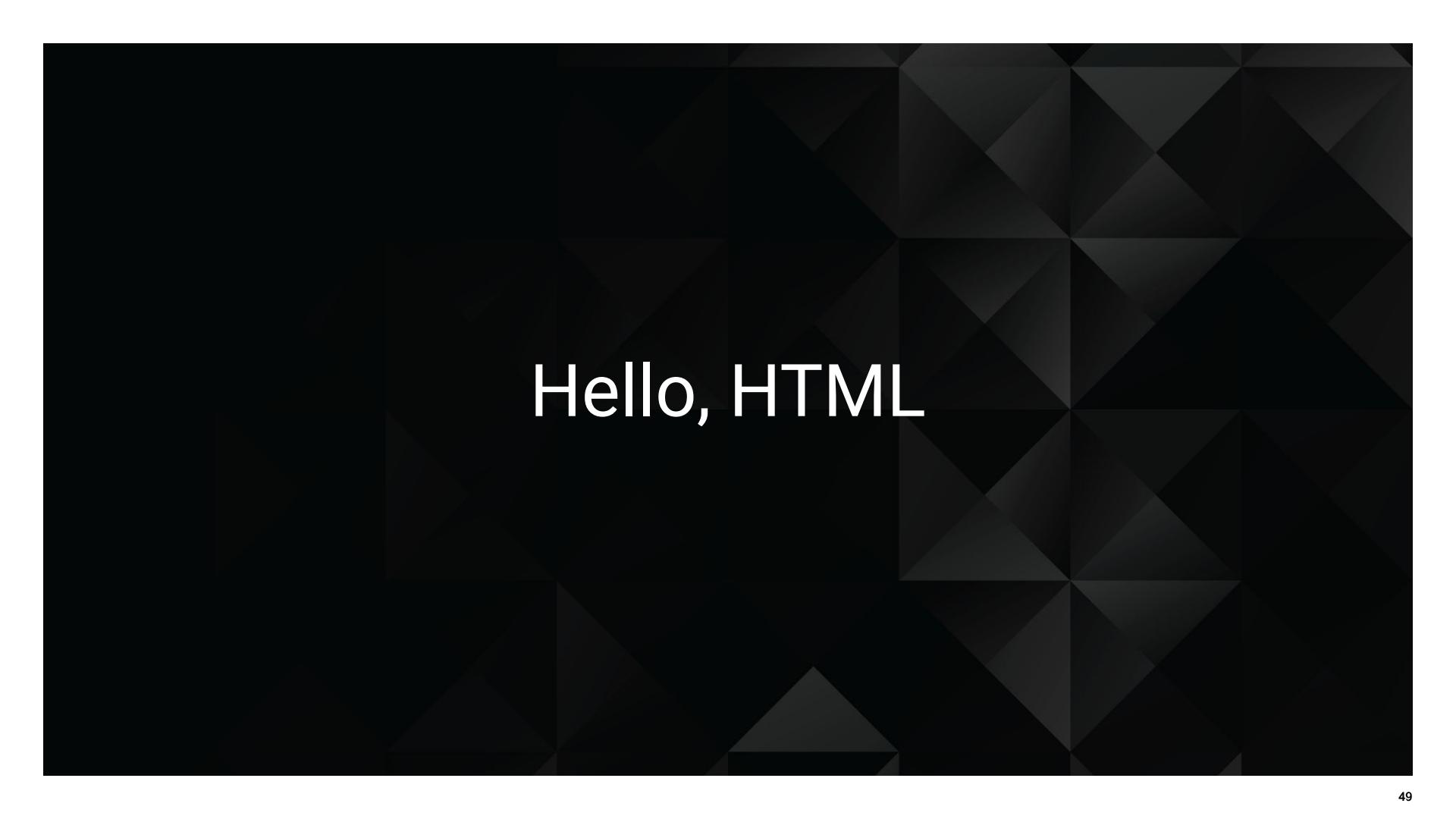
Create multiple files with the names **one.html** and **two.html** with one command in the **first-day-stuff** directory.

Suggested Time: 12 minutes



Intro to Console: Discuss with Neighbors





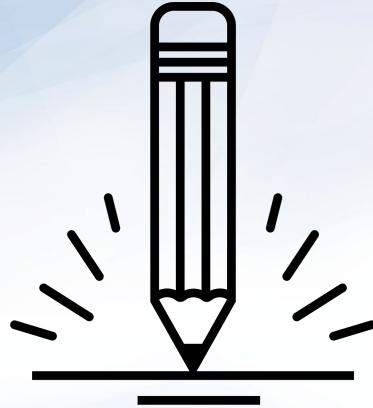
Hello, HTML

<title>Intro to HTML</title>

HTML5

- HTML is one of the three base languages behind every website.
- It defines all the basic content and a bit of formatting.





Activity:

Intro to HTML

Suggested Time:
5 minutes



Activity: Intro to HTML

In a new HTML file, create the basic structure of an HTML document and include the following in it:

- DOCTYPE declaration
- Head tag with a title tag
- H1 tag with a title of your choice
- An embedded image

Now add the following three links to your page:

- One link that has target="_blank" so that it opens a new tab when clicked
- One link that is bold
- One link that is only a placeholder (it goes nowhere)

BONUS!

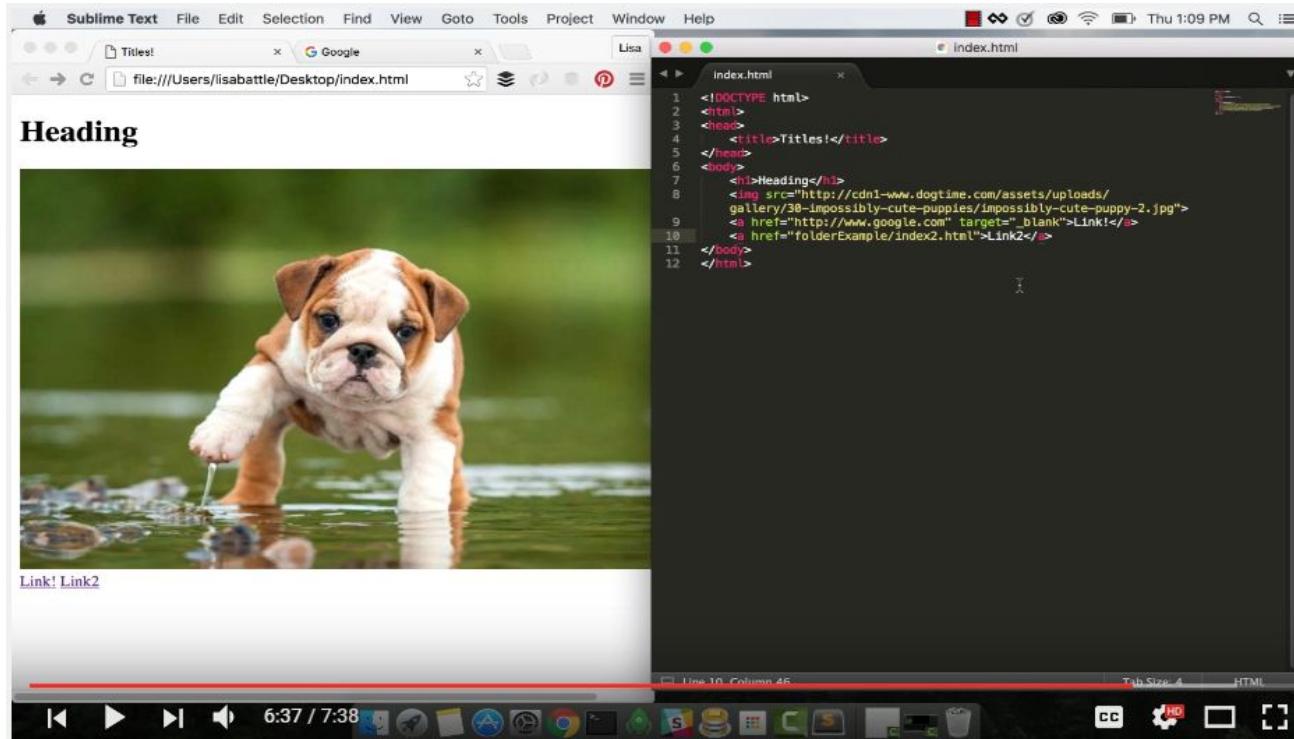
- Create an ordered list of steps to make a sandwich
- Create an unordered list of five bands/musicians you like
- Create a table with two columns (animal class and animal name) and four rows of animals
- Use an alternate way of separating links without line breaks
- Embed a YouTube video of your favorite band/musician

Suggested Time: 5 minutes



YouTube Video Walkthrough

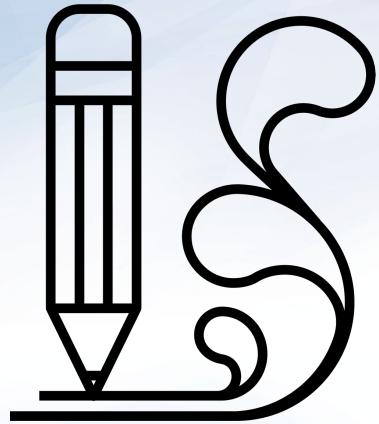
Watch the [walkthrough video](#):



<title>Intro to HTML</title>



How'd it go?



Homework Activity

Homework Activity

01

Figure out where the GitHub repo is for our class.

02

Redo the Terminal example from today's class.

03

Redo the HTML example from today's class.
(Watch the [walkthrough video](#) if you feel a bit lost.)

