# Welcome to the George Washington Coding Bootcamp

Wifi Name: Internet\_Here

Password: Connect!

**Mark Attendance:** 

bootcampspot-v2.com

**Accept Invite:** 

github.com/CodingBootcamp

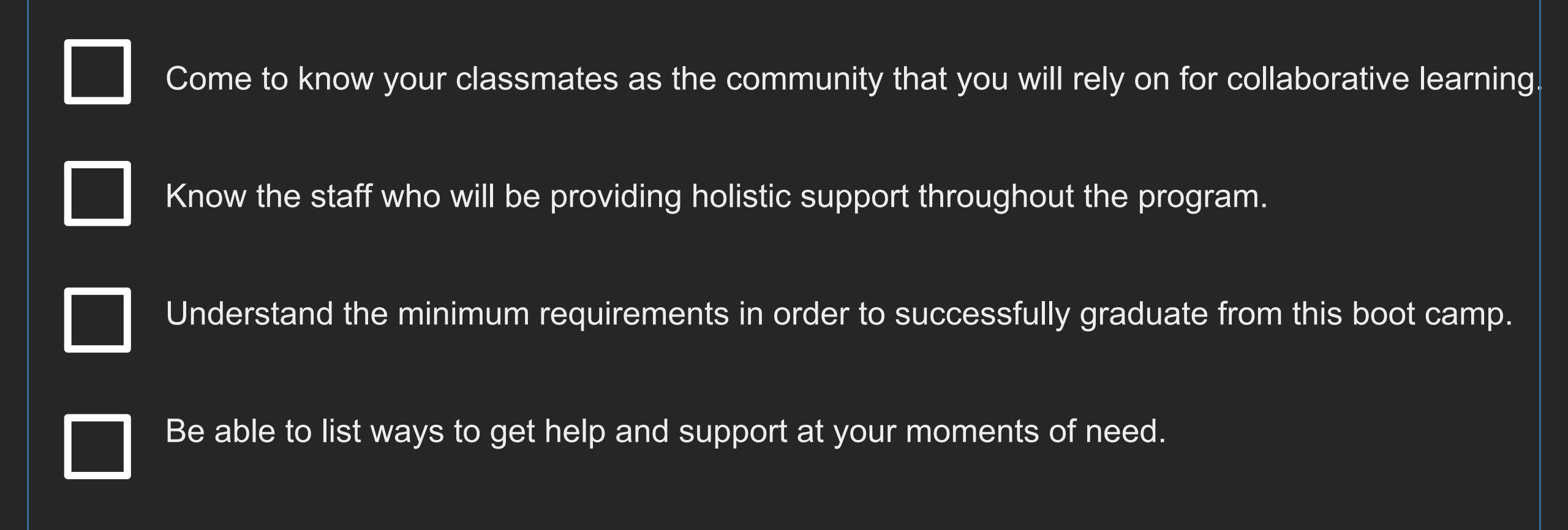
Open:

Slack Desktop App & Add Photo!

**Play Bingo!** 



# By the end of this session, you will:



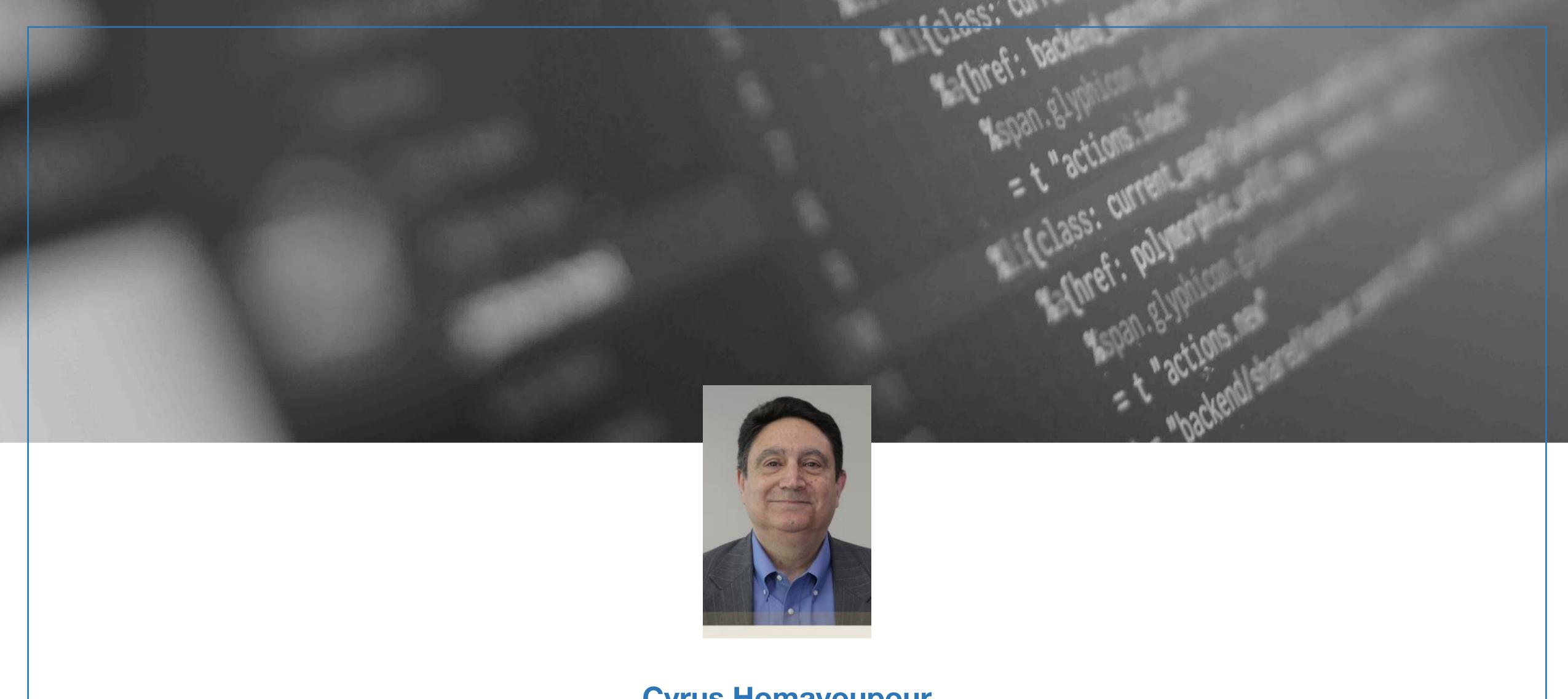
### Sasha Slacum Student Success Manager

My goal is to help you successfully complete the program

I like the outdoors and my puppy Pippa.

You can reach me at sslacum@bootcampspot.com





Cyrus Homayoupour Associate Dean, George Washington

### Your turn!

In 30 seconds or less, share your

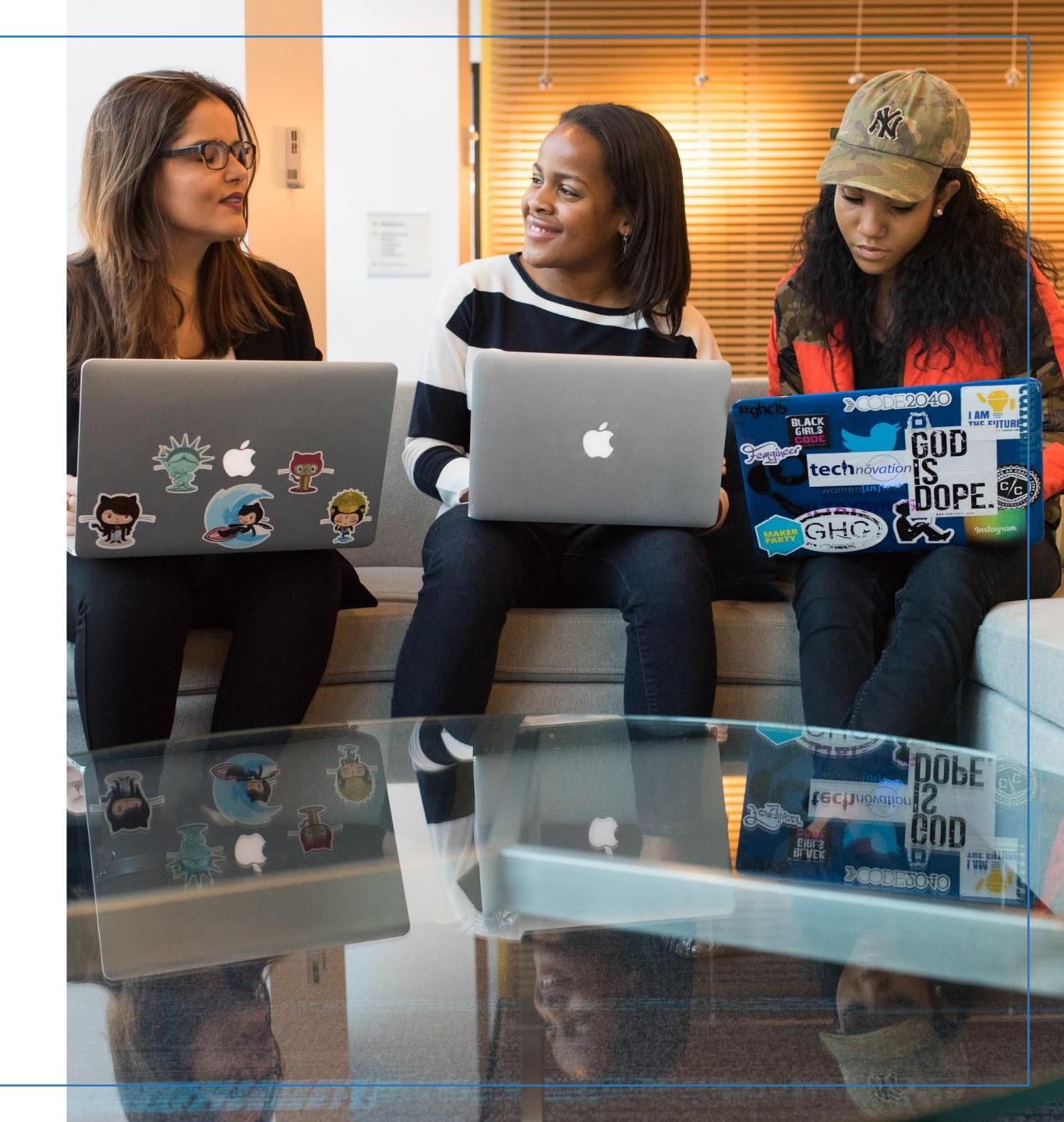
Name

Location (Live and Commuting from)

Background (Career, Education, Interests)

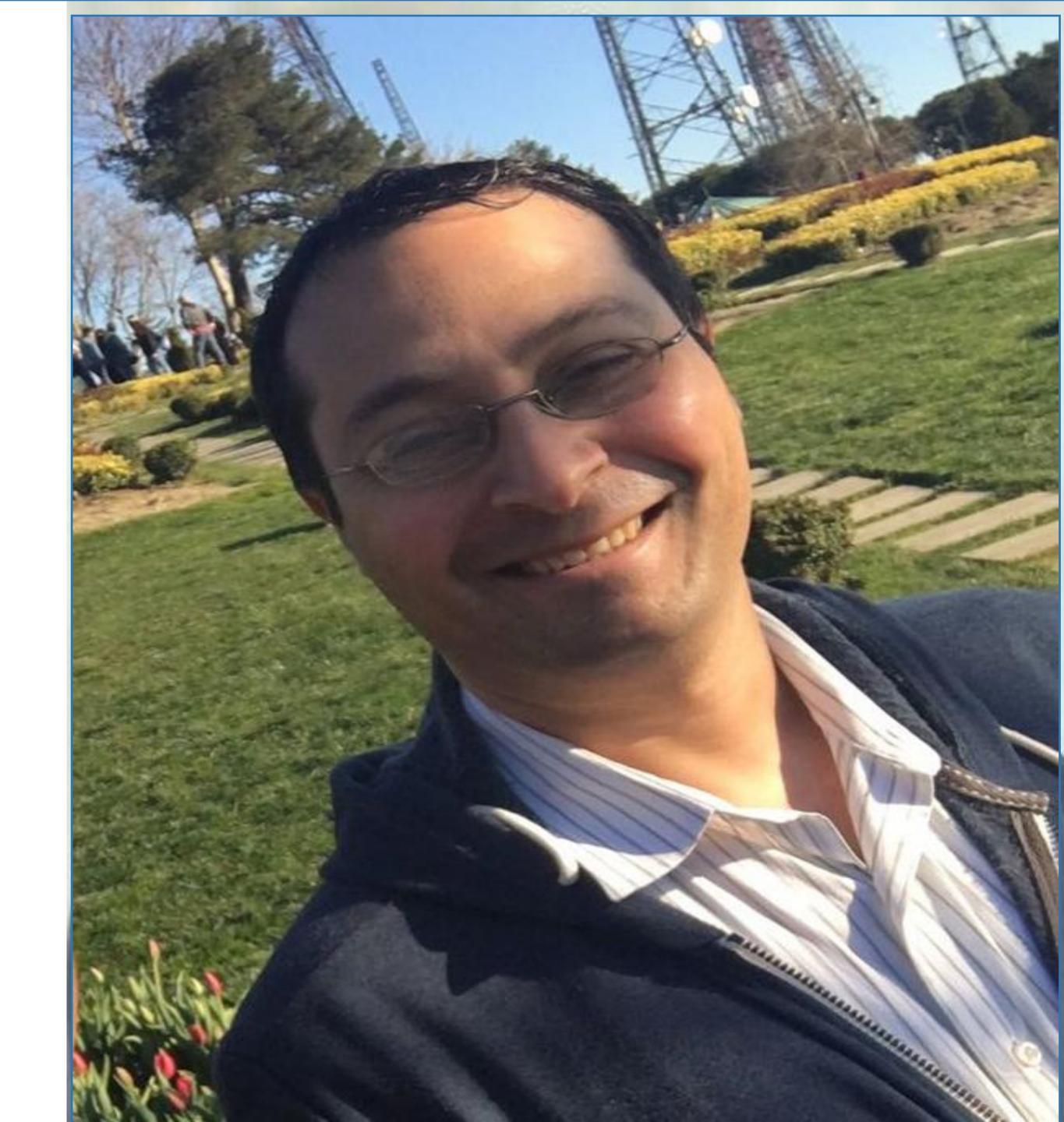
What is it about this class that excites you?

What is your proudest achievement?



# **Shadi Bashir**Teaching Assistant, Mon/Wed

- BSc in Biology
- BA in IR and Economics
- Two years of professional coding experience
- Interested in Full Stack , AI , and ML



# Trey Eckels Instructor

Developing for more than 16 years

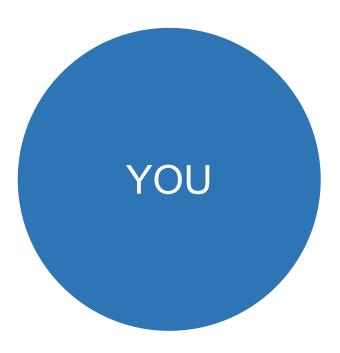
Love my cat, Eve

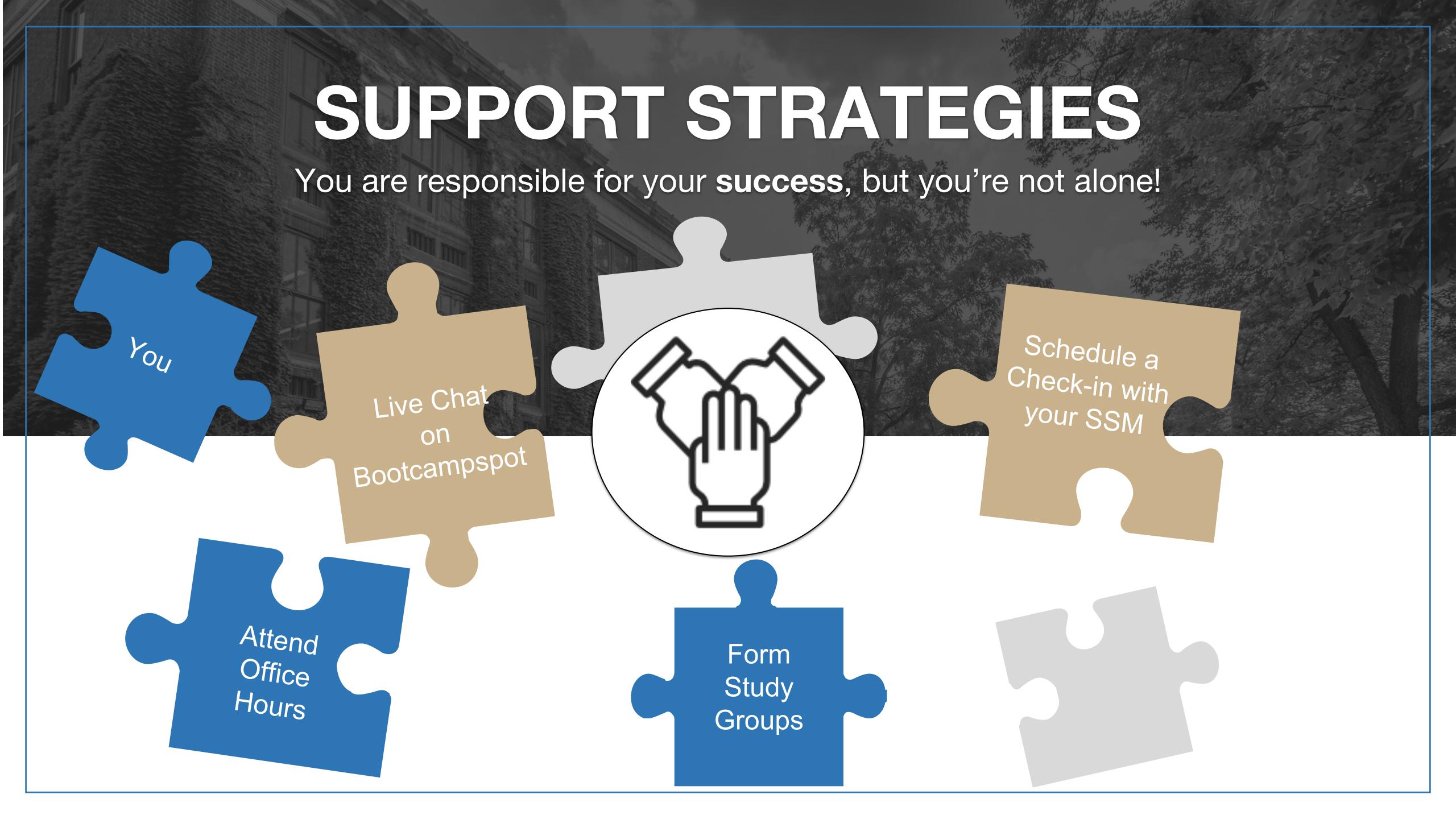
Software Engineer for Perfect Sense, previously Software Engineer contractor for Google and Software Enginner for LinkedIn





# YOUR CAREER SERVICES TEAM

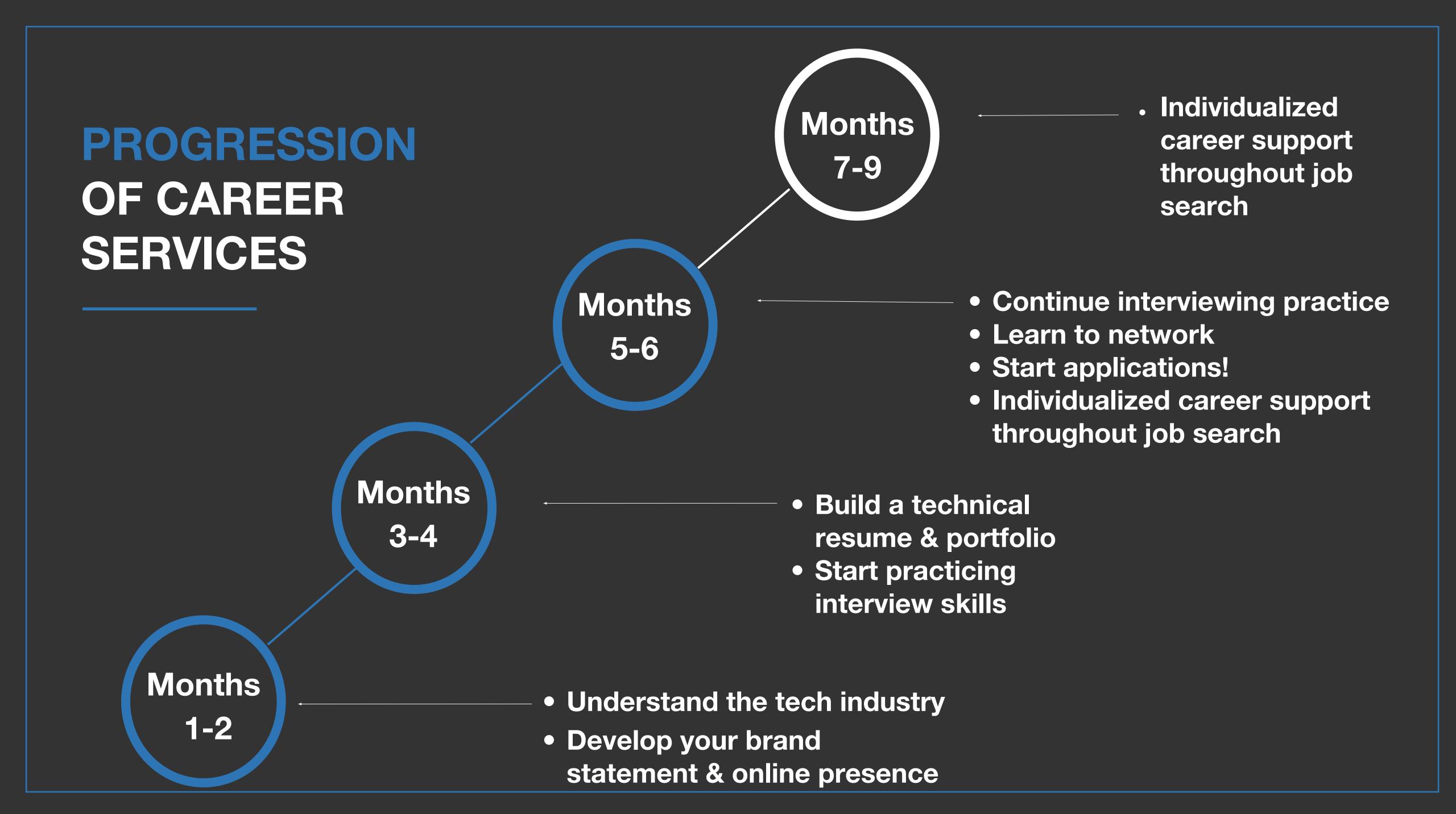




# **Activity: Landing Zones**

- 1. Choose one day of the week when your class is NOT held.
- 2. Break into groups by chosen day.
- 3. As a group, decide on a meeting time and place for your study group on that specific day of the week.

- 4. Share with the class. Post in your Slack and pin.
- 5. If time allows, confirm each person as a solid study plan in place to be successful in class.



# Minimum Graduation Requirements:

Miss no more than 4 classes
Have no more than 2 incomplete homeworks
Hold at least a 70% average on homeworks
Hold at least a 70% average on group projects
Participate in all projects

# COURSE TIMELINE

HTML CSS JavaScript Node/Express Mongo

Project 1

Modularity
External APIs
Socket. io
Testing

Project 2

React
Also React
More React
Computer Sci.

Project 3

#### Project 1:

Group Project
Full-stack (MEN)
External Library

#### Project 2:

Group Project
Real-time DB
External API/Library

#### Project 3:

Group or Individual
Project
React (MERN)
External API/Library

# Session Objectives Completed:



Come to know your classmates as the community that you will rely on for collaborative learning.



Know the staff who will be providing holistic support throughout the program.



Understand the minimum requirements in order to successfully graduate from this bootcamp.



Be able to list ways to get help and support at your moments of need.

# Pre-Work

## **Software Checklist**

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

- Slack
- ☐ Visual Studio Code
- Git for Version Control
- ☐ Git Bash (Windows) or Terminal (Mac)
- Node.js
- ☐ Heroku-CLI
- ☐ Google Chrome

## **Accounts Checklist**

You should also now have accounts for:

GitHub (with SSH Integration)

Heroku

LinkedIn

☐ Stack Overflow

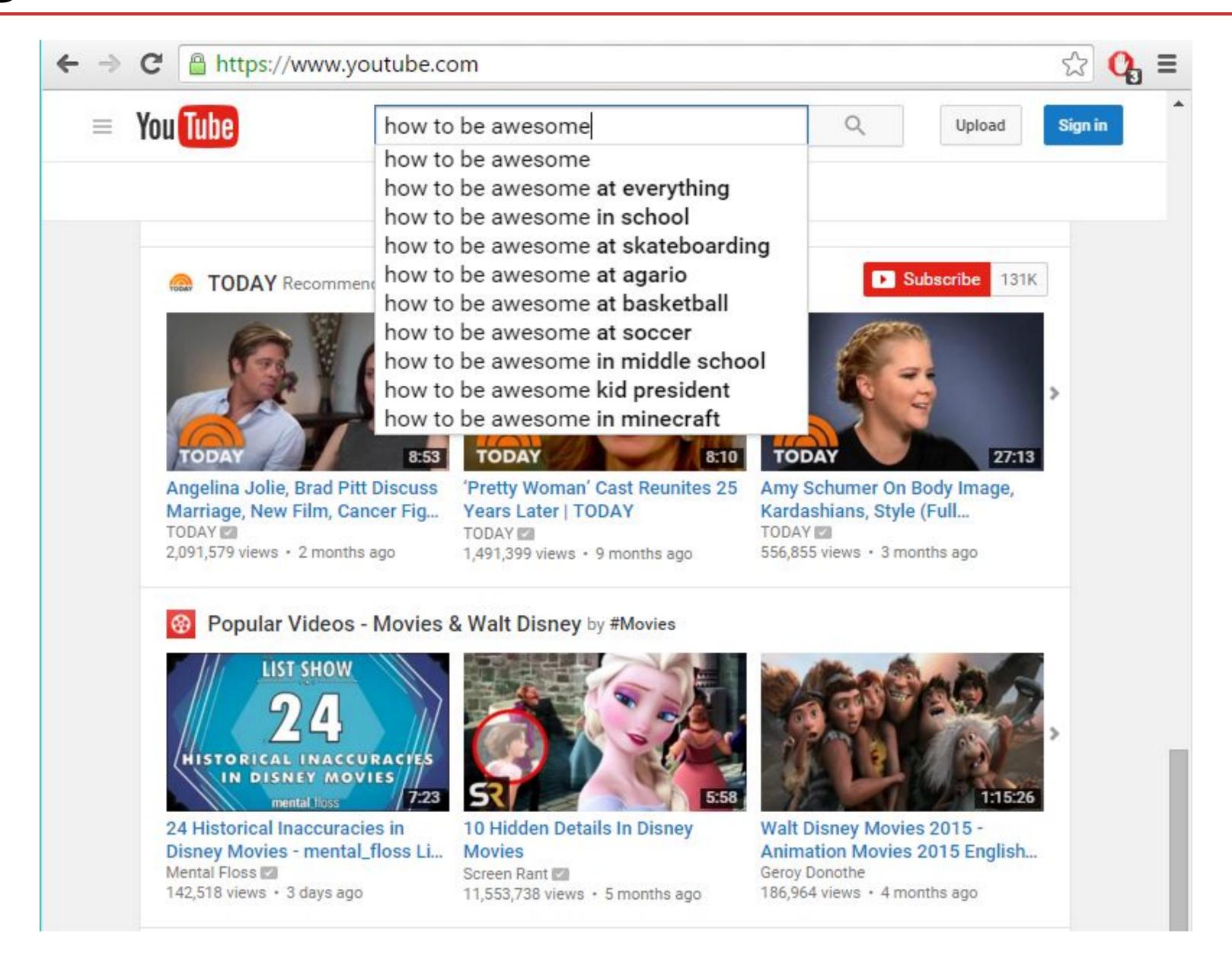
### Self-Check

Let's do some quick checks of the following

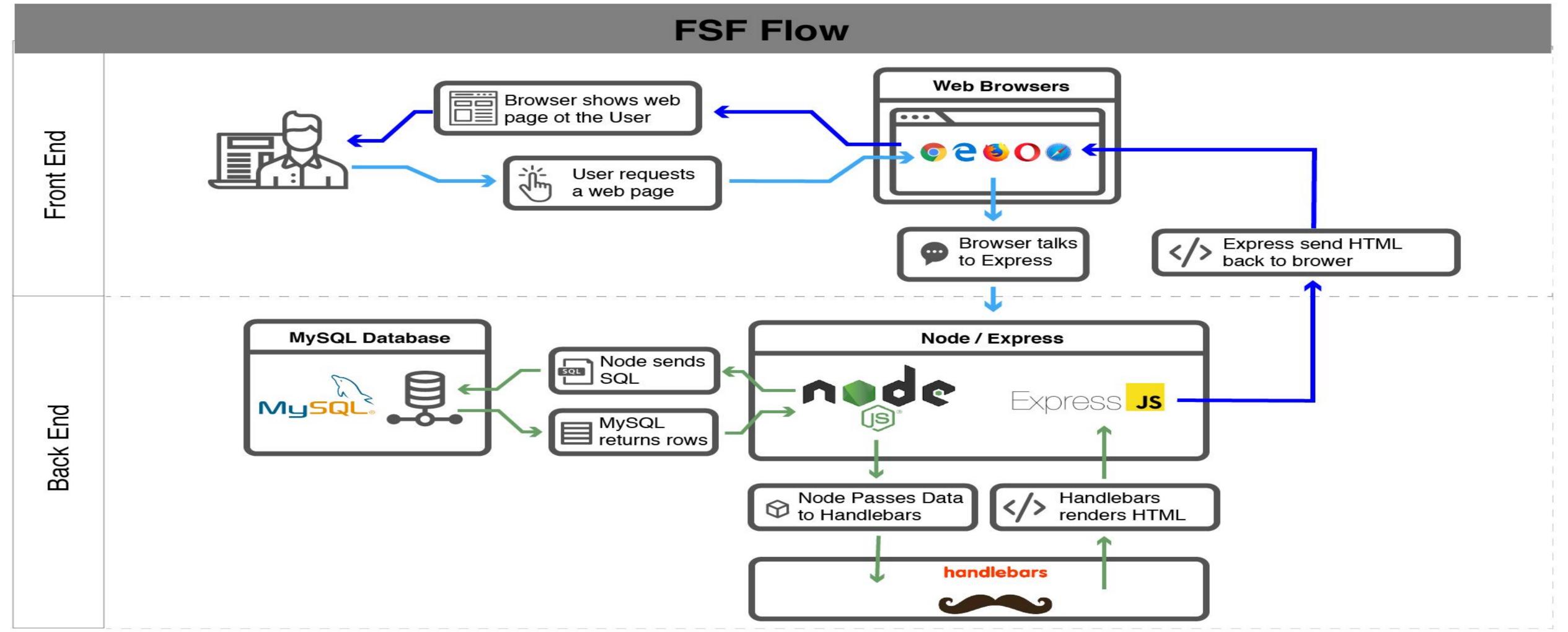
- ✓ Visual Studio Code Check
- Git Bash / Terminal Check
- ✓ Node Check
- Git Check
- Heroku Check

# On the Modern Web

# The "Magic" of YouTube



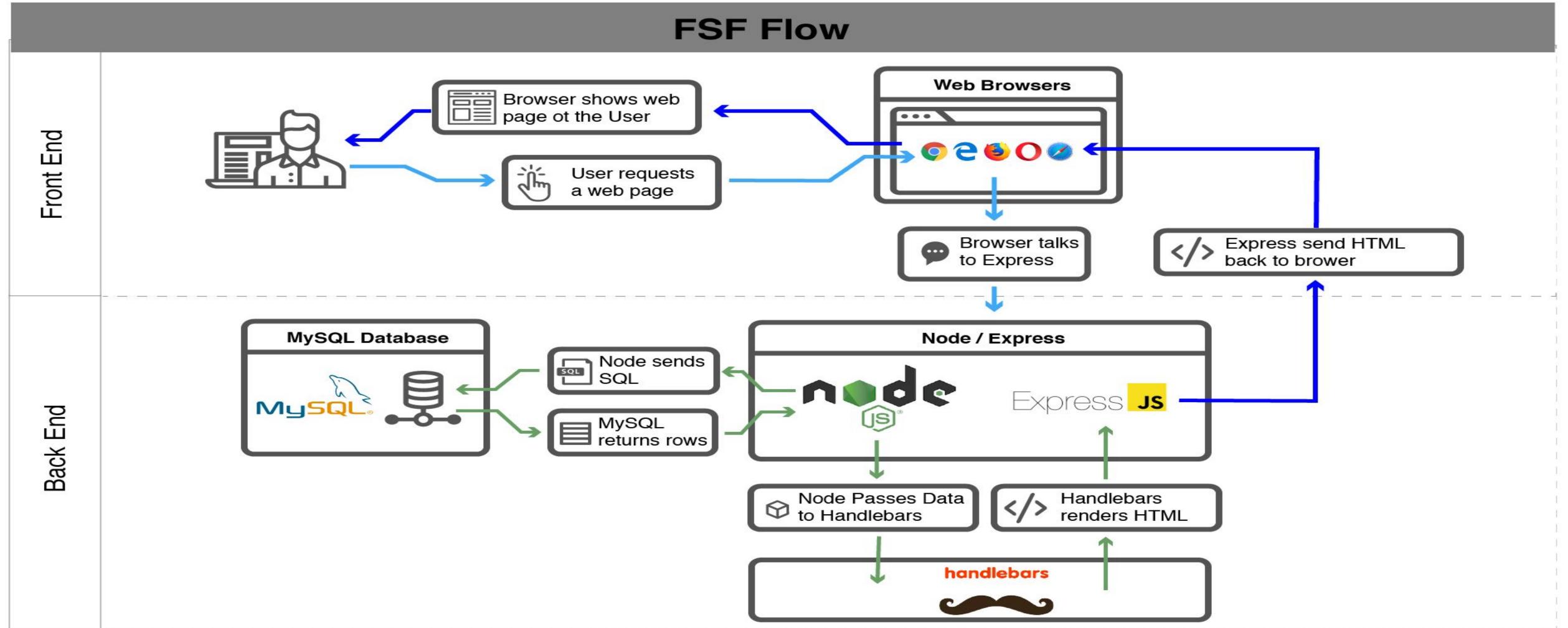
# Full-Stack Development



In modern web apps, there's a constant back-and-forth communication between two key components: the visuals displayed on the user's browser (frontend) and the

data and lagio atomad an the common (healkand)

# Full-Stack Development



**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**

- HTML
- CSS
- JavaScript
- jQuery
- Bootstrap
- SEO

#### **API Interaction**

- APIs (Consuming)
- JSON
- AJAX
- Real Time Cloud Database via Firebase

#### **Cutting Edge Development**

React.js

#### **Dev Tools**

- Heroku
- Git
- GitHub

#### **Databases**

- MySQL
- MongoDB

#### Server Side

- Templating Engines
- Sessions
- Writing tests
- Node.js
- Express.js
- Creating APIs
- MVC
- User Authentication
- ORM (Sequelize)

#### **CS Fundamentals**

- Algorithms
- Design Patterns

# Let's Get Crackin'

### Intro to Console / Terminal

```
0.0
                             Macintosh HD - bash - 80×26
      Terminal
                                            bash
                                                              bash
OSXDaily@hyrule:/$ ls -l
total 16053
drwxrwxr-x+ 112 root admin
                           3.7K Jan 29 16:49 Applications/
                           510B Jul 21 2011 Developer/
drwxrwxr-x 15 root admin
                           238B Aug 9 15:28 Incompatible Software/
          7 root admin
drwxrwxr-x
           62 root wheel
                           2.1K Jan 29 13:47 Library/
drwxr-xr-x+
drwxr-xr-x@ 2 root wheel 68B Jun 20 2012 Network/
                           136B Jul 26 2012 System/
drwxr-xr-x+ 4 root wheel
                            60B Mar 10 2011 User Guides And Information@ ->
lrwxr-xr-x 1 root admin
/Library/Documentation/User Guides and Information.localized
                           306B Jan 25 14:00 Users/
            9 root admin
drwxr-xr-x
                           136B Jan 29 13:56 Volumes/
drwxrwxrwt@ 4 root admin
drwxr-xr-x@ 39 root wheel
                           1.3K Jan 29 13:47 bin/
                            68B Jun 20 2012 cores/
drwxrwxr-t@ 2 root admin
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
            2 root wheel
                            1B Jan 29 14:08 home/
dr-xr-xr-x
                           7.8M Aug 25 00:49 mach_kernel
-rw-r-r-@ 1 root wheel
            2 root wheel
                             1B Jan 29 14:08 net/
dr-xr-xr-x
                           136B Dec 2 14:44 opt/
drwxr-xr-x@ 4 root admin
                           204B Jul 26 2012 private/
drwxr-xr-x@
           6 root wheel
drwxr-xr-x@
           62 root wheel
                           2.1K Jan 29 13:47 shin/
lrwxr-xr-x@
           1 root wheel 11B Jul 26 2012 tmp@ -> private/tmp
                           374B Dec 2 14:45 usr/
drwxr-xr-x@ 11 root wheel
lrwxr-xr-x@ 1 root wheel 11B Jul 26 2012 var@ -> private/var
OSXDaily@hyrule:/$
```

### INSTRUCTOR DEMO

# Instructor: Demo (1-ConsoleCommands)

### **Assignment:**

- Make a folder on your desktop named code.
- Put all of your code that you do inside of that folder.

#### **Best Practices:**

- Always use lowercase for folder and file names.
- Never put in spaces in your folder and file names.
- Use dashes to separate.

## **Assignment:**

From the Terminal / Console and using only the command line, create:

- A new folder with the name of first day stuff.
- A new HTML file with the name of 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 in one command.
- Create multiple files with the names one.html and two.html in one command in the first\_day\_stuff directory.

# Discuss with Neighbors

# Hello, HIML

### <title> Intro to HTML </title>

# 





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

## > YOUR TURN

#### **Assignment:**

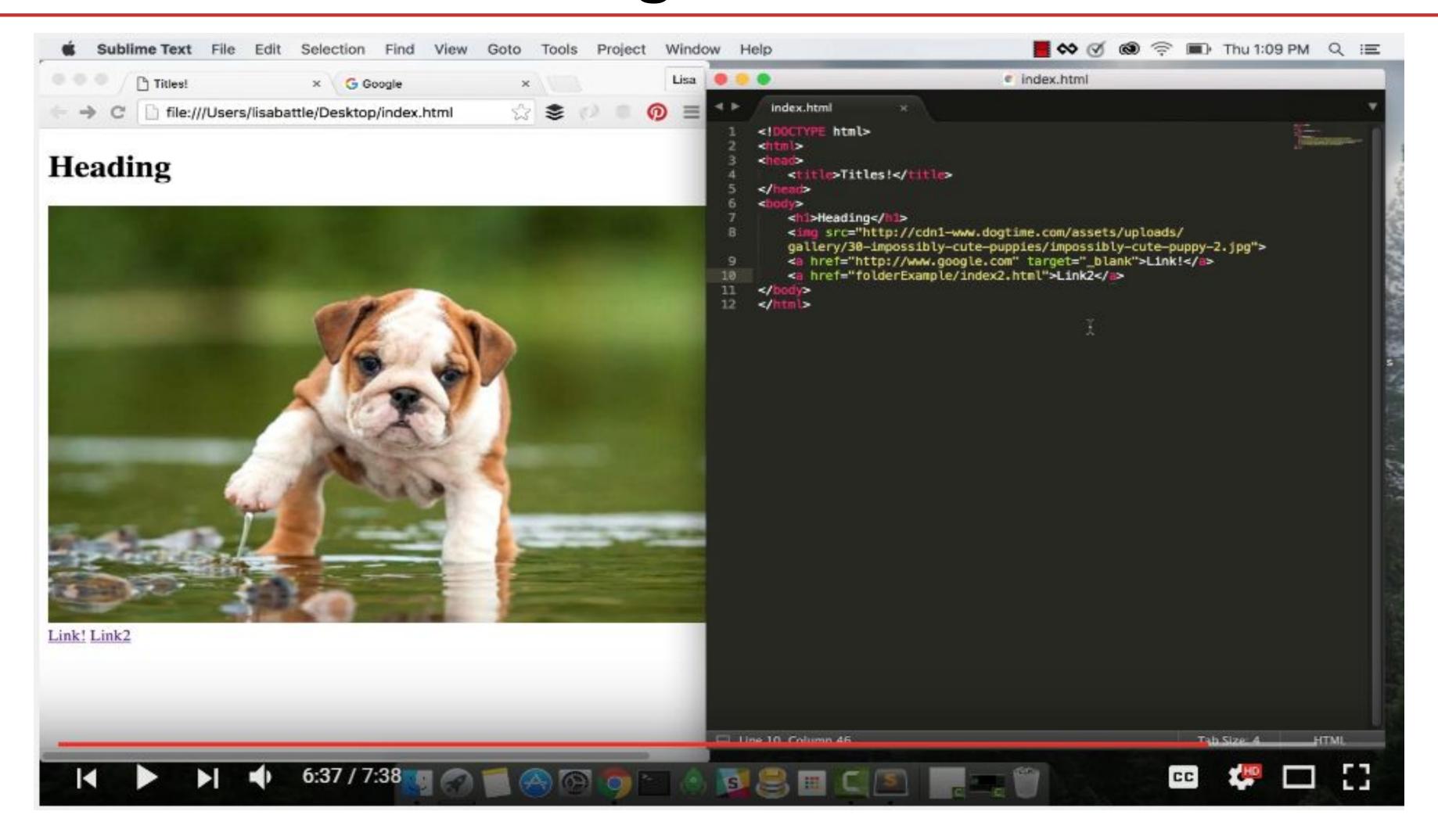
In a new HTML file, create the basic structure of an HTML document and include the following in it:

- DOCTYPE declaration.
- Head tag with a title tag.
- H1 tag with a title of your choice.
- Embed an image.
- Create the following three links on your page:
  - One link that has target="\_blank" which opens a new tab when clicked
  - Make the second link bold.
  - Make the third link a placeholder so it goes nowhere.

#### **Bonus:**

- Create an ordered list of steps to make a sandwich.
- Create an unordered list of 5 bands/musicians you like.
- Create a table with 2 columns (animal class and animal name) and 4 rows of animals.
- Use an alternate way of separating links without line breaks.
- Embed a YouTube video of your favorite band/musician.

# YouTube Video Walkthrough!



https://www.youtube.com/watch?v=ieb6Svbc10E&index=1&list=PLgJ8UgkiorCn MLsUevoQRxH8t9bt7ne14

# How'd it go?

# Homework

## Homework "Due": Next Class

### **By Next Class:**

- Figure out where the GitHub Repo is for our class.
- Re-do the Terminal example from class today.
- Re-do the HTML example from class today.
  - Watch the Walkthrough Video if you felt a bit lost.