

# WORKING WITH APIS IN PYTHON

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# AGENDA

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## 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.

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## WHAT IS AN API?

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- Toss this out to the class: What is an API? Best guesses are acceptable!

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## WHAT IS AN API?

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- An application programming interface (API) 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!

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## WHY ARE APIS VALUABLE?

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- 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 successful?

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## WHY ARE APIS VALUABLE?

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- 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 servers).
- APIs promote innovation: Third-party developers build on top of your service, and your service may learn and make these features defaults (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 (e.g., Google Maps, sign in with Facebook, etc.).