

# WORKING WITH APIS IN PYTHON

Joseph Nelson, Data Science Immersive

# **AGENDA**

## **LEARNING OBJECTIVES:**

- Have a clear understanding of how APIs work, and why they are increasingly prevalent
- Know how the HTTP protocol works
- Understand the basics of data types in Python

# WHAT IS AN API?

→ Toss this out to the class: what is an API? Best guesses!

## WHAT IS AN API?

- An Application Programming Interface is a set of protocols, routines, and tools for building software applications.
- They're (partially) the reason a number of your favorite applications work. The ability for Uber to load Google Maps is a prime example!

## WHY ARE APIS VALUABLE?

Class suggestions? Why?

• From the standpoint of a company, why would you make it easier to access information you've worked hard to collect to make your product a success?

## WHY ARE APIS VALUABLE?

- APIs are channel to new customers and markets: Attracting new users via your app being baked into other services this grows your exposure
- APIs can be private: Internal APIs power apps (Communicate with server)
- APIs promote innovation: Third party developers build on top of your service, and your service may learn and make these features default (FollowerWonk)
- APIs retain current users: By continually providing value to current users or making your platform the default for, say, mapping the world, your service becomes harder to displace (Google Maps, sign in with FB)