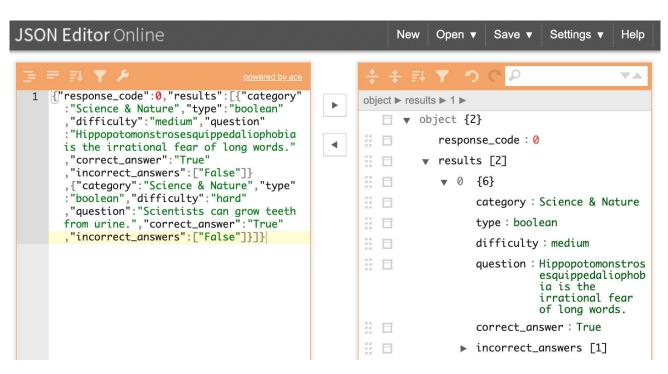
SI206 Discussion 10 APIS

Objective

- The purpose of today's section is to get familiar with API and JSON.
 You will:
 - Create an API request
 - Get familiar with a browser-based JSON viewer
 - Analyze nested data
 - Do plenty of debugging

JSON Editor Online : https://jsoneditoronline.org

It's super helpful to see the structure in a readable format that you can manipulate Opening the JSON file in VSCode might help, too!



Today's Task (more detail in starter code)

Use the World Bank API and get gdp for different countries

Demo:

Write a function get_gdp(country_code, date) that takes a country code (e.g. USA, BRA) and a date in years (e.g. 2017) that returns the value as an integer.

TASK 1:

Write a function get_data(country_code, first_year, second_year) that takes a country code (e.g. USA, BRA) and two consecutive years (e.g. 2004 and 2005) that returns the data from the API after converting it to a python list.

TASK 2:

Write a function gdp_growth(country_code, first_year, second_year) that calls get_data(country_code, first_year, second_year) and returns the GDP growth of the country for the two years in a tuple.

DEMO

Walking through how to solve get_gdp()

- 1. Craft URL
 - a. http://api.worldbank.org/v2/country/USA/indicator/N
 Y.GDP.MKTP.CD?format=json&date=2020
- 2. Retrieve JSON
- 3. Parse JSON
 - a. https://jsoneditoronline.org/
- 4. Return desired value

How to go about TASK 1?

- Read documentation for World Bank API
 https://datahelpdesk.worldbank.org/knowledgebase/articles/898581
- 2. What is the base URL of the World Bank API?
- 3. What is the code for population information? (Scroll to "Featured Indicators" on the page below)

http://datatopics.worldbank.org/world-development-indicators/themes/people.html

4. How should the parameters (gdp, country, and year) be combined with the base URL?