



# INTRO TO BACKEND DEVELOPMENT

DAY 1

03/15/2021  
*Instructor - Casey Wilson*  
*TA - Kevin Dublin*

# *Introductions*

- Instructor - Casey Wilson
- TA - Kevin Dublin



# *Ice Breaker*

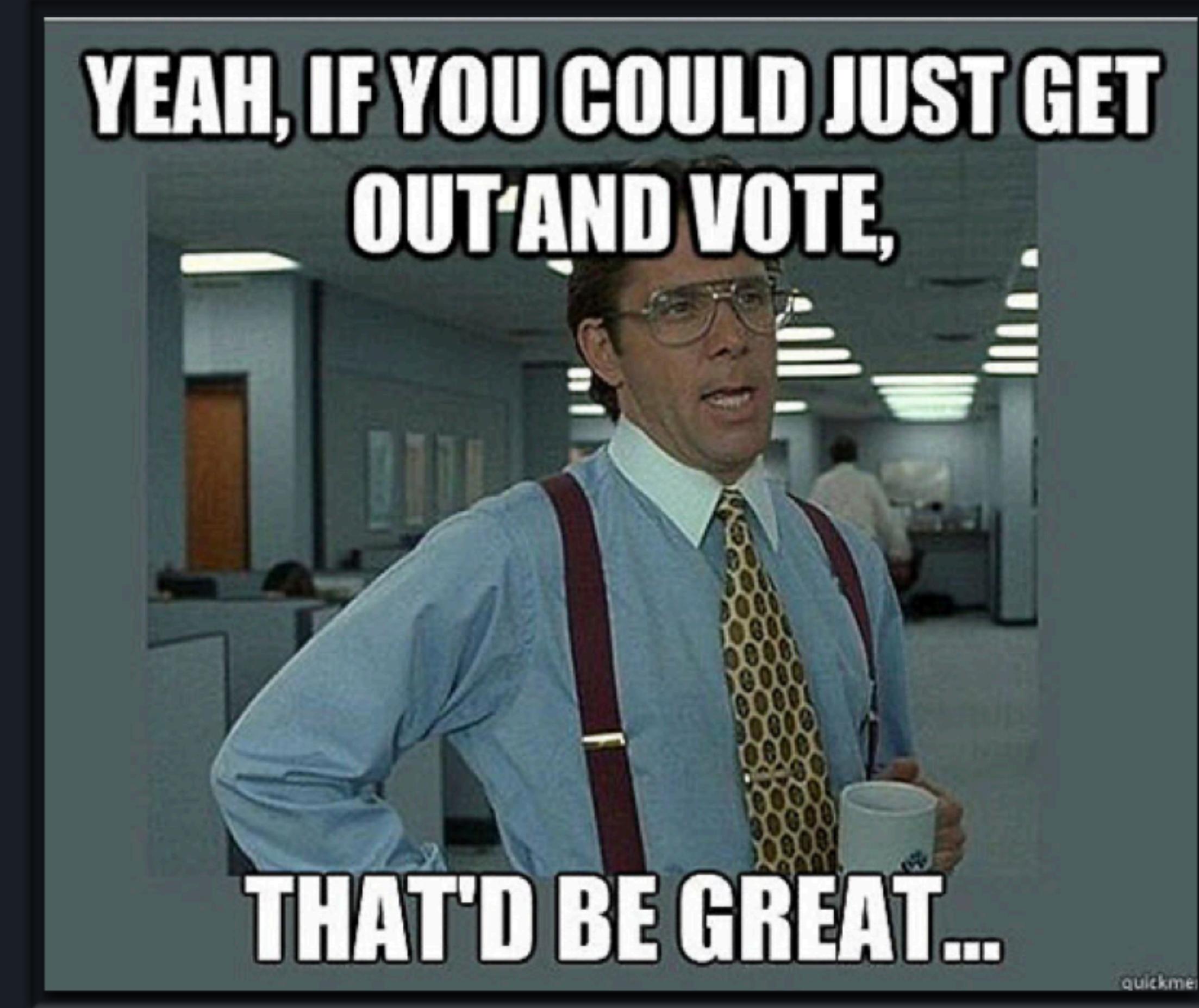


- Name?
- Favorite Emoji?
- Unique Talent?
- What do want to learn from this class?

# *Course Expectations / Guidelines*

- Course Outline - <https://geekwiseacademy.github.io/intro-to-backend-development/>
- Github Repo - <https://github.com/GeekwiseAcademy/intro-to-backend-development>
- Slack - <https://app.slack.com/client/T039Z04V3/C01R4PH0MGA/details/members>
- Bitwise Workforce Training - <https://bitwiseindustries.com/services/workforce-training/>

# Poll Time



# *What is “Backend” programming?*

- What the user “does not see”
- Database
- API
- Server-side



# *Examples of Backend Languages*



python

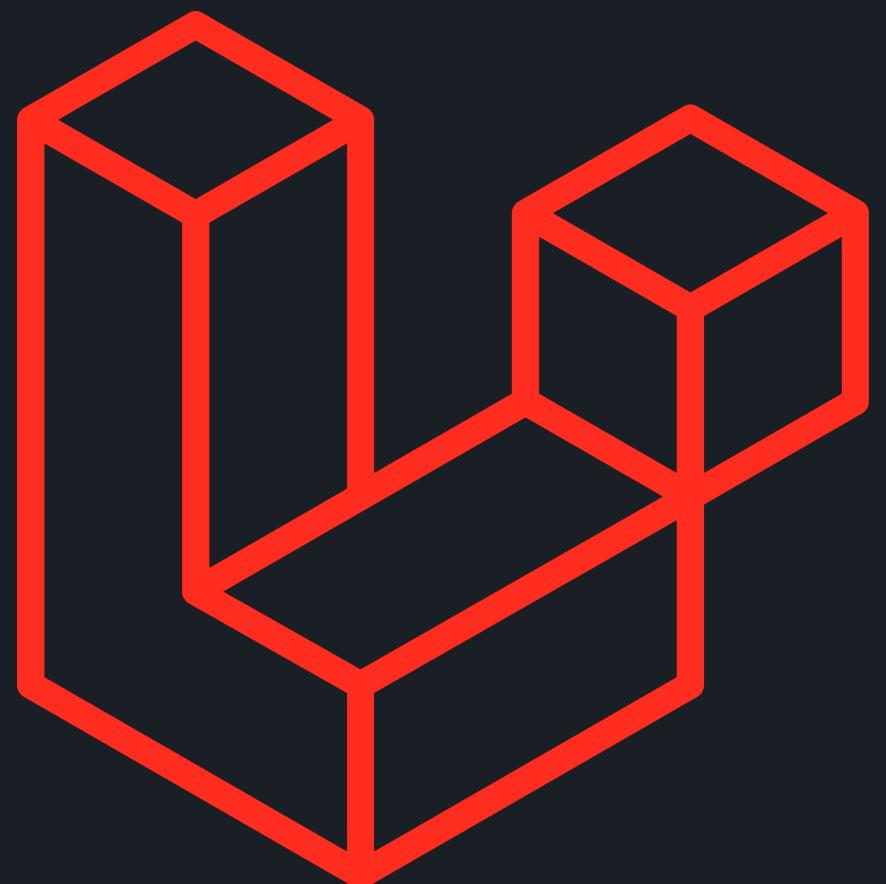
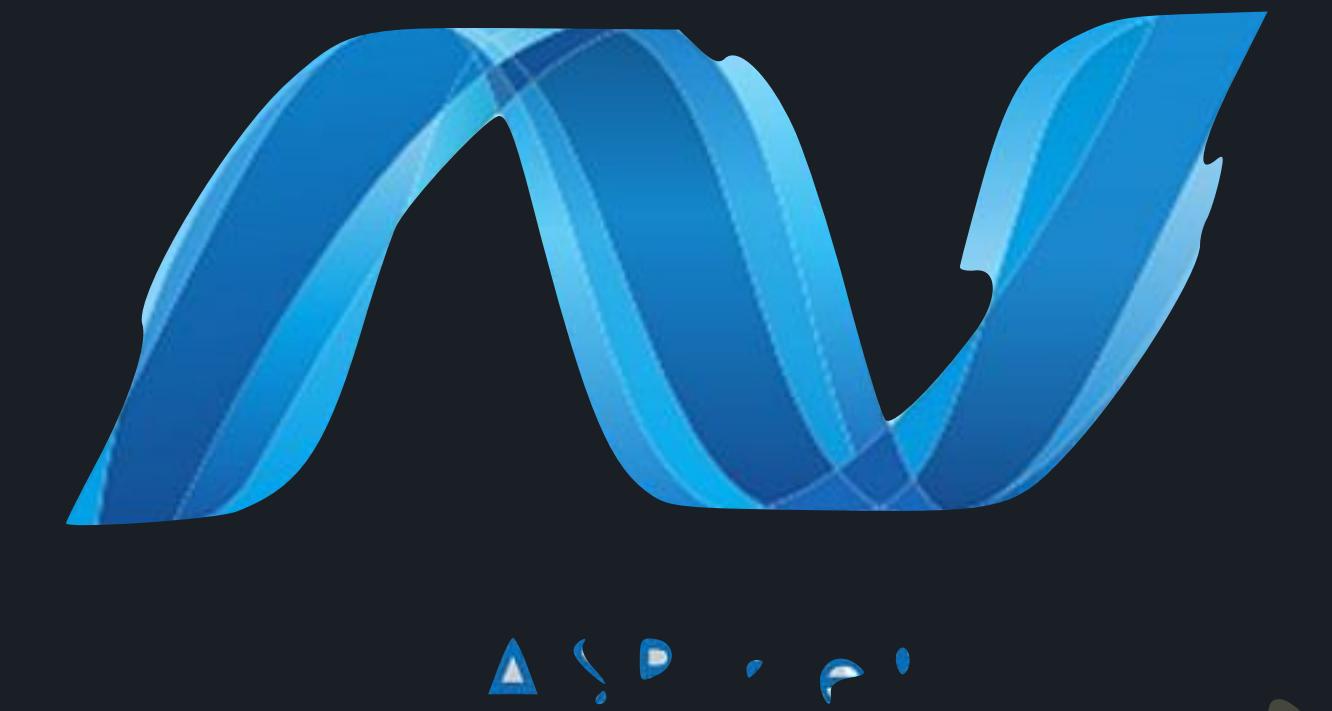


Ruby



# *Examples of Backend Frameworks*

**django**



ASP.NET

NODE



# *So Why Django?*

- Rich Ecosystem
- Admin Panel
- SEO
- Pluggable
- ORM (Database Migrator)
- Power of Python
- Easy Syntax
- Machine Learning
- Scalable
- Time Tested
- MVT Architecture
- Secure

# Who Uses Django?



Google

Quora

bitly



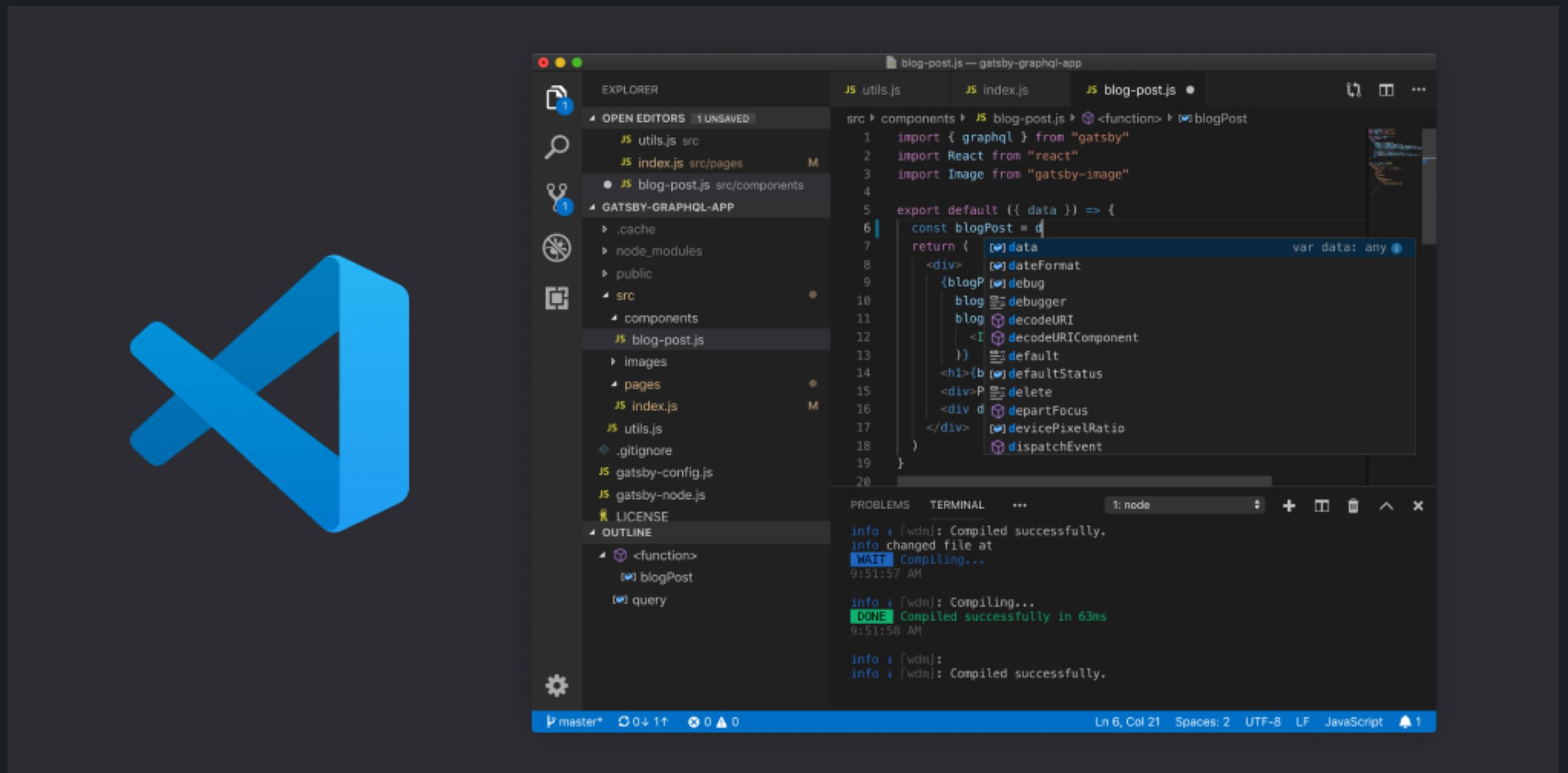
Instagram

Pinterest

DISQUS

# *What Will You Need to Succeed?*

- Computer
- Internet Connection
- VS Code
- Python
- Open-mind

A screenshot of the Visual Studio Code (VS Code) interface. The central part shows a code editor with a file named 'blog-post.js' open. The code is a component definition for a Gatsby site. The file content includes imports from 'gatsby', 'react', and 'gatsby-image', and a function 'blogPost' that returns a JSX element. To the left of the code editor is the 'EXPLORER' sidebar, which shows the project structure with files like 'utils.js', 'index.js', and 'blog-post.js'. Below the code editor is the 'TERMINAL' tab, which displays log messages from the build process, including 'Compiled successfully.' and 'Compiled successfully in 63ms'. The bottom status bar shows the current file is 'master', has 0 changes, and the terminal has 0 errors.

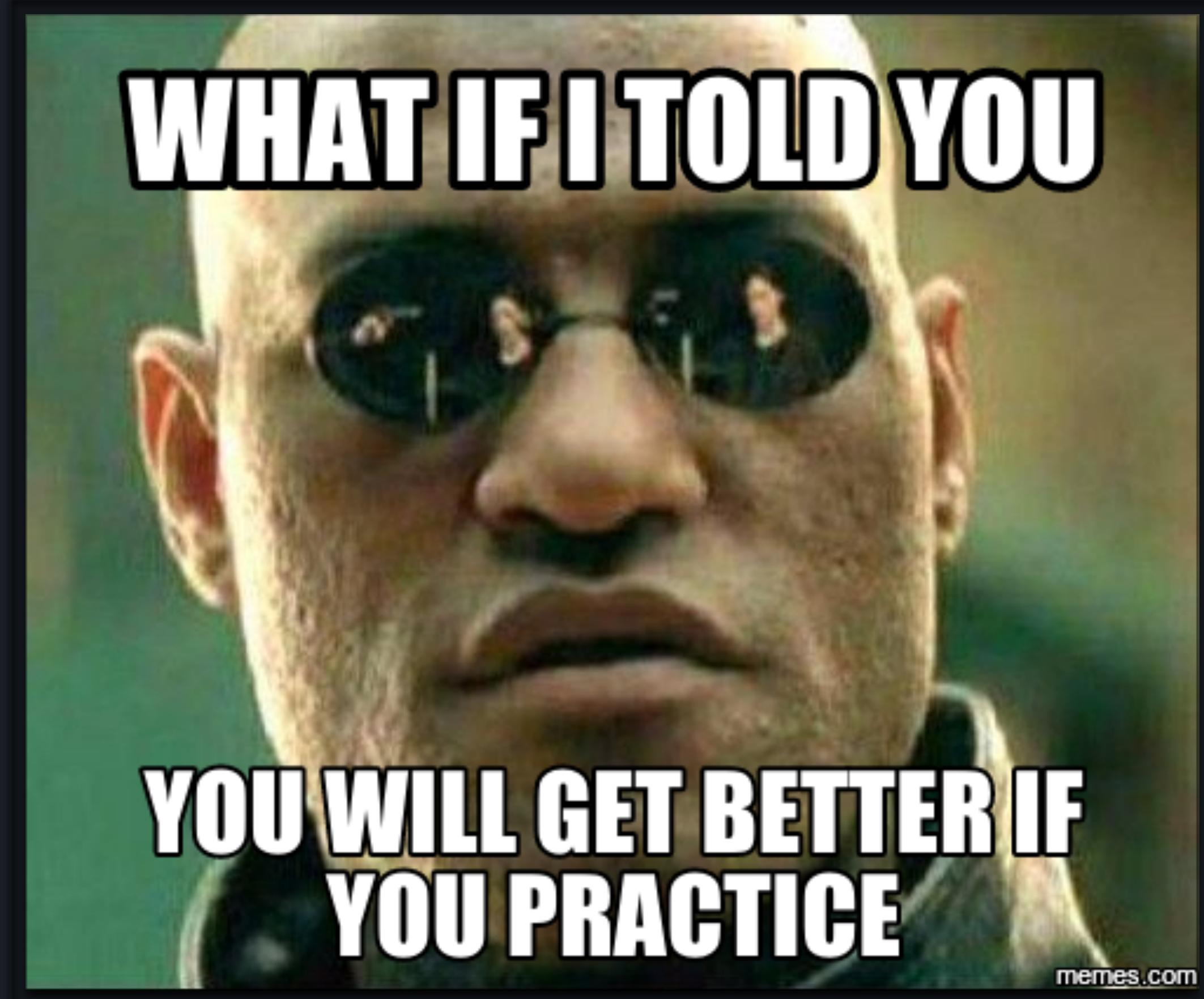
DAILY CHALLENGE -> Setup



# DAILY CHALLENGE -> Review



# *Tips on Learning (1) -> Practice*



# *Tips on Learning (2) -> Dr. Google*



# *Tips on Learning (3) -> Monkey See*



# *Tips on Learning (4) -> Black Box*



# *How the Web Works (Discussion)*



# *Python Basics -> Reserved Words*

False	await	else	import	pass
None	break	except	in	raise
True	class	finally	is	return
and	continue	for	lambda	try
as	def	from	nonlocal	while
assert	del	global	not	with
async	elif	if	or	yield

# *Python Basics -> Variables*

- Numbers
  - Int = 10
  - Long = 10303030943
  - Float = 10.2
  - Complex =  $\pi$
- Other
  - String = “Hello”
  - Boolean = True/False
- Array
  - List
  - Tuple
  - Dictionary
  - Set

# *Python Basics -> Arrays - > List*

- Mutable
- Brackets = [ ]
- Easiest To Use
- EX: my\_list = [1 , 2, 3]
- <https://www.programiz.com/python-programming/list>

# *Python Basics -> Arrays -> Tuple*

- Immutable
- Parenthesis = ( )
- Faster Than Lists
- EX: my\_tuple = (1, 2, 3)
- <https://www.programiz.com/python-programming/tuple>

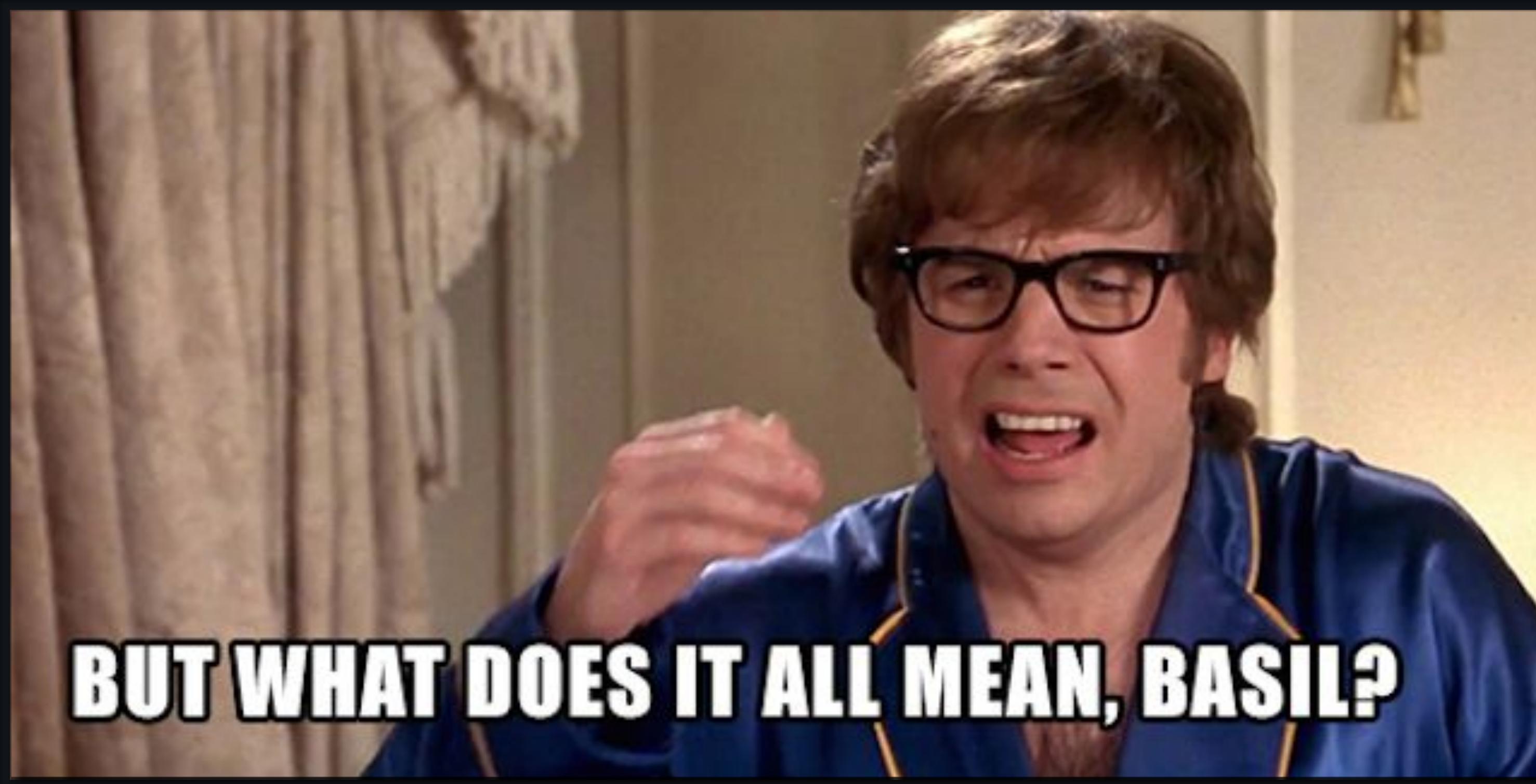
# *Python Basics -> Arrays -> Sets*

- Mutable
- Curly Braces = { }
- Cannot Have Duplicates
- EX: my\_set = {1, 2, 3}
- <https://www.programiz.com/python-programming/set>

# *Python Basics -> Arrays - > Dictionary*

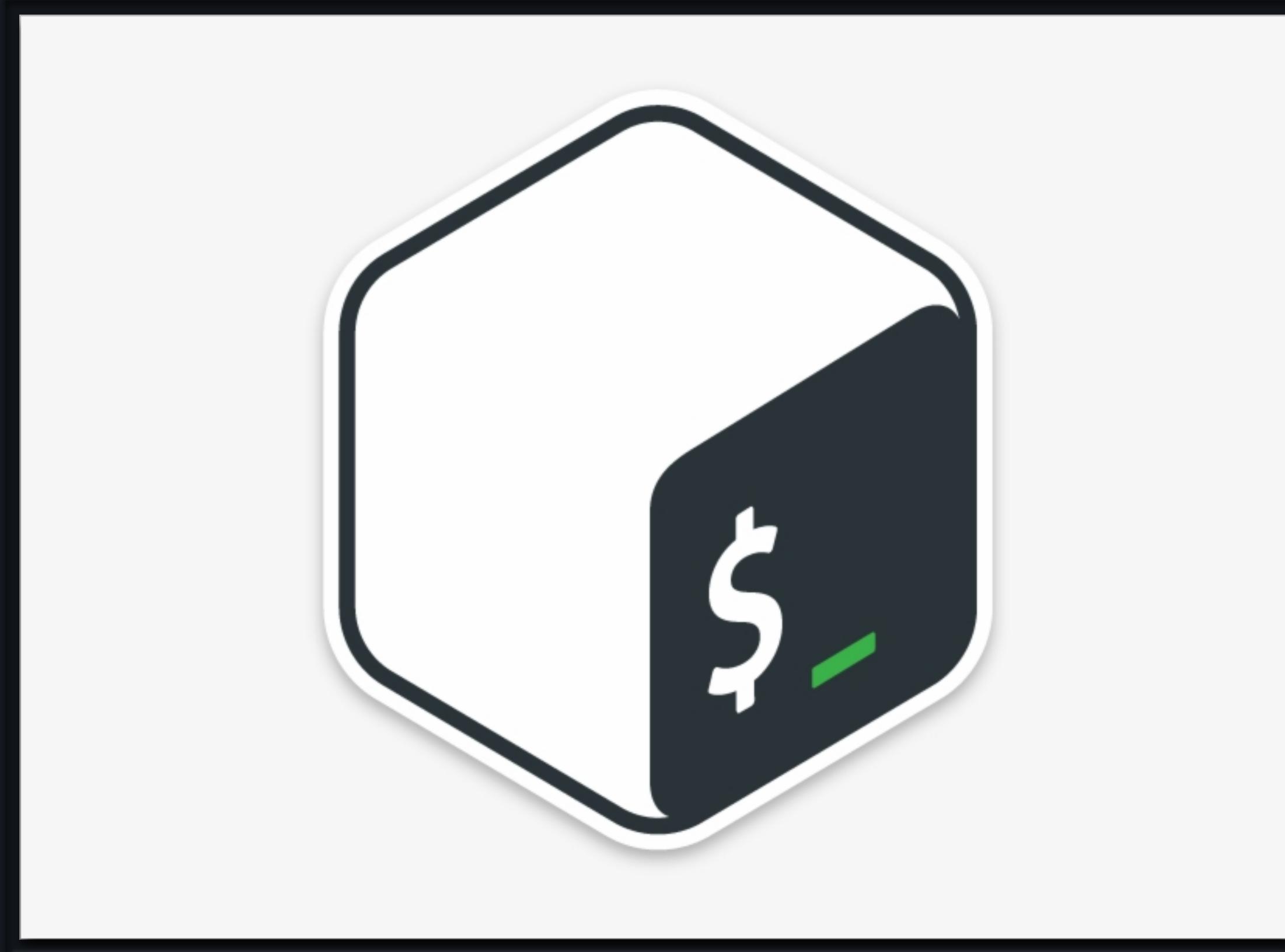
- Immutable (keys)
- Curly Braces = { }
- Key/Value Pairs
- EX: my\_dictionary = {1: 'apple', 2: 'ball'}
- <https://www.programiz.com/python-programming/dictionary>

# Questions?



**BUT WHAT DOES IT ALL MEAN, BASIL?**

# *Python Shell*



# Take Home Challenge

