



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!



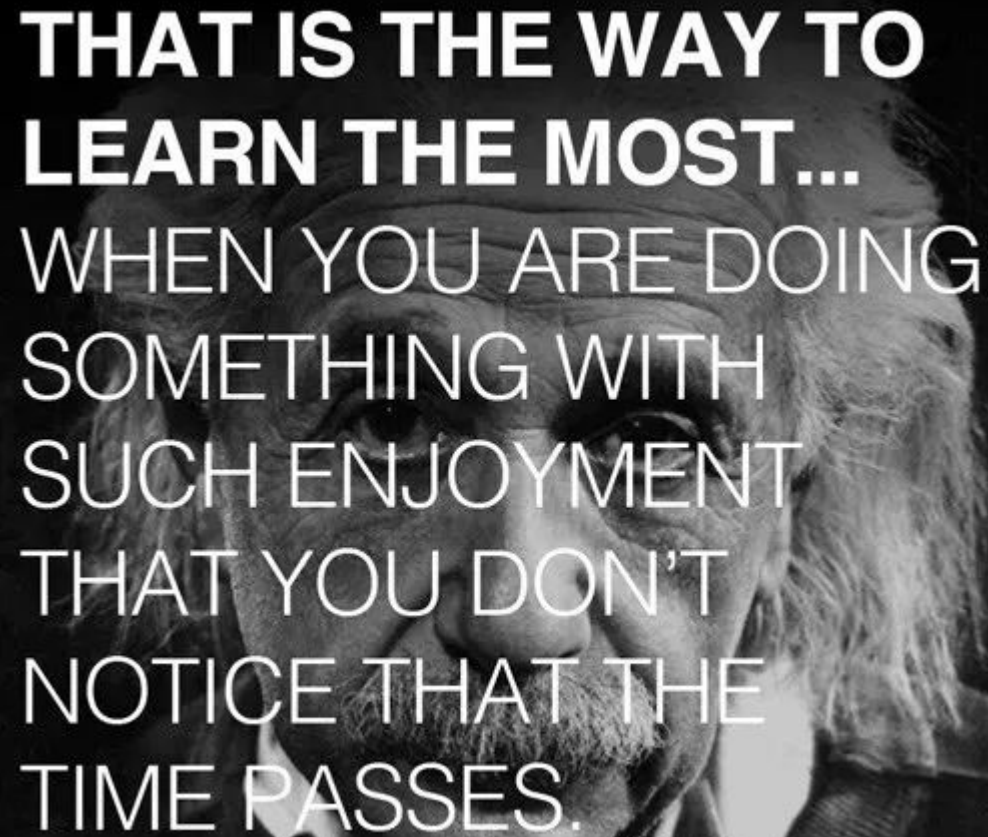


But Remember:
Nothing good comes easily.

Our Keys to Success

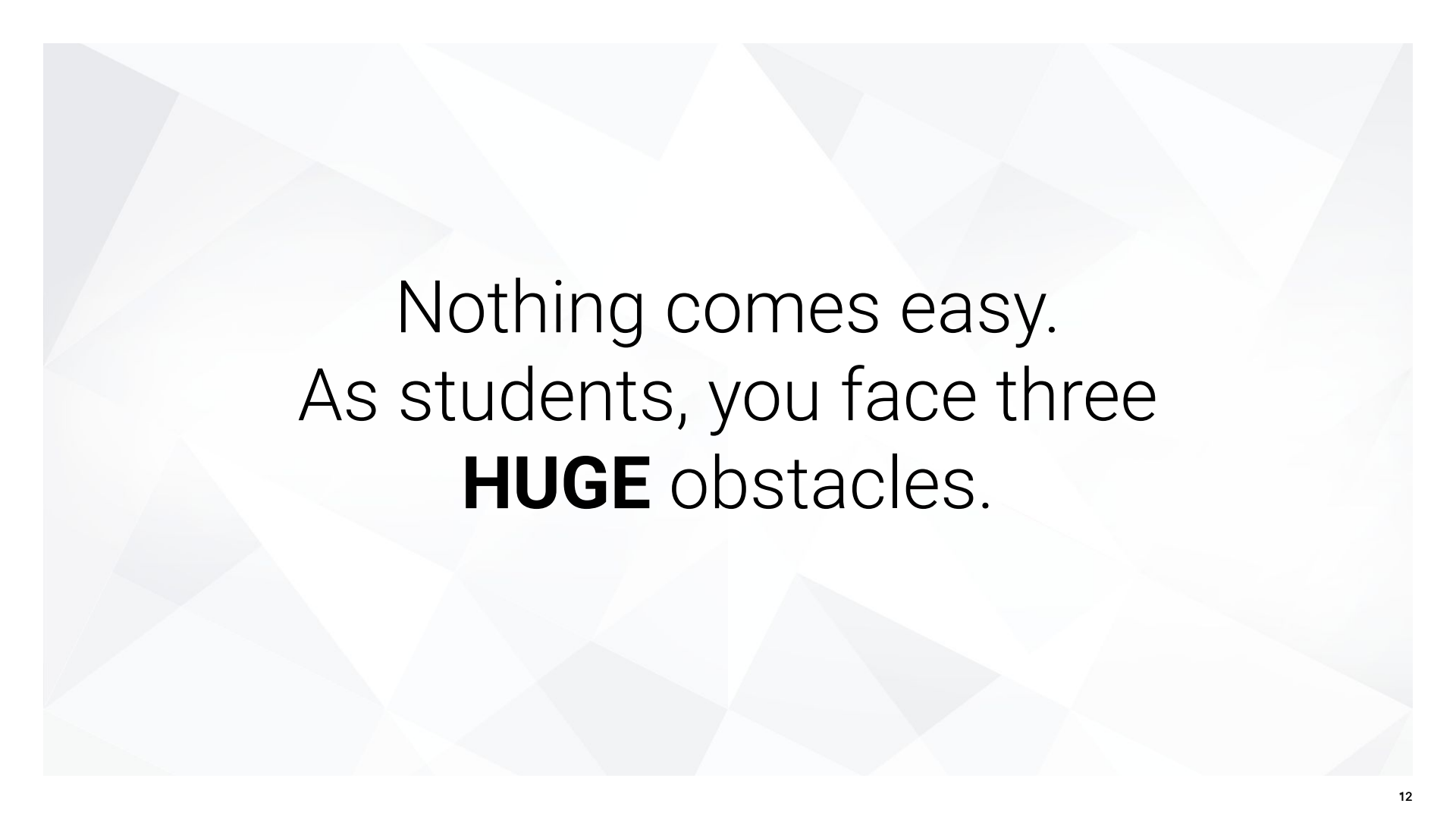


**A person who has never made a mistake
has never tried to do something new.**



**THAT IS THE WAY TO
LEARN THE MOST...**
WHEN YOU ARE DOING
SOMETHING WITH
SUCH ENJOYMENT
THAT YOU DON'T
NOTICE THAT THE
TIME PASSES.

The Path of Learning



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

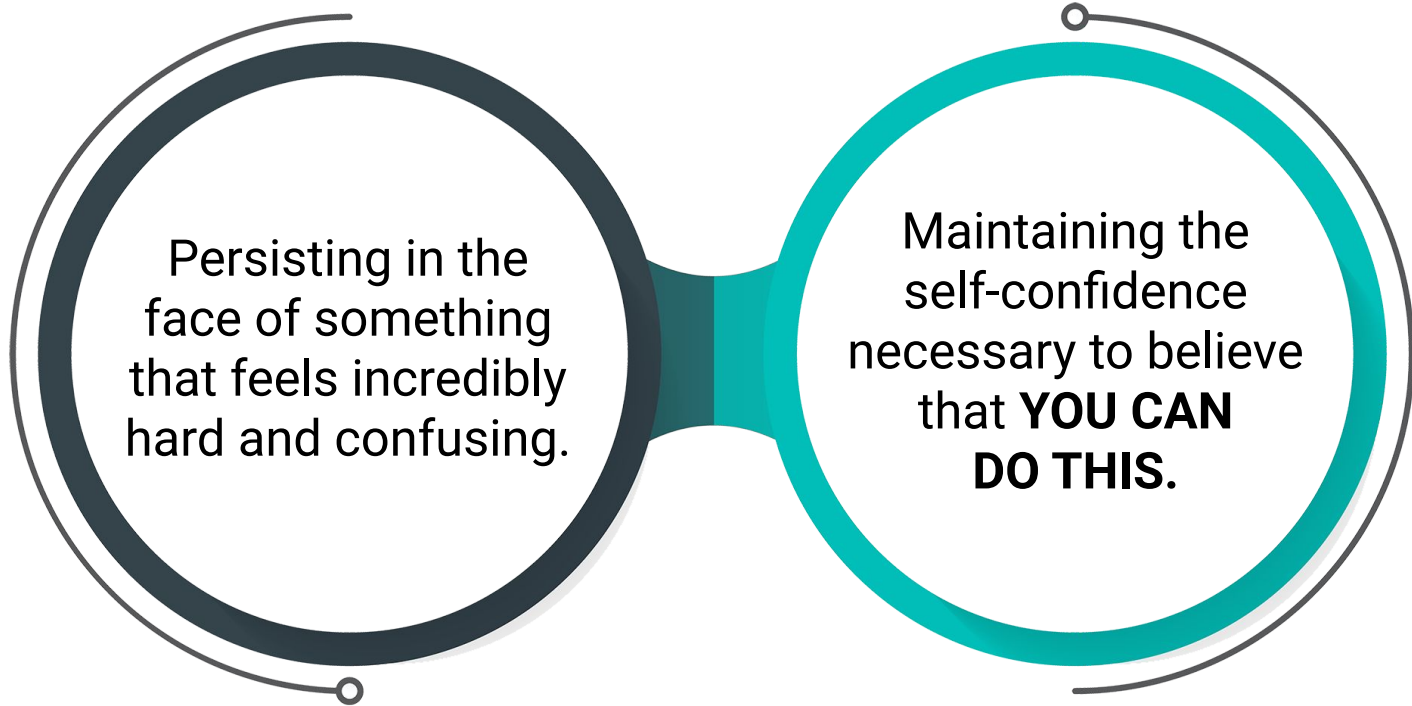
Obstacle

: 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.

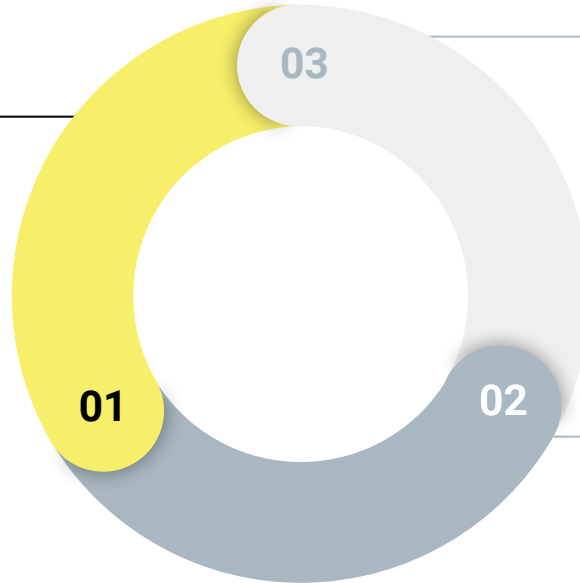


—Jeff Dickey, author of *Write Modern Web Apps with the MEAN Stack: Mongo, Express, AngularJS, and Node.JS* (Peachpit Press, 2014)

Advice for the Journey

Throughout this course, always remember to:

Work hard!



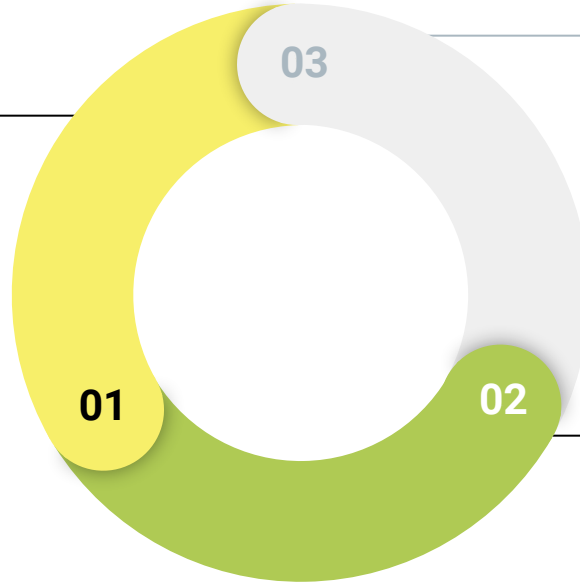
Trust yourself

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!

Prework


Software Checklist

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

-  Slack
-  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

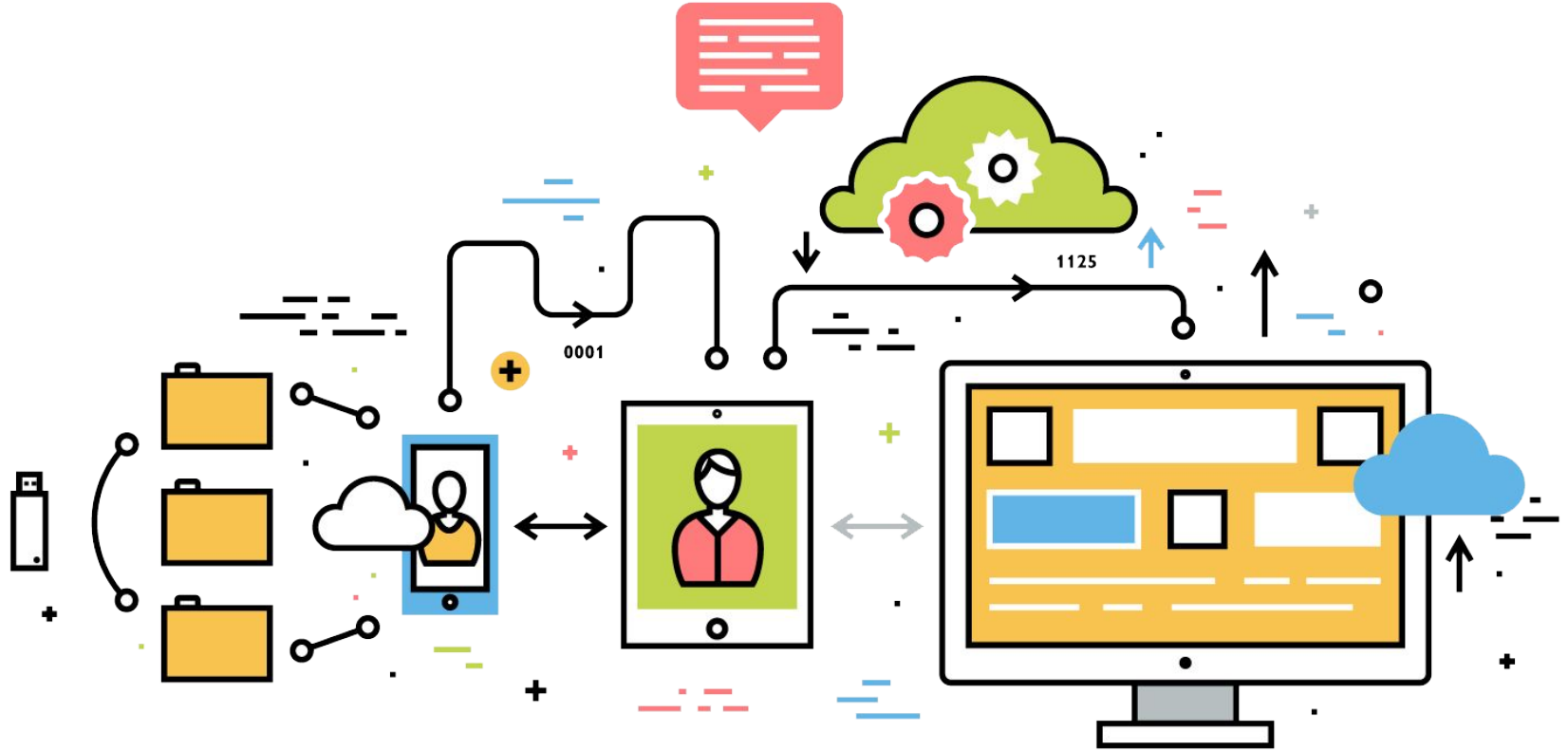
 Node Check

 Git Check

 Heroku Check

The Modern Web

What Exactly Is Full-Stack Development?

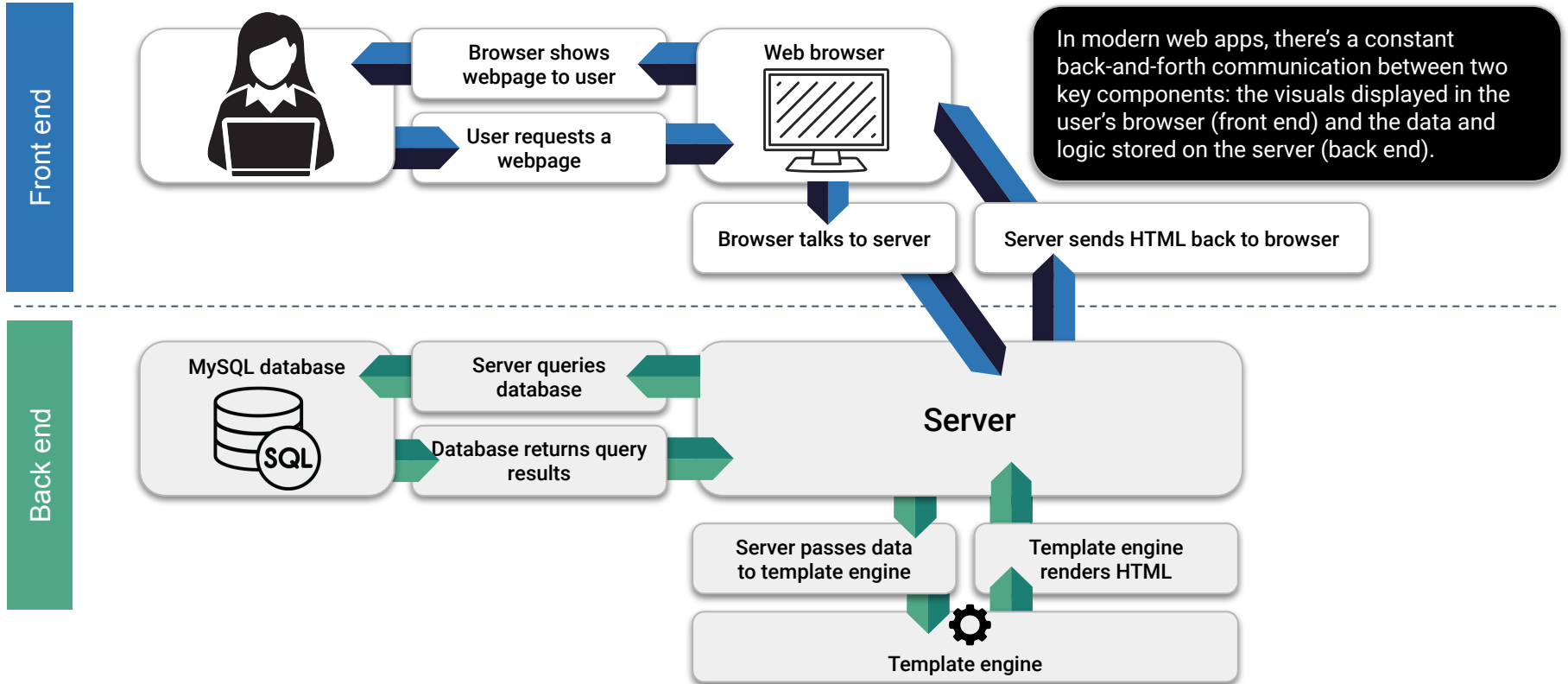


The “Magic” of YouTube



Full-Stack Development

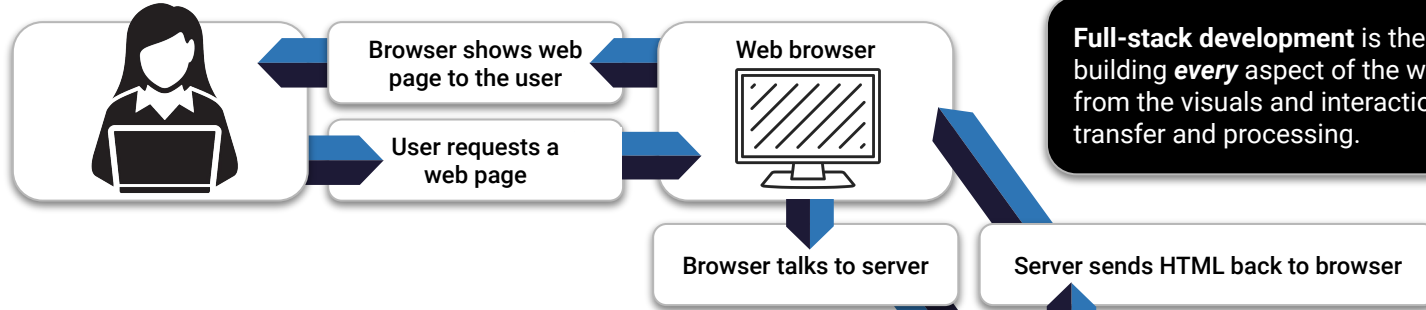
FSF FLOW



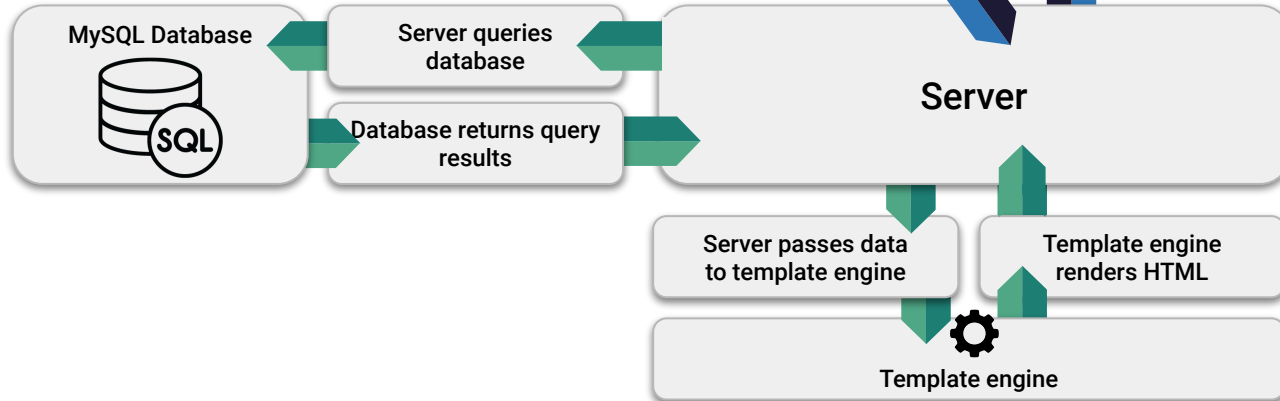
Full-Stack Development

FSF FLOW

Frontend



Backend



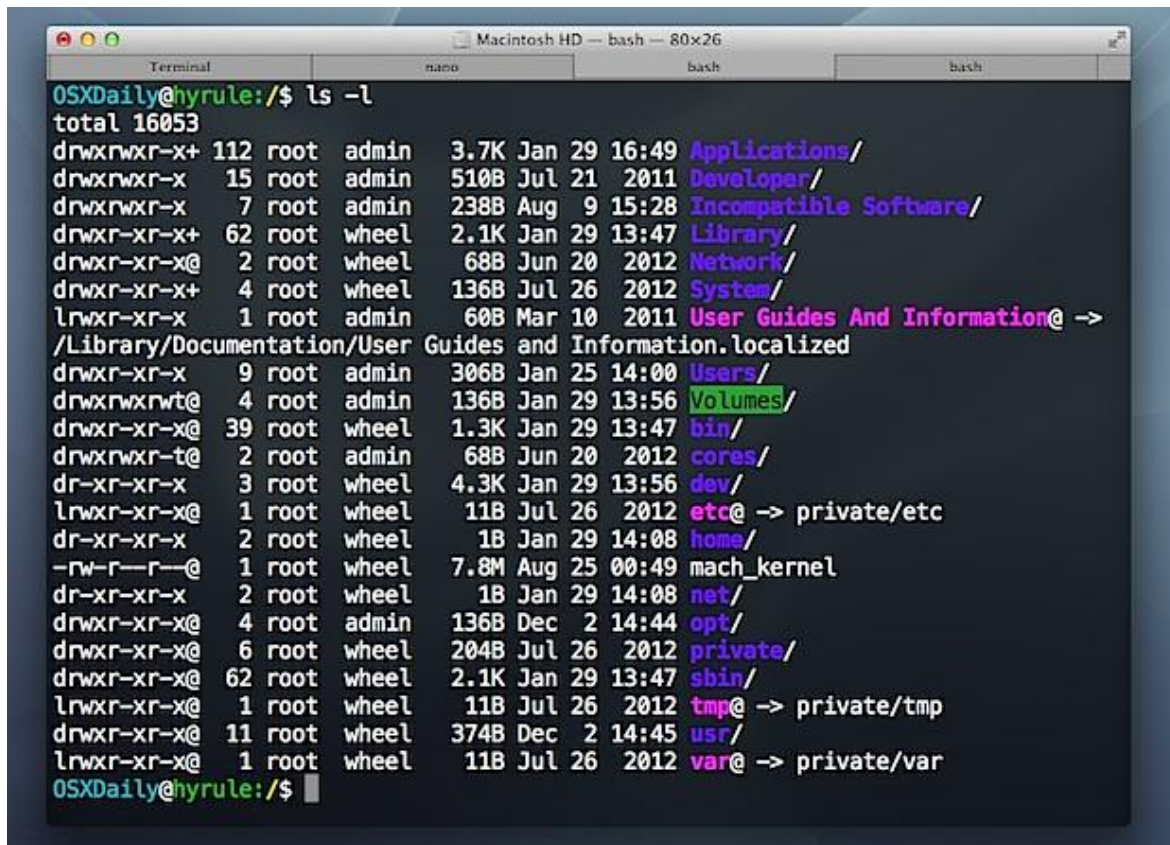
Full-Stack Development

The Browser	Dev Tools	Server Side
HTML	Heroku	Templating engines
CSS	Git	Sessions
JavaScript	GitHub	Writing tests
jQuery	Databases	Node.js
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



The image shows a screenshot of a macOS Terminal window. The title bar at the top reads "Macintosh HD — bash — 80x26". The terminal window has a dark background with light-colored text. The prompt is "OSXDaily@hyrule:/\$". The command "ls -l" has been executed, displaying a long listing of files and directories. The output shows permissions, owner, group, size, date, and filename for various system directories like Applications, Developer, Incompatible Software, Library, Network, System, and Users. Some entries are truncated with arrows indicating they continue on the next line. The prompt "OSXDaily@hyrule:/\$" is visible at the bottom of the terminal.

```
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/
drwxrwxrwt@   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!

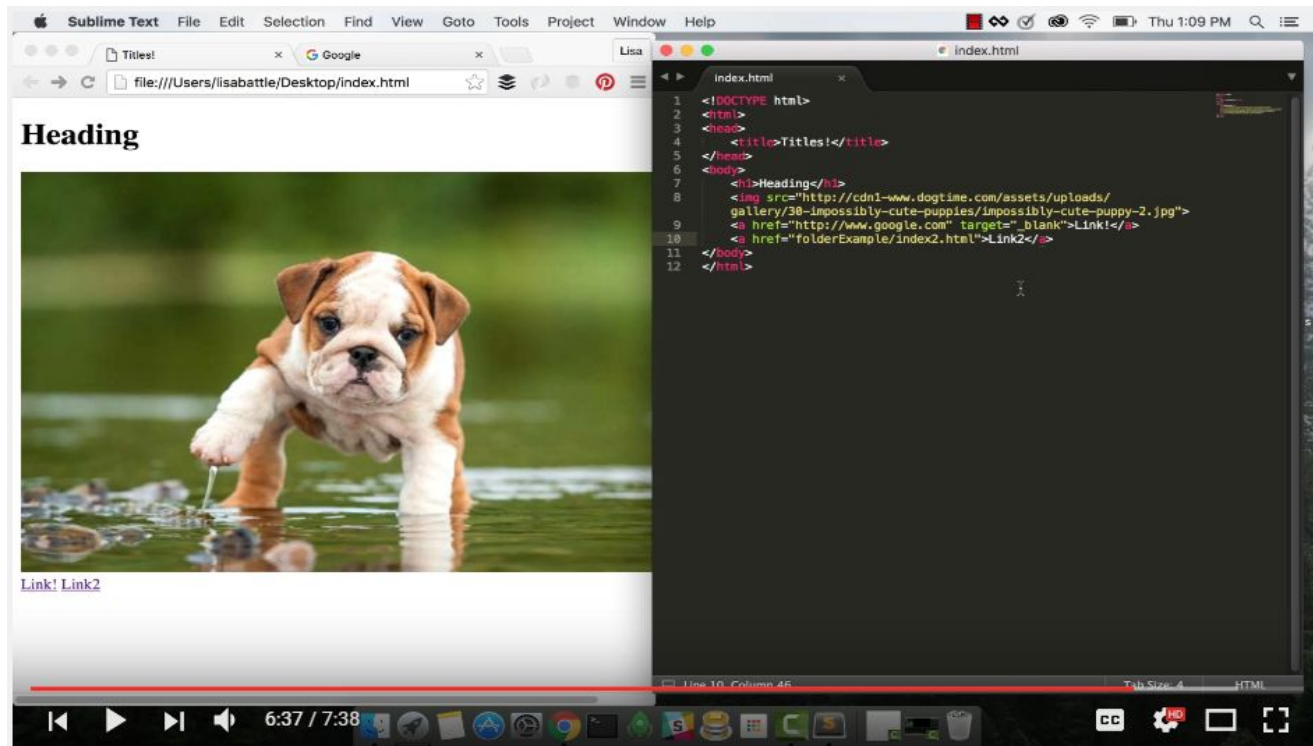
- Create an ordered list of steps to make a sandwich
- Create an unordered list of five bands/musicians you like
- Create a table with two columns (animal class and animal name) and four rows of animals
- Use an alternate way of separating links without line breaks
- Embed a YouTube video of your favorite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

Suggested Time: 5 minutes



YouTube Video Walkthrough

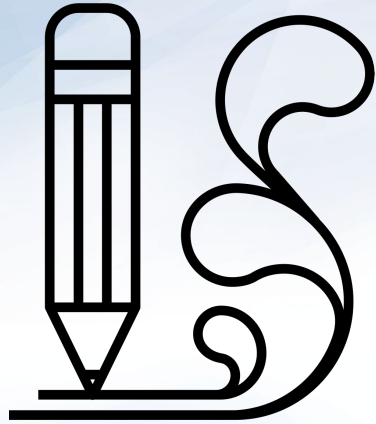
Watch the [walkthrough video](#):



<title>Intro to HTML</title>



How'd it go?



Homework Assignment

Due Date:
Next Class



Homework 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.)

Due Date: Next Class

