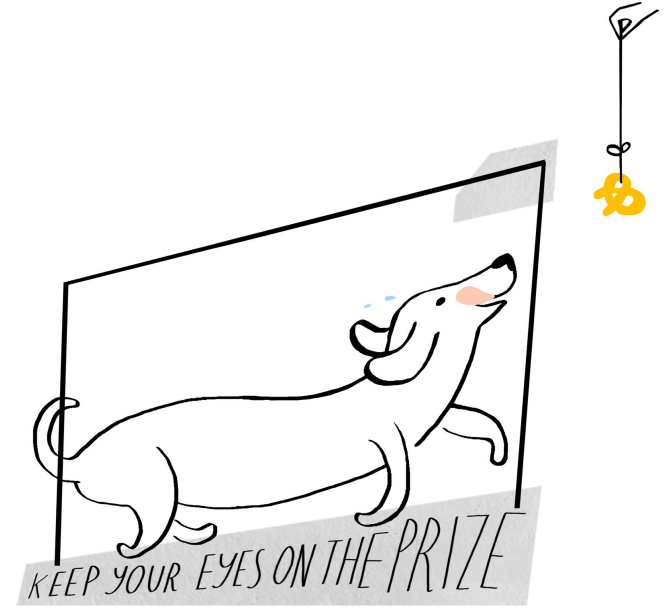# The Zen of Coding

Jared Nielsen

- 20 years teaching + webdev
- Grew up in rural Utah
- First full time job teaching wilderness survival

Introductions

- Who are you?
- Where are you from?
- What's your background?
- Why are you here?
- Fun fact?

Goals

KEEP YOUR EYES ON THE PRIZE

LNP

The Path of Learning

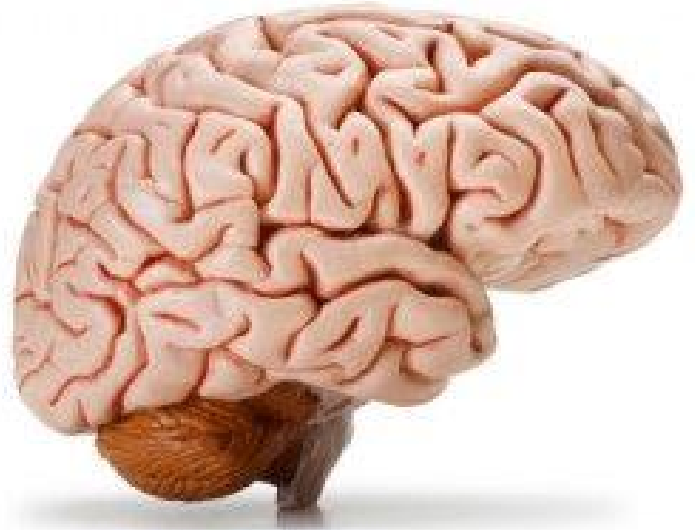# Lifelong Learning

David Parkins

What is Code?

What is programming?

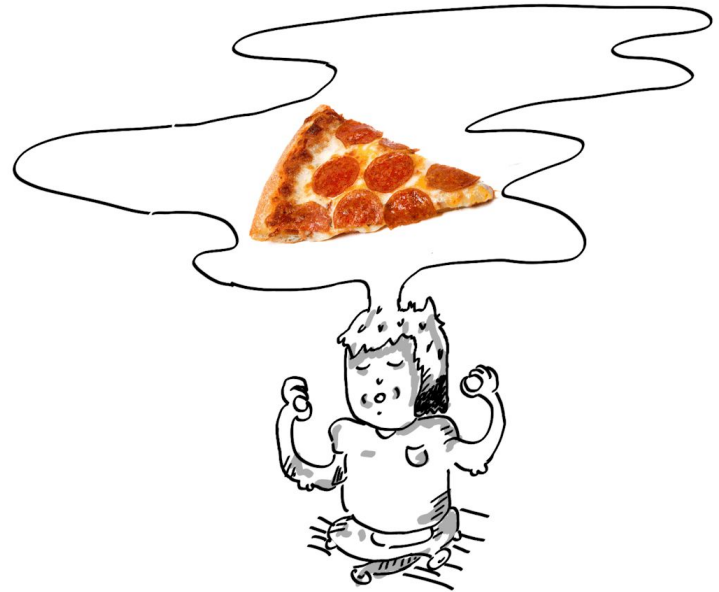# Problem solving

The Keys to Success

Mindset

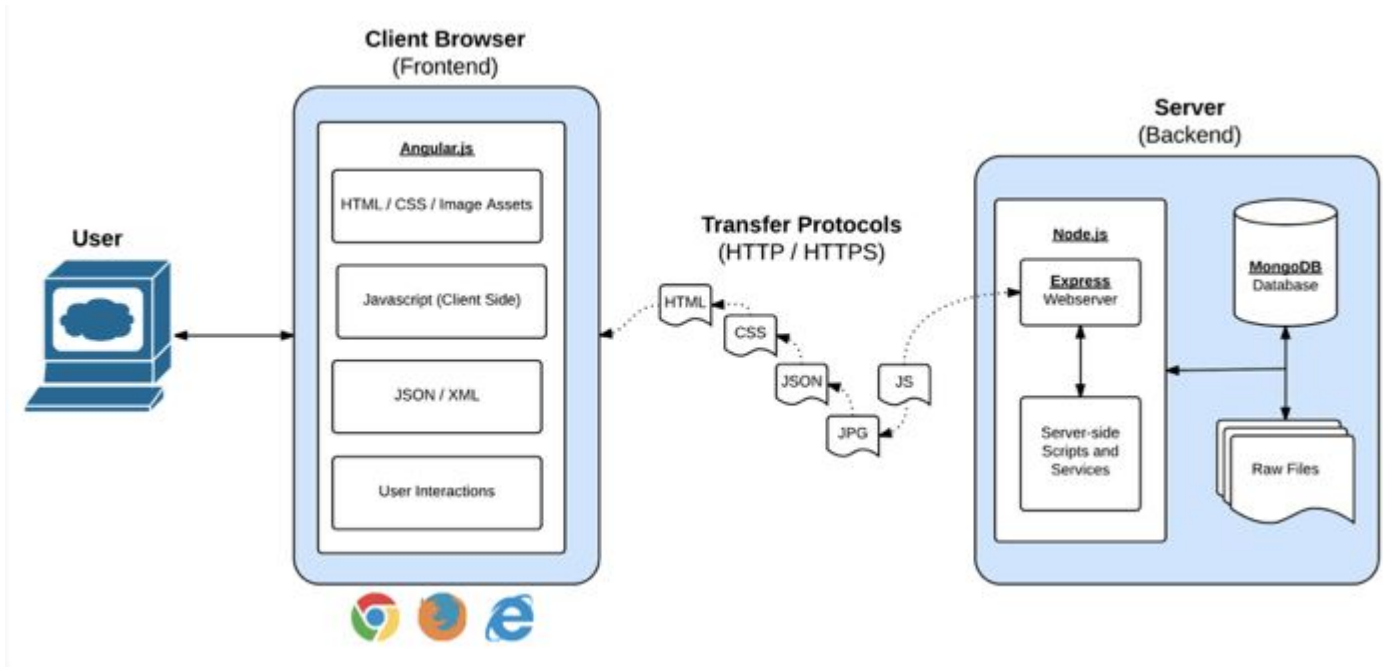# Teamwork

Focus

Google Fu

On the Modern Web

What is Full Stack Development?

Front End, Meet Back End. Back End, Front End.

Building Blocks

Course Structure

Daily Schedule

- Set objectives
- Lecture
- Demo(s)
- Discussions
- In-class exercise
- Homework and projects

Weekly Schedule

- Homework

  AND/OR

- Group Project

Learning to Code Requires Coding

Pre-Work

Accounts

- GitHub
- GitLab
- Heroku
- LinkedIn
- Stack Overflow
- Google

Installation Checklist

- Slack
- VSCode or Atom
- Git
- CLI
  - Git Bash (Windows)
  - Terminal (Apple)
- Node.js
- Heroku
- Chrome

Test

- Open VS or Atom
- Open Git Bash or Terminal
  - node -v
  - git --version
  - heroku --version

In the Beginning was the Command Line...

CLI vs. GUI

Files

- touch
- ls (list)
- open (Apple), explorer (Windows)
- cat (concatenate)
- rm (remove)
- atom <file-name>

Directories

- pwd (print working directory)
- mkdir (make directory)
- cd (change directory)
- cd .. (move up)
- cd ~ (go home)
- open . (Apple), explorer . (Windows)
- rm -r (remove directory)

RTFM

- man (manual)
- Tab
- Up/Down

Activity! Command Line (15 min)

- From the command line:
  - Make a new directory titled: **apps**
  - Change into **apps**
  - Create a file titled: **index.html**
  - Open **apps**

- Bonus
  - In one command, make multiple directories titled: **dir_one** and **dir_two**
  - In one command, create multiple files: **one.html** and **two.html**

Activity! Find a Friend (5 min)

- Friend on the right, explain:
  - How to make a directory
  - How to change into a directory
  - How to create a file
  - How to open directories and files
- Friend on the left, answer:
  - What is Full Stack Web Development?

Hello, HTML!

Demo: Intro to HTML

Activity! Intro to HTML (10 min)

- Open **index.html**, and include the following:
  - DOCTYPE declaration
  - head tag with a title tag
  - h1 tag with a heading of your choice
  - Embed an image
  - Add three links:
    - One standard
    - One that opens in a new tab
    - One that is a bold placeholder

- Bonus
  - Use an alternative way of separating links without line breaks
  - Create an ordered list of steps to make a sandwich
  - Create an unordered list of your favorite bands
  - Embed a YouTube video of one of your favorite songs

Review: Intro to HTML

Git?

Git!

- ● What?
  - ○ Organized system for managing code
  - ○ Allows multiple developers to collaborate
- ● Why?
  - ○ Strict system for resolving conflicts
  - ○ Version history
- ● See also:
  - ○ GitHub
  - ○ GitLab

First Commit, er... Steps, with Git

Basic Git Commands

- git clone (copy a repo)
- git add (add file(s) to the repo)
- git commit (notes changes to the repo)
- git push (send changes to GitHub)
- git pull (update repo locally)

Demo: Git add, commit & push

Activity! Git add, commit & push (20 min)

- Using GitHub and the command line:
  - Create a new public GitHub repo, initialized with a README
  - Clone the repo to your laptop
  - Create an HTML file in the local repo directory
  - add, commit and push the repo to GitHub

- Bonus!
  - Find a friend in class and **fork** their repo
  - Clone this fork to your laptop
  - Create an HTML file in the repo
  - add, commit and push
  - Submit a **pull** request to your friend's repo

See class repo for Steps_To_Upload_Github.pdf

Netflix && Chill

https://www.youtube.com/watch?v=ieb6Svbc10E

Watch this walkthrough for review.

Demo: Homework

See Also

- [Difference between git add . & git add -A](#)