



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 have **jobs seeking me** for a change

Coding Boot Camps - Are They Worth It?

Is chasing tech money in a coding bootcamp worth it?

Dan Gentile, SFGate Updated 9:48 am PDT, Monday, August 19, 2019



<https://www.sfgate.com/technology/article/Is-chasing-tech-money-in-a-coding-bootcamp-worth-it-12500000>



Coding Boot Camps - Are They Worth It?

In an Indeed survey, 41% of employers said they prefer students with college degrees.

That same Indeed survey cited that only 17% of employers *thought* bootcamp grads were less prepared, 12% of employers actually considered boot camp grads more prepared, 72% thought them just as viable candidates. Those who hired boot camp grads didn't have many regrets, **99.8% said they'd do so again.**

<https://www.sfgate.com/technology/article/coding-bootcamps-are-they-worth-it-14341655.php>

LinkedIn

Paige McIntosh

Technical Recruiter at TEKsystems

...



Paige McIntosh • 11:05 AM

Hi Mark!

I hope all is going well. I apologize that I couldn't come and make it to one of your bootcamp classes. Let me know when you guys start up for another session, I would love to help out.

Also wanted to let you know , Raymond is doing awesome at Afterpay. I am getting lunch with him tomorrow to learn more about projects he is working on. So thank you again for your reference, really ,made a difference to him!

Also I know when we briefly spoke you mentioned all your previous Front End/UI experience. I am currently supporting several Front End positions with our retailer clients throughout the bay area, like Restoration Hardware, Walmart and Williams Sonoma. I wanted to see if you have anyone in your network who is open to hearing about new opportunities?

Let me know if anyone comes to mind. I would love to tell them more about these and other roles I am supporting!

Thank you!

LinkedIn



Mark Carlson • 12:21 PM

Hi Paige, Yes! I have another cohort starting 9/16 and running through Mid March 2020. Of course I would LOVE to introduce you to the students and expose them to what a recruiter does and how you can help them in their careers.

I'm also delighted to hear that Raymond is working out well. He's a gem!

And yes, I do have people in my network that I would love to connect you with. Probably would be best to share their linked in profiles here. I'll find a few and send them to you later.

Best of luck in your search! --Mark



Paige McIntosh • 2:06 PM

Hi Mark,

Thank you! I am going to get a couple recruiters in my office to come with. I can reach out when it comes closer to the start date.

Awesome, please send them over my way whenever you get a chance! Much appreciated.

Cohort #1



Takeoff Technologies - Job Postings

Senior Backend Developer (Waltham, MA)

Waltham, Massachusetts, United States · Software Engineering

Web Developer (San Francisco, CA)

San Francisco, California, United States · Software Engineering

Web Developer (Waltham, MA)

Waltham, Massachusetts, United States · Software Engineering

Site Reliability Engineer

Takeoff Technologies - Job Postings



Mark Carlson 1:46 PM

@channel, oh my gosh, look what my employer just posted: <https://takeoff.workable.com/jobs/1100495> Interested?
What are you waiting for?? And then go and apply to a couple dozen other companies while you're at it. You ARE ready! (edited)

<https://www.workable.com>

[Job opening: Web Developer, San Francisco, CA at Takeoff Technologies, Inc.](#)

Job opening: Web Developer, San Francisco, CA at Takeoff Technologies, Inc.. (23 kB) ▾



5

2

Cohort #4



Cohort #4





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, puffy jacket. The background is a dark, textured surface covered in numerous small water droplets, suggesting rain or condensation. The overall mood is one of wonder and discovery.

This Should Be You

Words Of Advice From Past Students



“The thing I would tell the next cohort is...”

“The thing I would tell the next cohort is... “

“If you get frustrated, move on to the next exercise and come back to it later. Everything is connected so you will find a way to fix your problem later on”

“Be patient with yourself: this type of knowledge requires multiple tries and fails...If you are failing that means you are working.”

“Breaking things down into smaller pieces chunks of work. You may be working on a project or homework assignment that seems massive, but once you start, try to work on a small feature, and you'll find that it's much more manageable. Then work on the next feature....and error by error, you're done!”

“Google, read, google again and repeat. There will always be 100 different ways to solve the same problem. Find the best solution that fits your style and stick with it. Be sure to understand the basics before you move on. And most importantly do the HW and the bonus challenges, it pays off for your reference later.”

“The thing I would tell the next cohort is... “

"I would have to say, 'Stay positive, patient, and focused.' If you don't know the solution, never give-up, be open to ask for and receive guidance, because it is those times when we learn the most, even if it is the smallest piece of information."

"Write code that works; then go back and ask why?"

"Start learning about the job market on day 1 along with the code. You may not be applying on day 1, but you can start building your network, attending meetups, etc. Also, look into podcasts and other sources of info as well. Landing your first job is hard, but it is so amazing when you finally make it."

"Be prepared to study and work as hard as i've ever studied before, imagine cramming for finals, but cramming for 6 months!"

"Be persistent, just try as many times as you can and learn from your mistakes. The more errors you face the more you'll gain your experience."

“The thing I would tell the next cohort is... “

“Even though it seems like a sprint, and it is, it’s a marathon at the same time, the class moves fast, but at the same time it is six months long, one needs endurance, so stay focused and motivated especially towards the end. I would’ve liked to say pace yourself but you really don’t have that luxury. ... and don’t react badly to react!”

“It's ok to cry, but then you'd better start googling.”

“I would advise them on staying strong. It can get overwhelming sometimes with the amount of information they have to digest, so keeping up to date and not falling behind is key, for that they need to spend time outside class to go over material and practice, practice, and practice. Good luck!”

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

“Maybe I’m just dumb.”

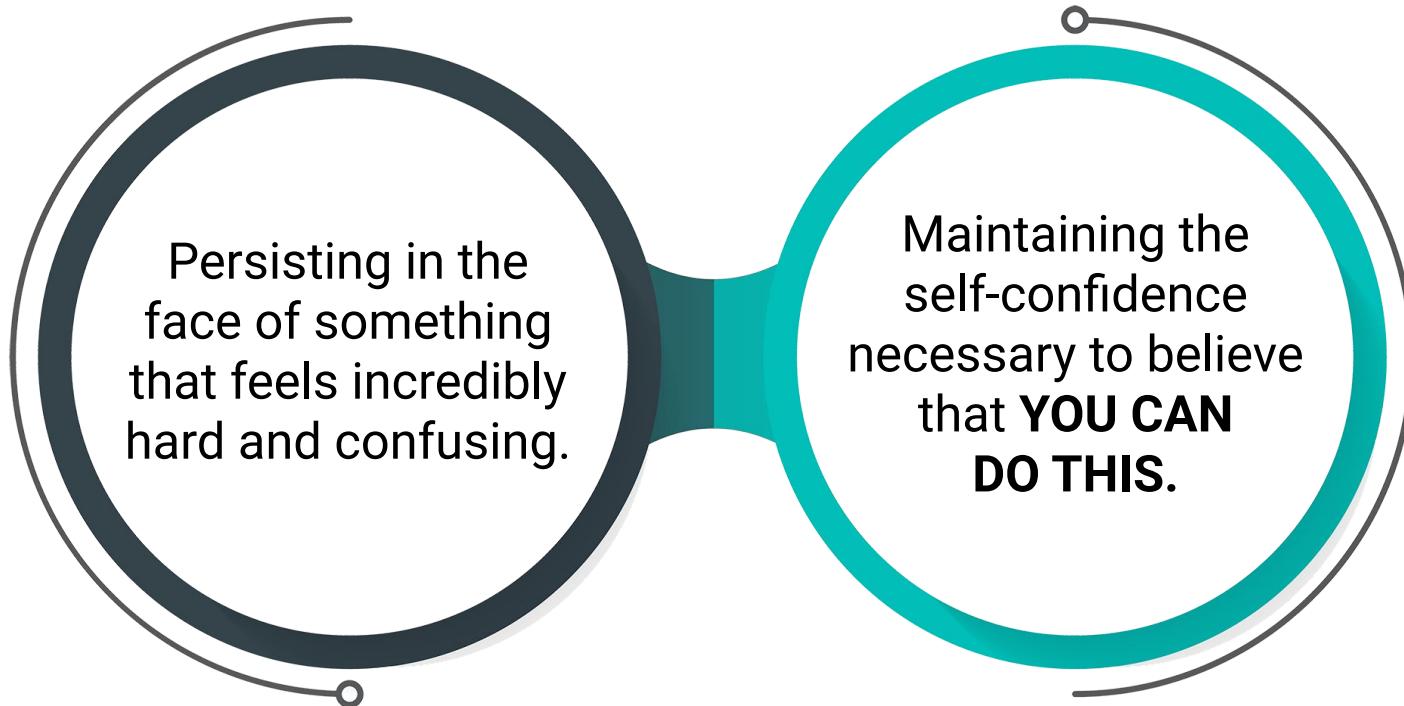


Obstacle #3: The Great Distance



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.

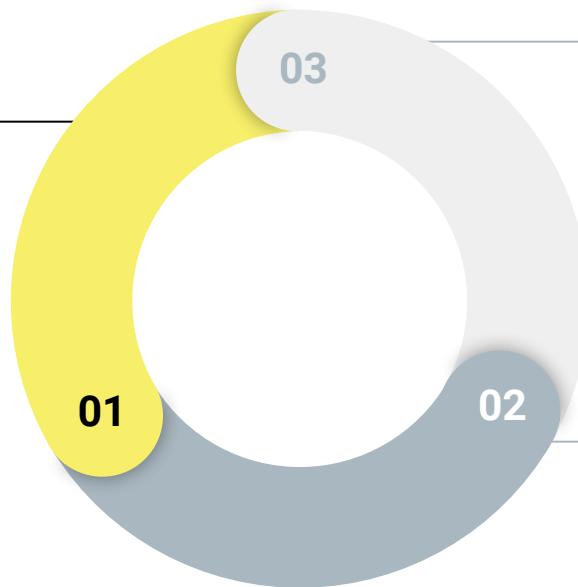


—Jeff Dickey, author of *Write Modern Web Apps with the MEAN Stack: Mongo, Express, AngularJS, and Node.js* (Peachpit Press, 2014)

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!

Trust yourself

Celebrate your
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

Brief background lecture

03

Watch me/coding demos

04

Code discussions

05

In-class exercises

06

Project work



This is the super important
stuff—ALWAYS BE CODING!

Always Be Coding... But seriously?



Prework

Software Checklist

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

- Slack - with a picture in your profile. Also add your photo to BCS and Github!
 - Visual Studio Code
 - Git
-
- Git Bash (Windows) or Terminal (Mac)
 - Node.js
 - Heroku-CLI
-
- Google Chrome

Accounts Checklist

You should also have accounts for:

- GitHub (with SSH Integration)

- Heroku

- LinkedIn

- Stack Overflow

Self-Check

Let's do some quick checks of the following:

Visual Studio Code Check

Git Bash/Terminal Check

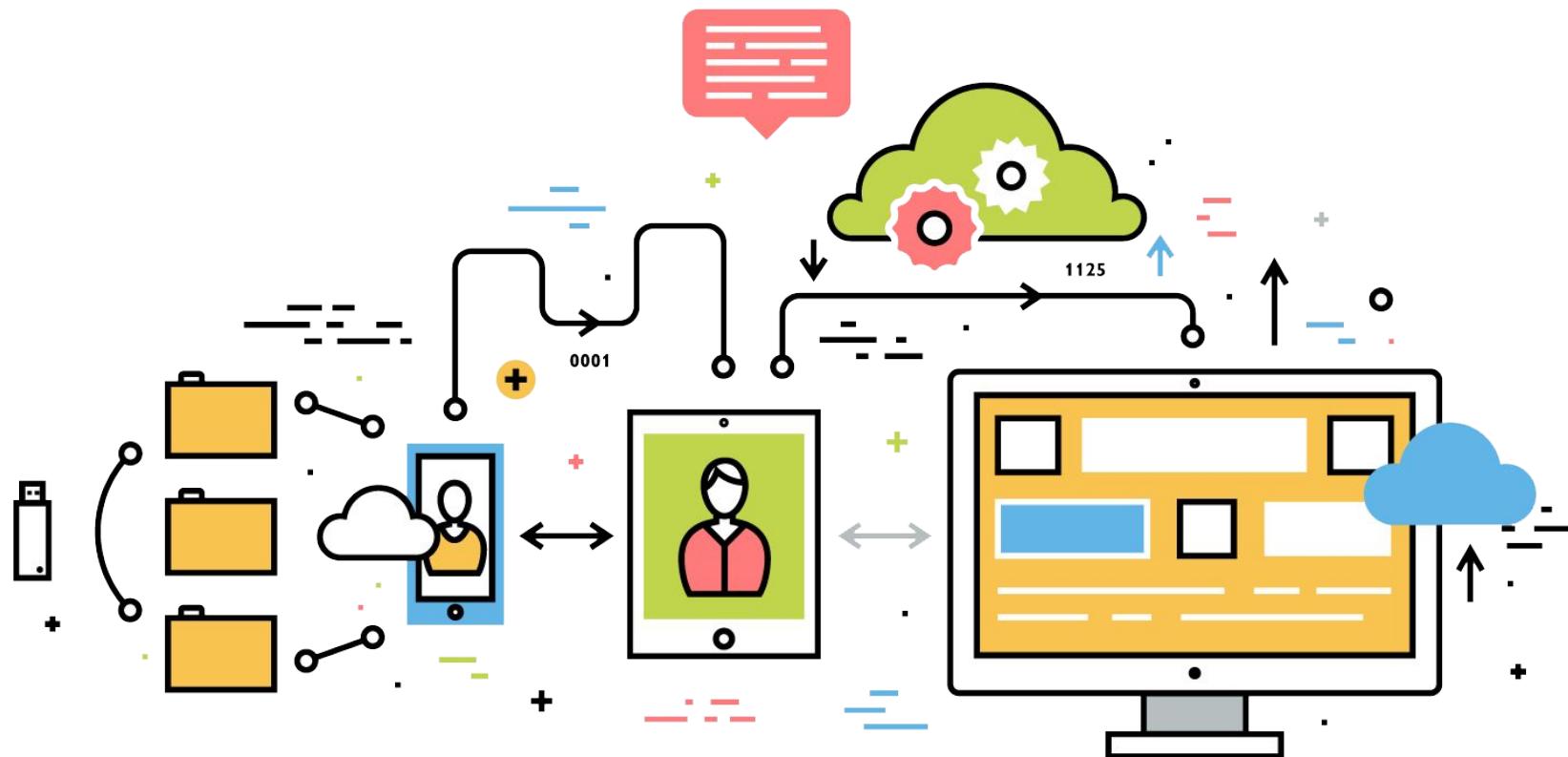
Node Check

Git Check

Heroku Check

The Modern Web

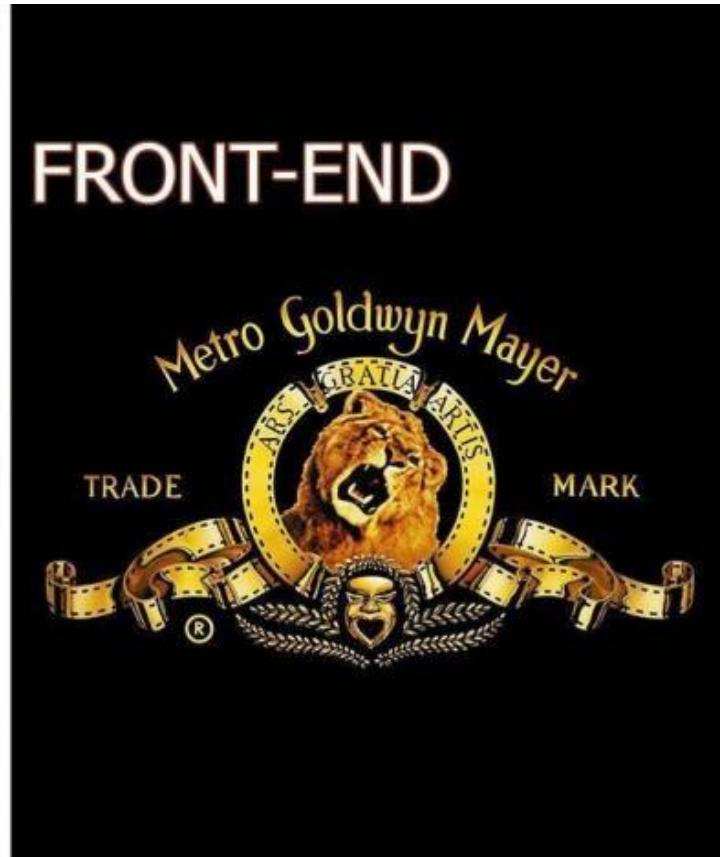
What Exactly Is Full-Stack Development?



The “Magic” of YouTube



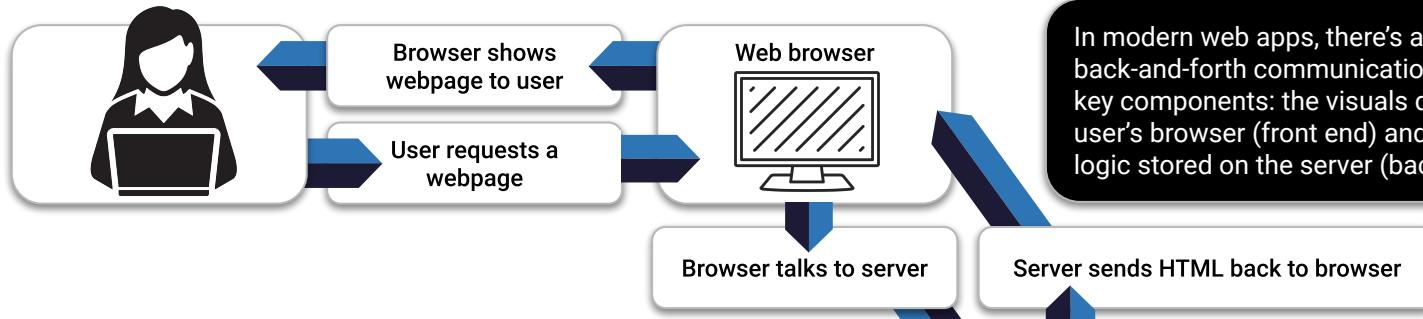
Backend Vs Frontend



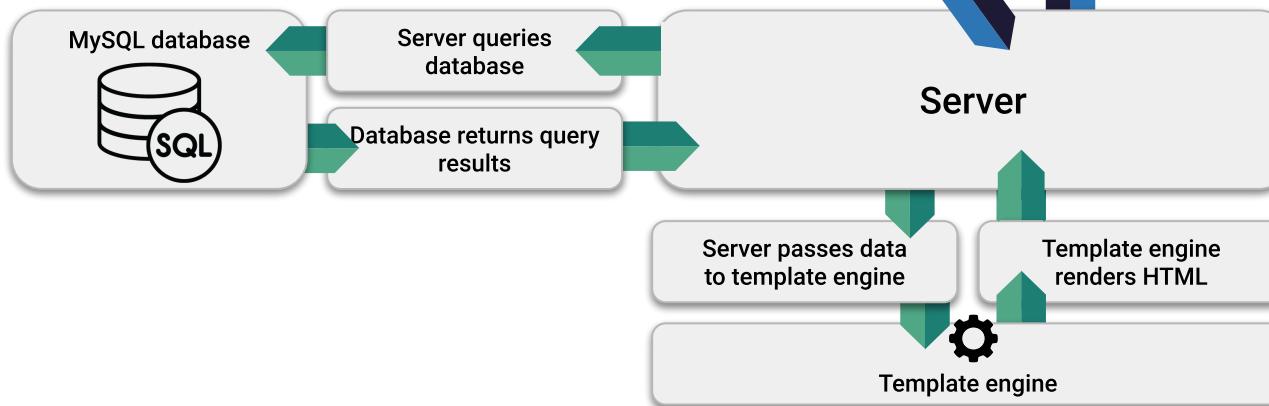
Full-Stack Development

Front end

FSF FLOW



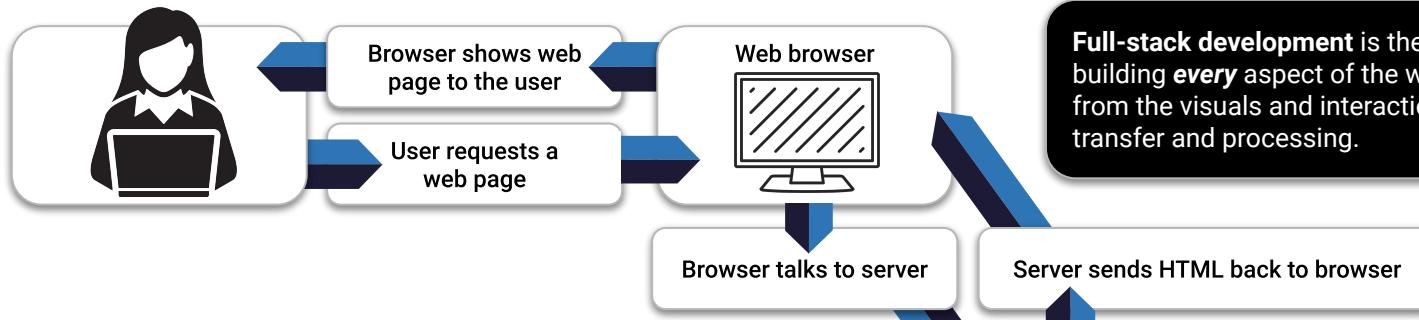
Back end



Full-Stack Development

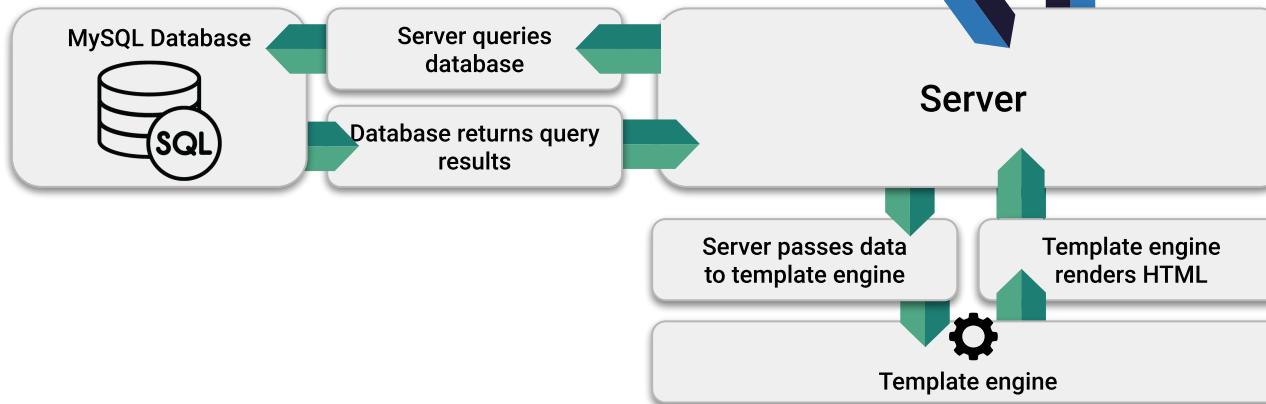
FSF FLOW

Frontend



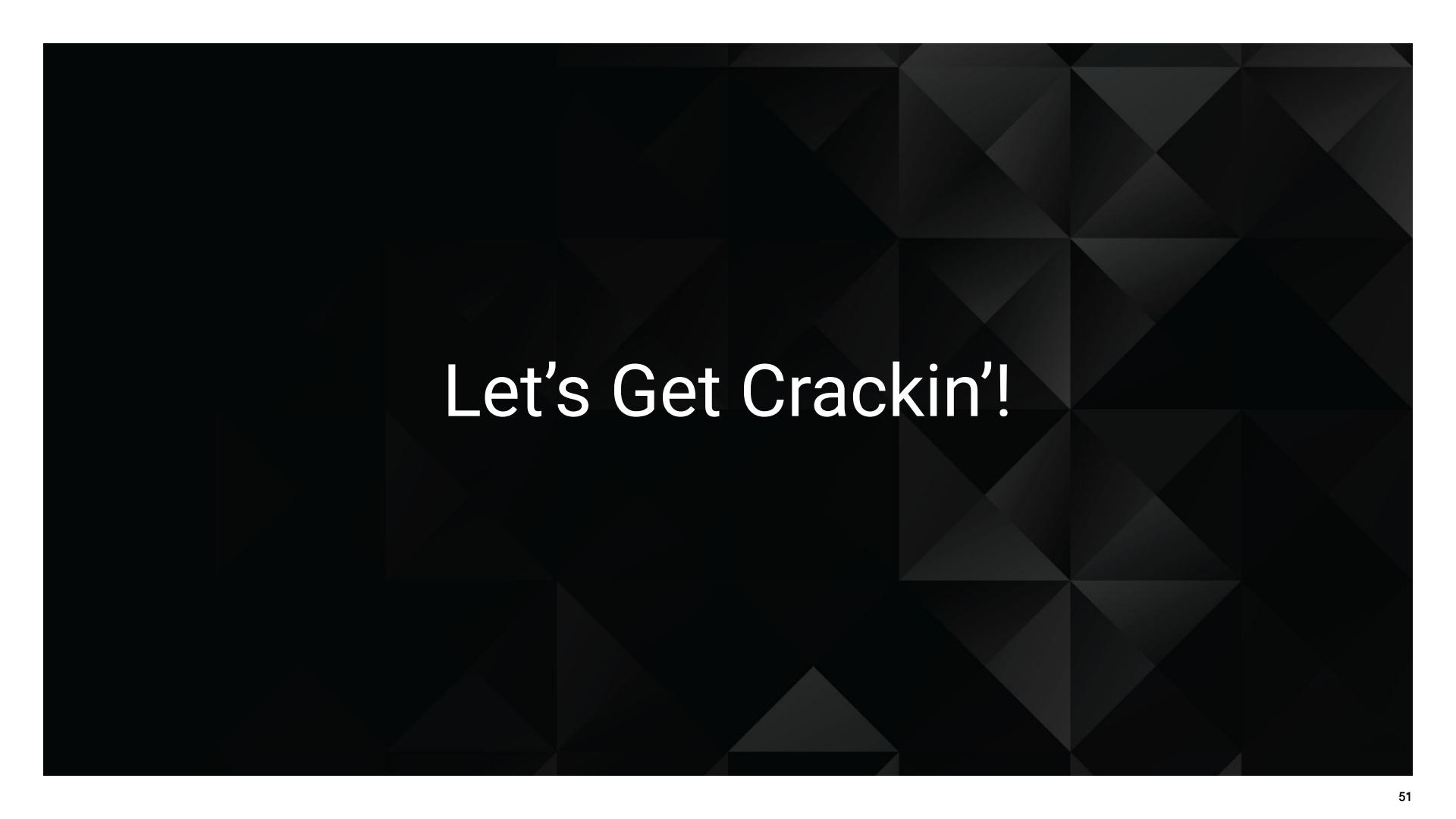
Backend

Full-stack development is the concept of building **every** aspect of the web application—from the visuals and interactions to the data transfer and processing.



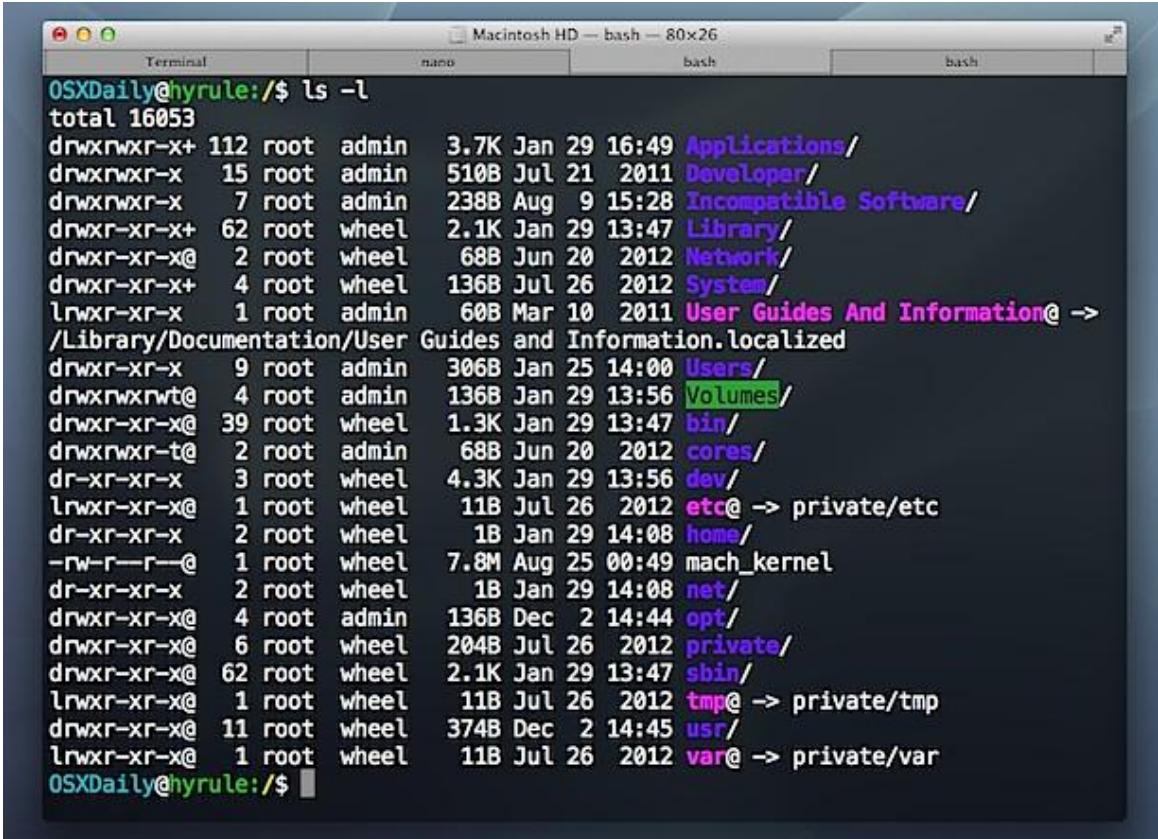
Full-Stack Development

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	
Real-time cloud database via Firebase		Algorithms	
Cutting-Edge Development		Design patterns	
React.js			



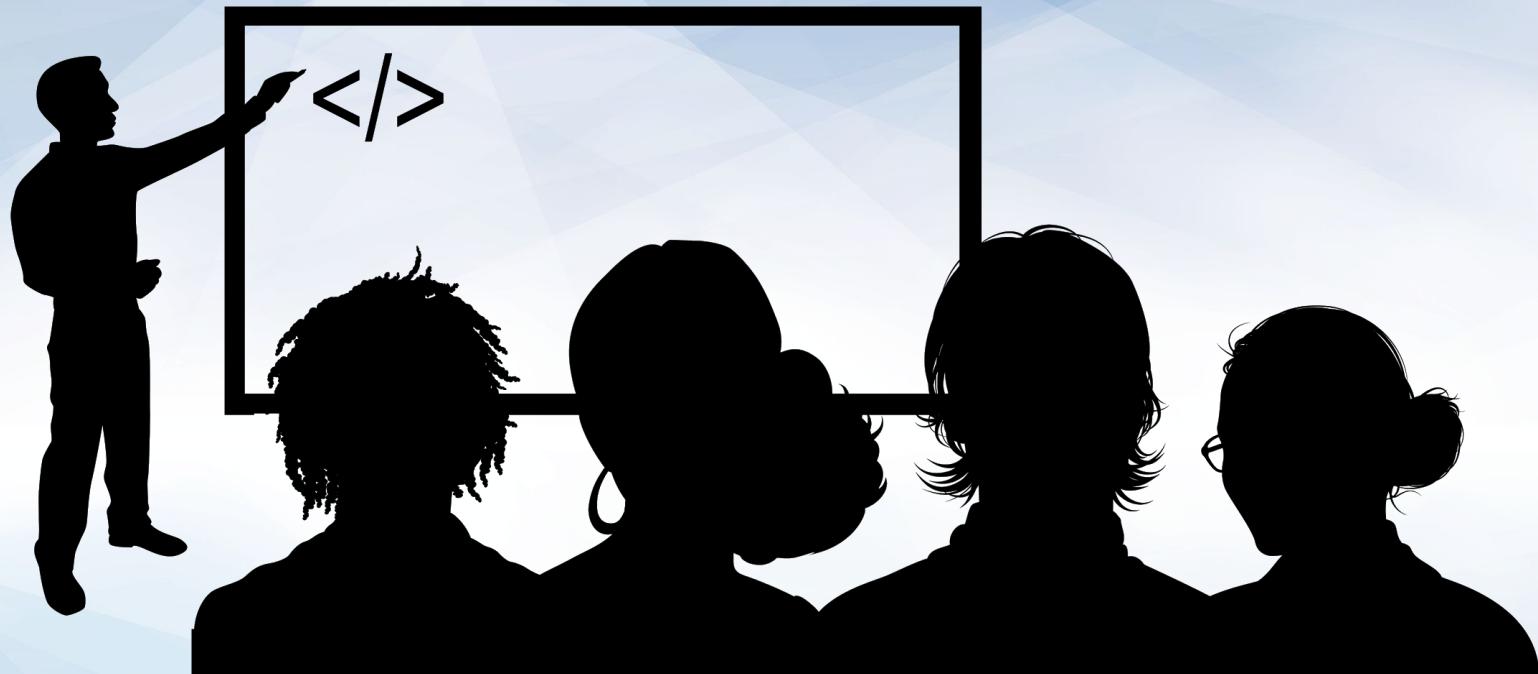
Let's Get Crackin'!

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 "Volumes/" directory is highlighted with a green rectangle. The "User Guides And Information" file is also highlighted with a pink rectangle.

```
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.



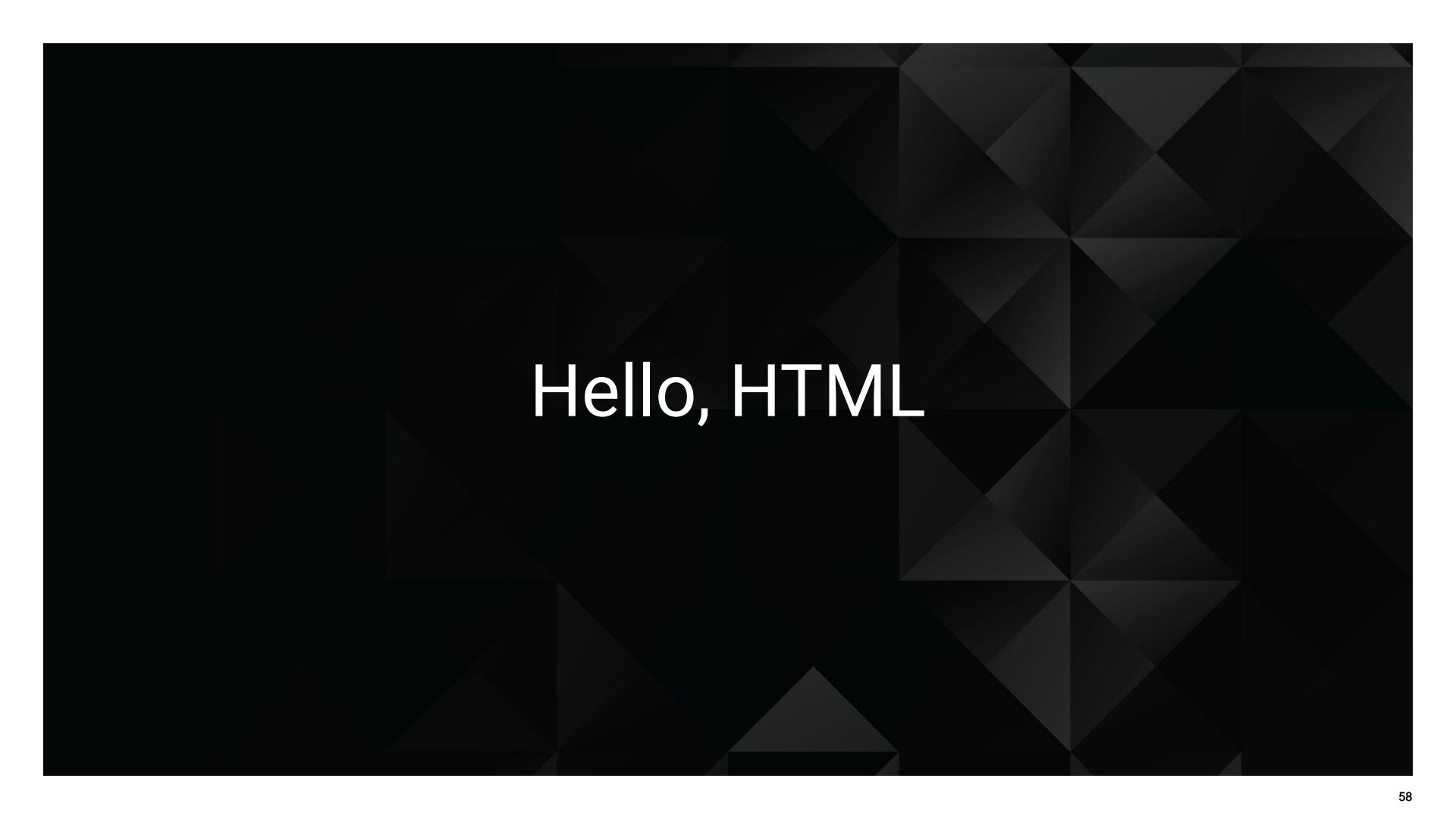
Create multiple files with the names **one.html** and **two.html** with one command in the **first-day-stuff** directory.

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!

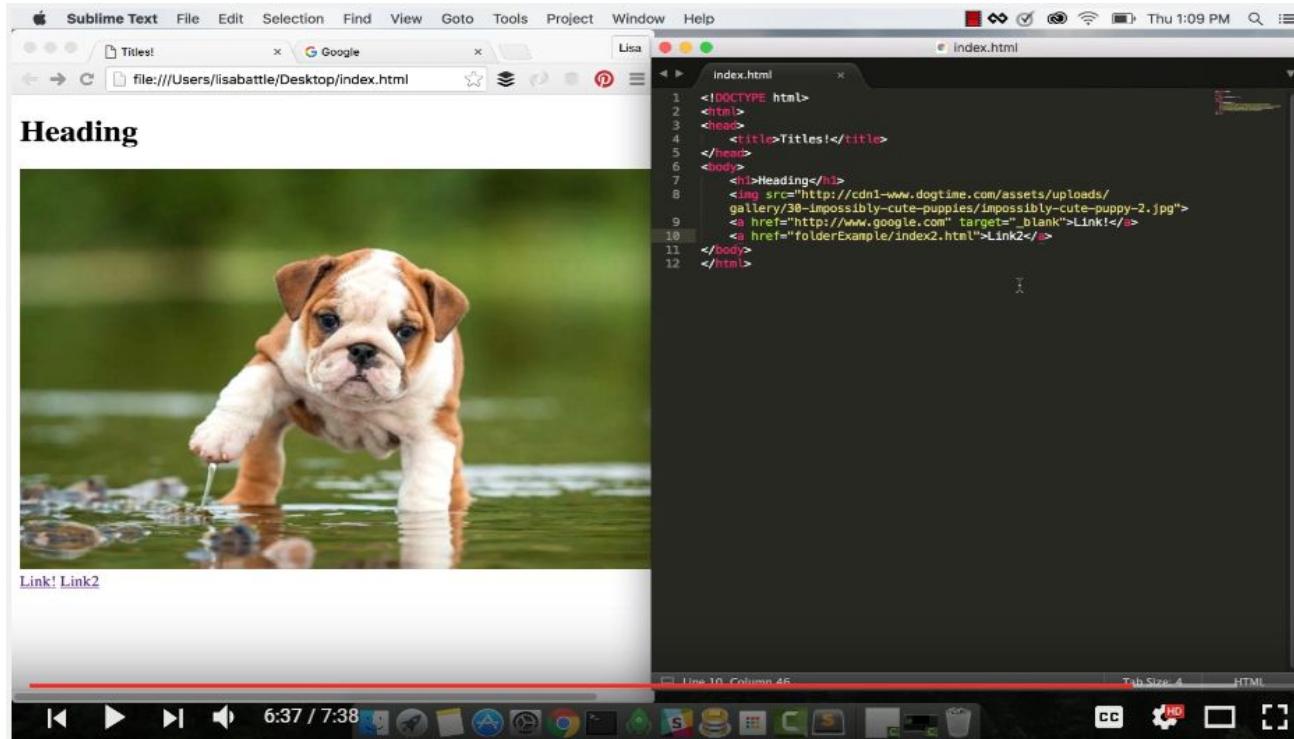
- Create an ordered list of steps to make a sandwich
- Create an unordered list of five bands/musicians you like
- Create a table with two columns (animal class and animal name) and four rows of animals
- Use an alternate way of separating links without line breaks
- Embed a YouTube video of your favorite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

Suggested Time: 5 minutes



YouTube Video Walkthrough

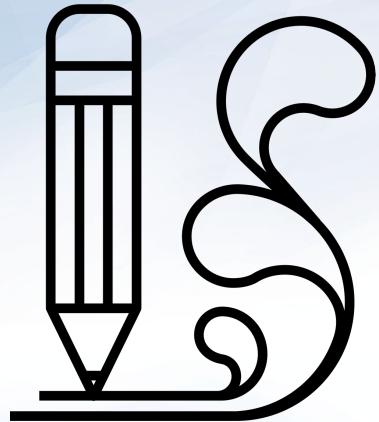
Watch the [walkthrough video](#):



<title>Intro to HTML</title>



How'd it go?



Homework Assignment

Due Date:
Next Class



Homework Assignment

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.)

Due Date: Next Class

