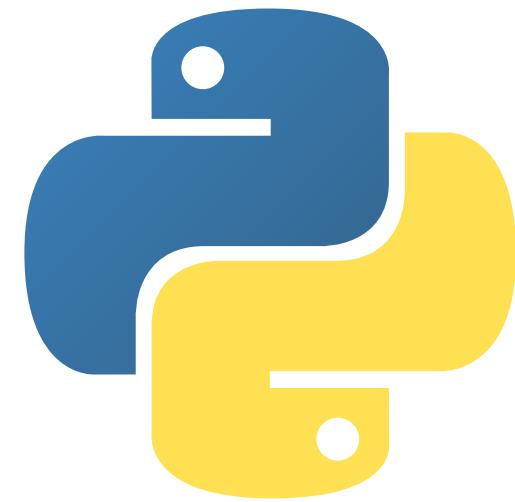
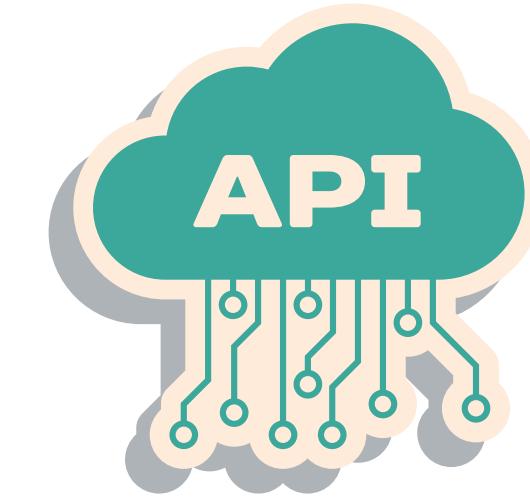


DAY



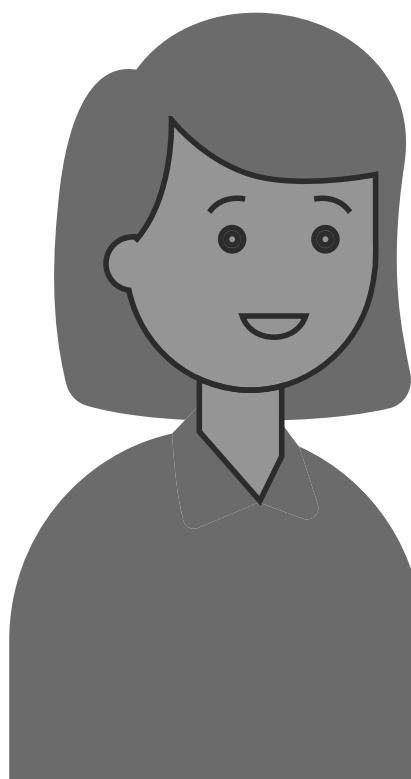
PYTHON
SCRIPTING

&



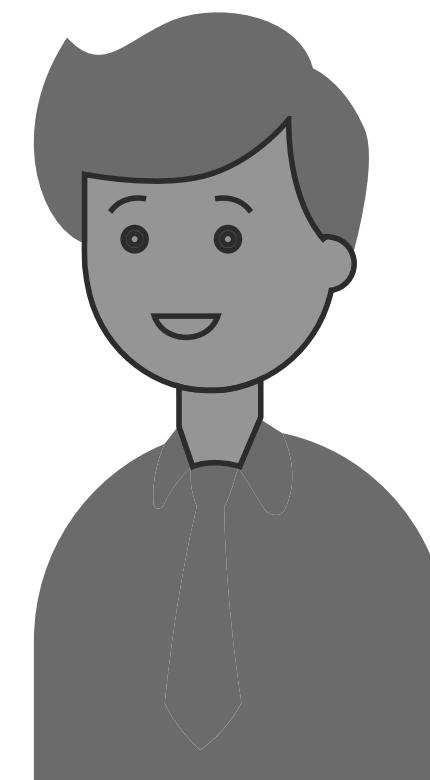
API USAGE
PRACTICE

Welcome to Python API Adventure!



Today's Mission?

Evolve from a Python
rookie into an API wizard
in just 2 hours!



Welcome to Python API Adventure!

What We'll Cover?

- Python review (the fun parts!)
- Writing scripts that don't make you cry
- Talking to APIs like a pro
- Building something actually useful



Warning: May cause excessive enthusiasm about programming 😊

Who You Are?

Beginner

I can print Hello World!

Pro

I've debugged a recursive
function at 3 AM!

Intermediate



PYTHON SCRIPTING

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Introduction to Python

What? Who? Why?

- Created by Guido van Rossum in 1991
- Named after Monty Python (not the snake!)
- Easy to read, write, and understand
- Used by Google, Netflix, Instagram, and your future self

Introduction to Python!

"Why Python? Because life's too short for semicolons!"

PYTHON

```
>>> print("Hello World!")
```

C++

```
#include <iostream>

int main() {
    std::cout << "Hello World!";
    return 0;
}
```

JAVA

```
class HelloWorld {  
    public static void main(String[] args) {  
        System.out.println("Hello, World!");  
    }  
}
```

ASSEMBLY

Python Review - The Greatest Hits

Let's quickly review the Python essentials:

- Variables (boxes for our stuff)
- Loops (doing things over and over)
- Functions (reusable magic spells)
- Data structures (organized chaos)



Think of it as: Python's Top 40 countdown!



Let's Travel To Colab

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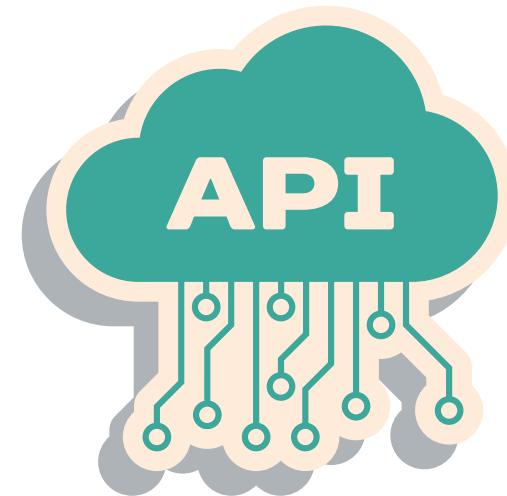


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“The best way to learn a language is to speak to natives.”

The guy learning python:





API USAGE PRACTICE

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Introduction to APIs

What's an API?

- Application Programming Interface
- A way for programs to talk to each other

While Programming:

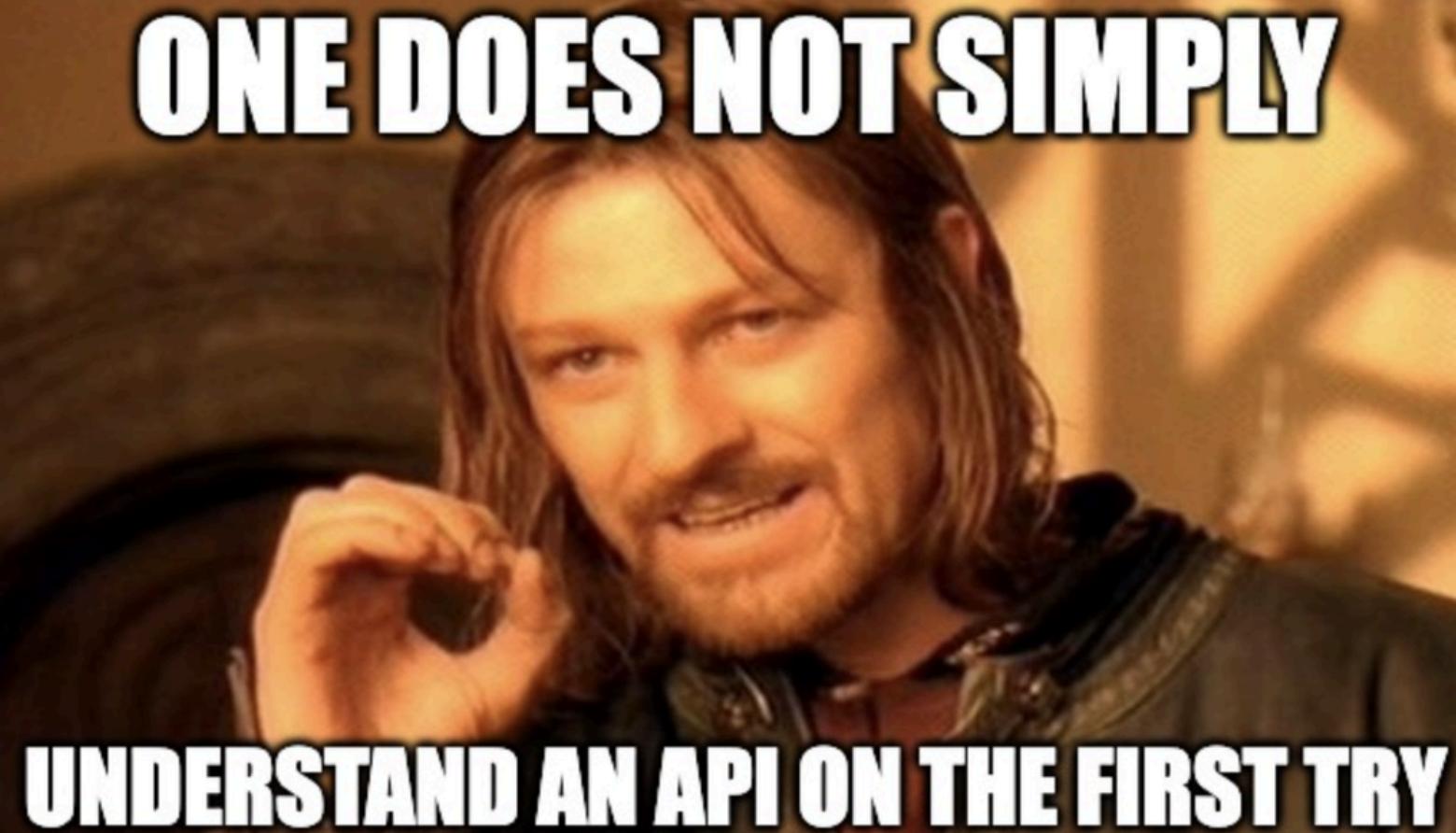
- Your script wants data
- Server has the data
- API delivers the data

Introduction to APIs

The Restaurant Analogy

But

ONE DOES NOT SIMPLY



Introduction to APIs

API Endpoints:

- **URL:** Where you send your request
- **Example:** `https://api.openweathermap.org/data/2.5/weather`

API Keys:

- Like a password to access the API
- Usually free for basic usage
- Helps API providers track usage
- **Example:** `62317028b4d0e43837d5ab554bfa59a4`

API Key Security - Protecting Your Credentials

Why API Key Security Matters?

- **API keys are like passwords**
They give access to your account
- **Exposed keys can be abused**
Others can use your quota or access your data
- **Financial consequences**
Unauthorized usage can lead to unexpected charges
- **Account suspension**

API Key Security - Protecting Your Credentials

What NOT to Do?

```
# DON'T: Hard-code API keys in your source code  
API_KEY = "sk-1234567890abcdef"      # Never do this!  
  
# DON'T: Upload code with API keys to GitHub  
# DON'T: Share API keys in chat messages or emails  
# DON'T: Store keys in plain text files tracked by version control
```

Best Practices:

- Use Environment Variables (.env file)
- Use .gitignore

Essential Python Libraries

The requests Library

```
import requests
```

- **Purpose:** Makes HTTP requests simple
- **Installation:** `pip install requests`
- **Why it's great?**
 - Handles complex HTTP operations with simple syntax



Let's Meet Some Foreign Friends

Using APIs

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Thank You !

Code is like poetry
Some get it, some don't

Those who don't get it,
are confused.

Those who get it,
are even more confused.

Source: geeksforgeeks