

# Lecture 6

# Intro to REST APIs

DS3500  
Rush Sanghrajka



# Practical Exam 1 Coming Up

Instructions on Canvas: [https://northeastern.instructure.com/courses/240374/pages/practical-exam-1-instructions?module\\_item\\_id=13325346](https://northeastern.instructure.com/courses/240374/pages/practical-exam-1-instructions?module_item_id=13325346)

Test starter file on the public repo under **test1**

If you have DAS accommodations, please reach out to Rush via email

# What is REST?

stateless

request / response

**RE**presentational **S**tate **T**ransfer

URL  
URI

Architecture for web APIs

Relies on HTTP methods for operations

URLs represent resources



# HTTP Methods and Status Codes

## Requests

GET

POST → add data point

PUT/PATCH update

DELETE

## response

20X 200 - OK

201 - accepted

40X 403

404

50X

server error



# Using REST APIs

`https://api.github.com/users/id=3112 & ...`

Headers

Parameters (Query and Path)

Authentication Keys

Python's `requests` module

curl  
wrappers

... /... / ...  
query parameters      path parameters  
?      param = value & param = value  
→      param = value

# Our API Today – OpenAQ

<https://docs.openaq.org/>

Air Quality Data

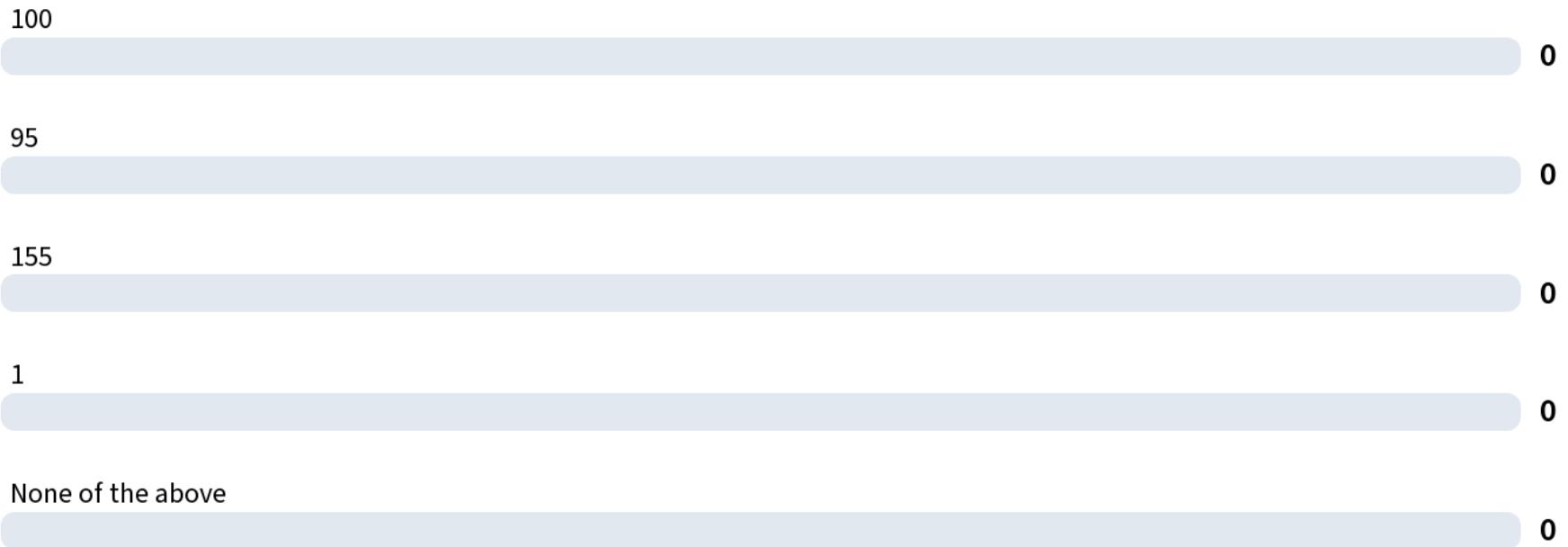
Requires an API key to use

Has a wrapper library for Python,  
but we will use it via `requests`



## [OpenAQ] What is the ID for the US?

0



How would you go about finding Boston's air quality through the API? Post an idea or a step to help others get there.

0

Nobody has responded yet.

Hang tight! Responses are coming in.