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APIs!

structured data that is NOT
from a CSV or Excel file

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APIs!

structured data that is NOT
from a CSV or Excel file

 View Slides

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Useful Links for this section:

- [Google Colab](#)
- [Inspect Element - Undocumented APIs](#)
- [Using Paginated APIs \(Video\)](#)
- [USGS Earthquake APIs](#)
- [Weather API](#)

Snorlax (Pokémon) - Bulbape...  +

bulbapedia.bulbagarden.net/wiki/Snorlax_(Pokémon)

This article is about the species. For a specific instance of this species, see [Snorlax \(disambiguation\)](#).

Snorlax (Japanese: カビゴン *Kabigon*) is a [Normal-type](#) Poké**mon** introduced in [Generation I](#). It evolves from [Munchlax](#) when leveled up with high friendship. Snorlax can [Gigantamax](#) into **Gigantamax Snorlax** if it has the [Gigantamax Factor](#). In Generations I and II games, their [remakes](#), and [Pokémon X and Y](#), wild Snorlax can be found sleeping in inconvenient locations. In order to catch one, a Trainer must first awaken it with music from either a [Poké Flute](#) or the [Pokégear](#) set to the Poké Flute channel. Snorlax is the [game mascot](#) of [Pokémon Sleep](#).

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Snorlax
Sleeping
Pokémon #0143
カビゴン
Kabigon



Snorlax



Gigantamax Snorlax

Images on the Bulbagarden Archives

A screenshot of a web browser showing the homepage of PokeAPI. The page has a red header bar with the 'PokeAPI' logo on the left and navigation links for 'Home', 'About', 'API v2', and 'GraphQL' on the right. The main content area has a dark background with the 'PokeAPI' logo in large yellow letters, followed by the text 'The RESTful PokéMon API' and 'Serving over 10 billion API calls each month!'. Below this, a light green section contains the text 'All the PokéMon data you'll ever need in one place, easily accessible through a modern free open-source RESTful API.' and a blue link 'Check out the docs!'. At the bottom, a white section features the text 'Try it now!'.

PokeAPI

pokeapi.co/api/v2/pokemon/s/

Home About API v2 GraphQL

PokeAPI

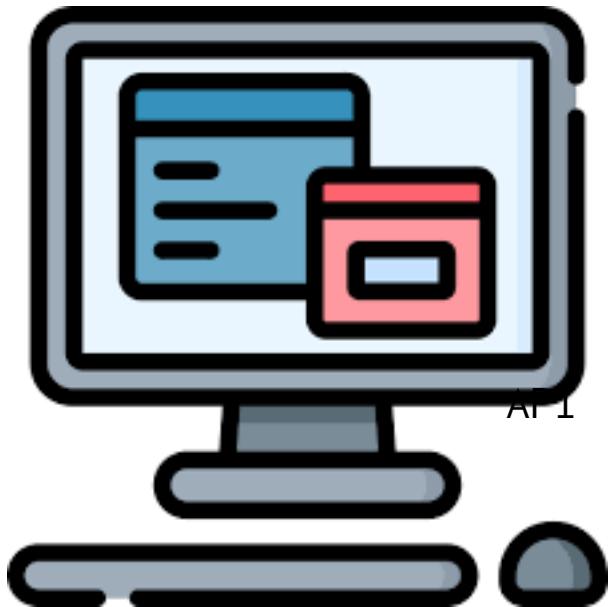
The RESTful PokéMon API

Serving over 10 billion API calls each month!

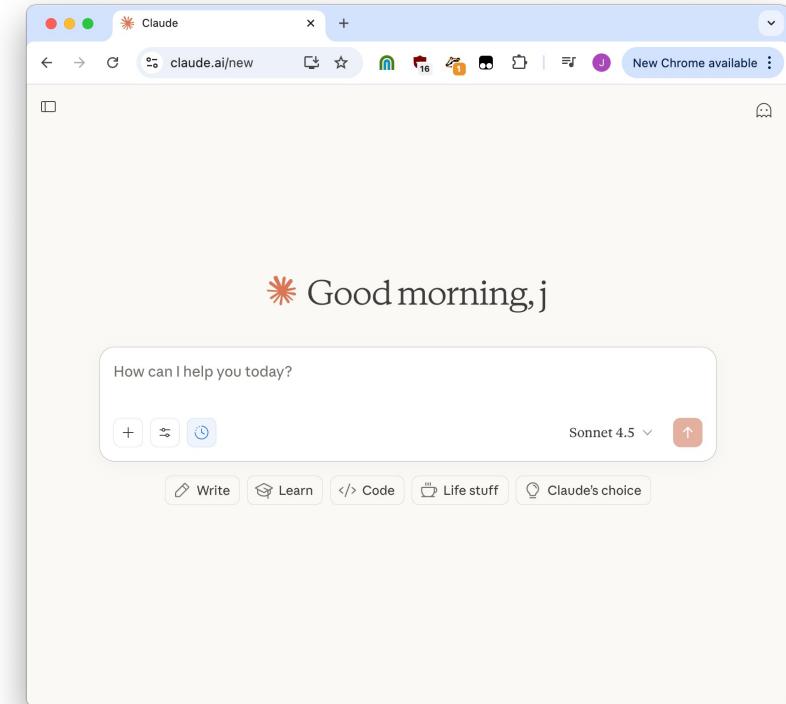
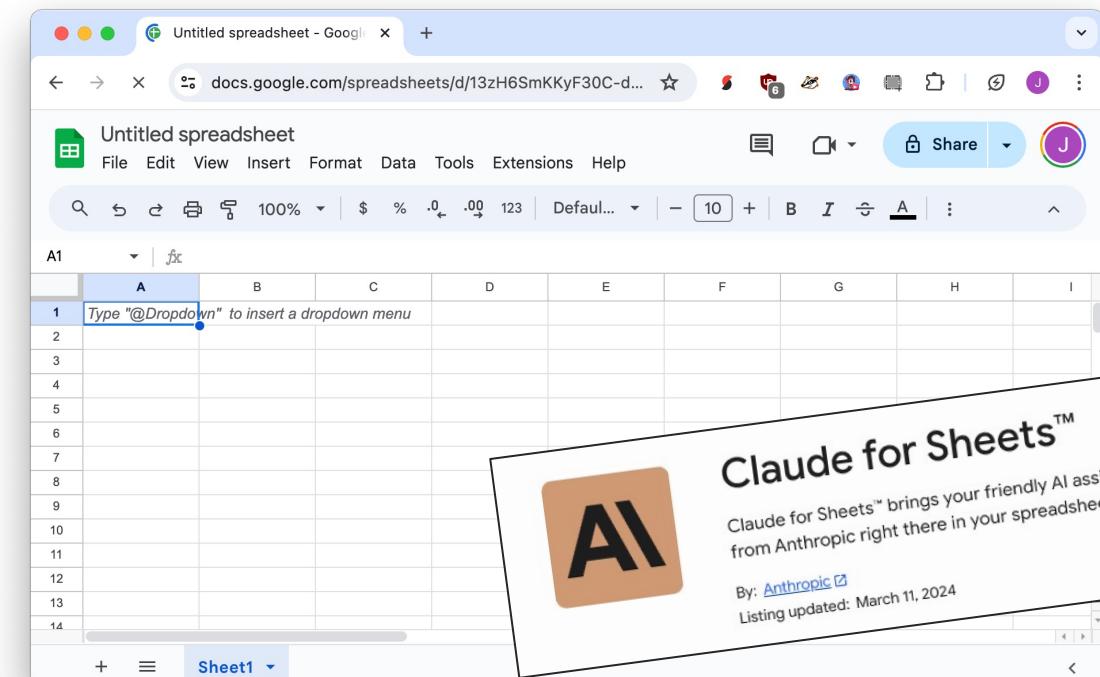
All the PokéMon data you'll ever need in one place,
easily accessible through a modern free open-source RESTful API.

[Check out the docs!](#)

Try it now!



API



API

Key successfully added!

You must keep a record of the key below as you will not be able to view it again.

sk-ant-api03-Wriod0W3KzsL_-osV4lnJCMfdZ6...
nPxe-cpCdewNwV2sRKl_pfrkj1mQCTqoDcEo1fJX...
cld7exevD-Q-y5y_KAAA

API keys

Your secret API keys are listed below. Please note that we do not display your secret API keys again after you generate them. Do not share your API key with others, or expose it in the browser or other client-side code. In order to protect the security of your account, OpenAI may also automatically disable any API key that has leaked publicly. Enable tracking to see usage per API key on the [Usage page](#).

NAME	SECRET KEY	TRACKING	CREATED	LAST USED	PERMISSIONS
Secret key	sk-...MJ0b	+ Enable	Mar 6, 2023	Apr 13, 2023	All
Secret key	sk-...e67A	+ Enable	Mar 18, 2023	Apr 19, 2023	All
Secret key	sk-...1PWe	+ Enable	Mar 18, 2023	Mar 18, 2023	All
Secret key	sk-...M1LX	+ Enable	Mar 19, 2023	Mar 19, 2023	All
Secret key	sk-...2ABE	+ Enable	Mar 23, 2023	Never	All

API keys

Close

Anthropic Console

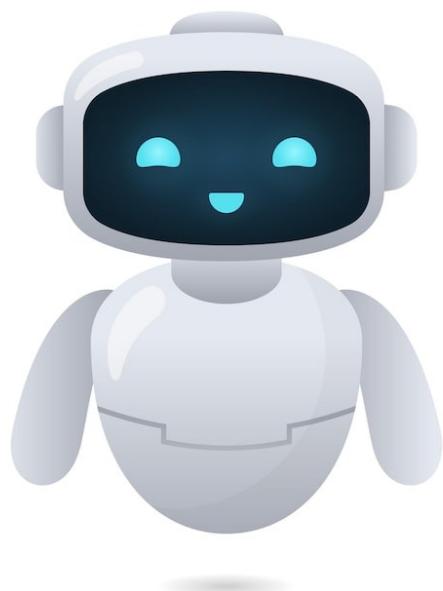
ANTHROPIC

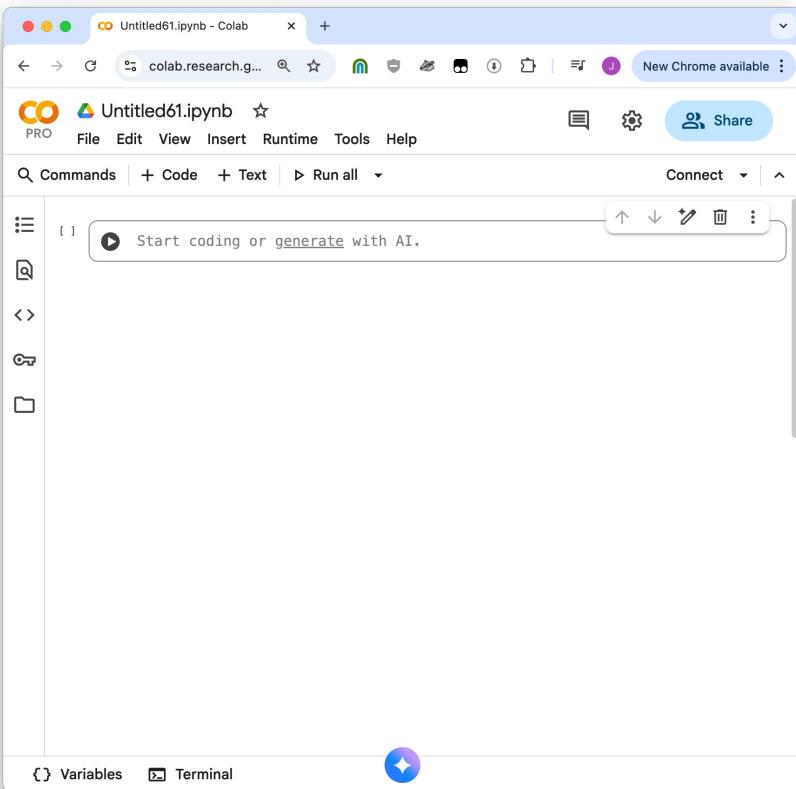
Your Organization Members & Invites Plans & Billing API Keys Logs Usage

API Keys

NAME	KEY	CREATED AT	UPDATED AT
claude for sheets	sk-ant-api03-1Sk...iAAA	Apr 9, 2024	...
sample class	sk-ant-api03-g0n...rgAA	Apr 10, 2024	...

Create Key





API

data

API

Why not just a CSV?

The screenshot shows the homepage of the Tokyo Open Data portal (portal.data.metro.tokyo.lg.jp). The page has a dark blue header with the Tokyo Open Data logo and navigation links for searching data, APIs, use cases, and viewing Tokyo data. Below the header is a large white search bar with the placeholder "公開中のデータを検索する" and a "データを探す" button. To the left, there's a section for requesting data and another for seeing how data is used. At the bottom, there are links for the community, hackathon, and roundtable.

TOKYO OPEN DATA
東京都 オープンデータカタログサイト

一覧からデータを探す APIを探す データ活用事例を見る データで見る東京

公開中のデータを検索する

データを探す

オープンデータは様々な用途で活用することができます。

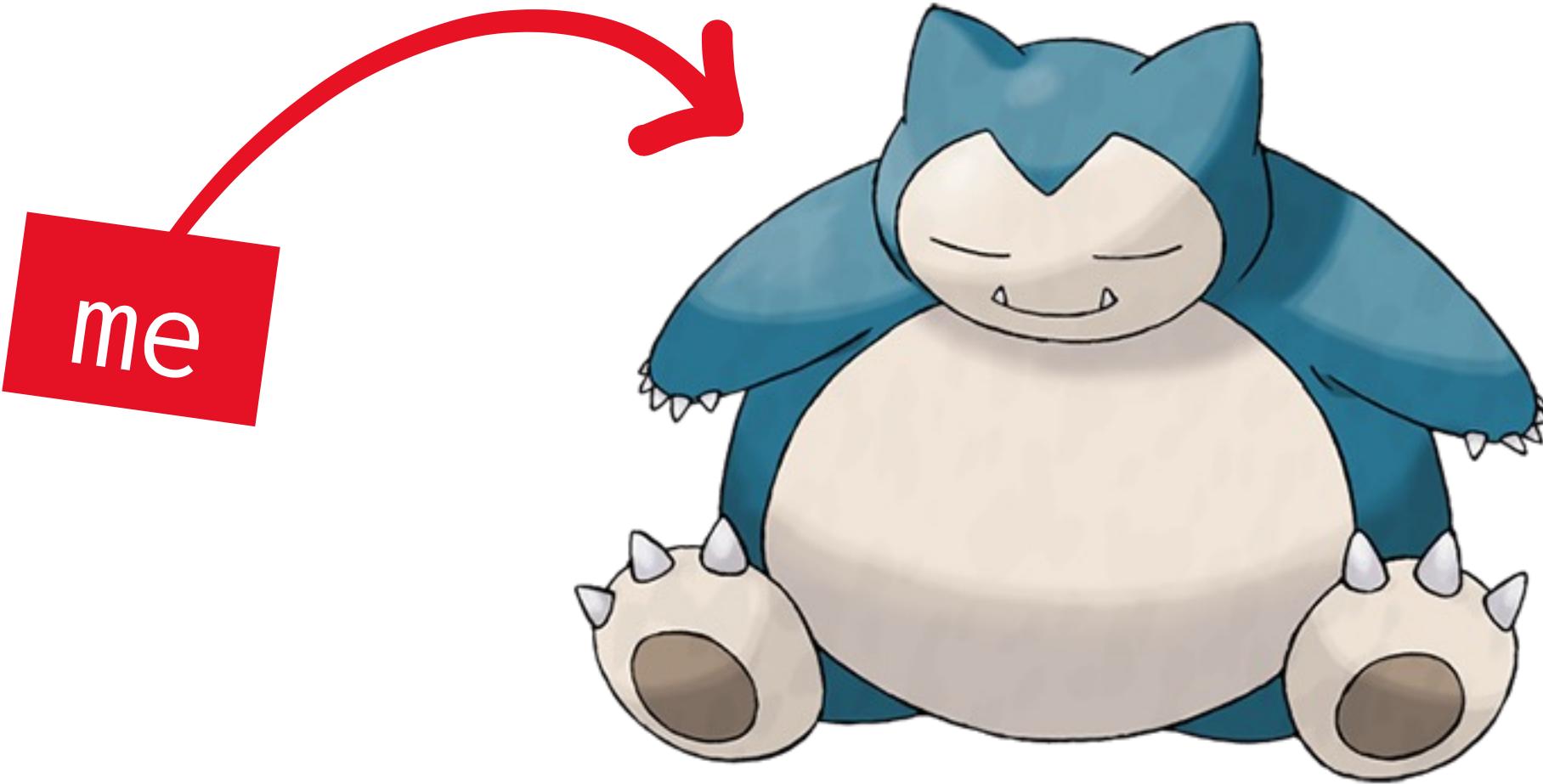
- 都や区市町村に関する様々な情報を調べる
- 都政に関するデータを確認する
- アプリやサービス開発に活用する

→ データをリクエストする → データを活用された方へ

東京都オープンデータコミュニティ 都知事杯オープンデータ・ハッカソン 東京都オープンデータ・ラウンドテーブル

2025

JANUARY							FEBRUARY							MARCH							APRIL							
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	
29	30	31	1	2	3		26	27	28	29	30	1		23	24	25	26	27	28	1	30	31	1	2	3	4	5	
5	6	7	8	9	10	11	2	3	4	5	6	8		2	3	4	5	6	7	8	6	7	8	9	10	11	12	
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15	13	14	15	16	17	18	19	
19	20	21	22	23	24	25	16	17	18	19	20	21	22		23	24	25	26	27	28	29	20	21	22	23	24	25	26
26	27	28	29	30	31	1	23	24	25	26	27	28	1	23	24	25	26	27	28	29	27	28	29	30	1	2	3	
2	3	4	5	6	7	8	2	3	4	5	6	7	8	30	31	1	2	3	4	5		4	5	6	7	8	9	10
MAY							JUNE							JULY							AUGUST							
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	
27	28	29	30	1	2	3	1	2	3	4	5	6	7	29	30	1	2	3	4	5	27	28	29	30	31	1	2	
4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9	
11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16	
18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23	
25	26	27	28	29	30	31	29	30	1	2	3	4	5	29	30	1	2	3	4	5	1	1	2	3	4	5	6	
1	2	3	4	5	6	7																						
NOVEMBER							DECEMBER																					
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	
28	29	30	1	2	3	4	26	27	28	29	30	1	2	26	27	28	29	30	1	30	1	2	3	4	5	6		
5	6	7	8	9	10	11	5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13	
14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20	
21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27	
28	29	30	1	2	3	4	26	27	28	29	30	31	1	23	24	25	26	27	28	29	28	29	30	31	1	2	3	
5	6	7	8	9	10	11	2	3	4	5	6	7	8	30	1	2	3	4	5	6	4	5	6	7	8	9	10	



me

Google Search x +

google.com/search?q=snorlax&oq=snorlax&gs_lcrp=EgZjaHJvbWUyDwgAEEUYORIRAhBABiKBTIMCAEQABhDGIAEGloFMg0IAhAAGJECGIAEGloFMgwIAxAA... ⋮

snorlax X Microphone Image Search

Google J

All Images Shopping Videos News Maps Web More Tools

Bulbapedia [https://bulbapedia.bulbagarden.net/wiki/Snorlax_\(Pok%C3%A9mon\)](https://bulbapedia.bulbagarden.net/wiki/Snorlax_(Pok%C3%A9mon)) ⋮

Snorlax (Pokémon) - Bulbapedia

Snorlax is a huge, bipedal, dark blue-green mammalian Pokémon with a cream-colored face, belly, and feet.

Ash's Snorlax III Menu Pokémon Sleep

People also ask :

What is Snorlax in Japanese? ⌄

Why is Snorlax sleepy? ⌄

What type of animal is a Snorlax? ⌄

What is Snorlax power? ⌄

Feedback

Pokemon.com <https://www.pokemon.com/pokedex/snorlax> ⋮

Snorlax | Pokédex

This gluttonous Pokémon eats constantly, apart from when it's asleep. It devours nearly 900 pounds of food per day.

Snorlax :



More images

Snorlax, known in Japan as Kabigon, is a Pokémon species in Nintendo and Game Freak's Pokémon franchise.

[Wikipedia](#)

Type: Normal

Weakness: Fighting

Ability (hidden): Gluttony

Abilities: Thick Fat, Immunity

Evolves from: Munchlax

Category: Sleeping

Weight: 460 kg

People also search for

Snorlax (Pokémon) - Bulbape... +

bulbapedia.bulbagarden.net/wiki/Snorlax_(Pokémon)

BULBAGARDEN News Bulbapedia Forums Discord More Editors Account Search Bulbapedia

article discussion view source history tools in other languages

In commemoration of Nintendo's 135th anniversary, September 20 to 30 is NIWA Cross-Wiki Week. [Click here](#) for event details and the possibility to win a \$20/€20 Nintendo eShop gift card.
Please remember to follow the [manual of style](#) and [code of conduct](#) at all times.
Check the [Bulbagarden home page](#) for up-to-date Pokémon news and discuss it on the [forums](#) or in the [Bulbagarden Discord server](#).

Snorlax (Pokémon)

For Pokémon GO information on this species, see [the game's section](#).

←  #0142: Aerodactyl Pokémon #0144: Articuno →

This article is about the species. For a specific instance of this species, see [Snorlax \(disambiguation\)](#).

Snorlax (Japanese: カビゴン *Kabigon*) is a Normal-type Pokémon introduced in [Generation I](#). It evolves from [Munchlax](#) when leveled up with high friendship. Snorlax can [Gigantamax](#) into [Gigantamax Snorlax](#) if it has the [Gigantamax Factor](#). In Generations I and II games, their remakes, and [Pokémon X and Y](#), wild Snorlax can be found sleeping in inconvenient locations. In order to catch one, a Trainer must first awaken it with music from either a [Poké Flute](#) or the [Pokégear](#) set to the Poké Flute channel. Snorlax is the game mascot of [Pokémon Sleep](#).

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Snorlax #0143
Sleeping Pokémon Kabigon



Snorlax

Gigantamax Snorlax

Images on the Bulbagarden Archives

Snorlax (Pokémon) - Bulbape... X +

bulbapedia.bulbagarden.net/wiki/Snorlax_(Pokémon)

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4.2 The Electric Tale of Pikachu
4.3 Pokémon Adventures
4.4 Pokémon Battle Frontier
4.5 Pokémon: Yeah! I Got Pokémon!
4.6 Pokémon Mystery Dungeon: Ginji's Rescue Team
4.7 Pokémon Journeys
4.8 Pokémon Pocket Monsters
4.9 Pokémon Ruby-Sapphire
4.10 Snorlax's Dream Gourmet

Gigantamax Snorlax

Images on the Bulbagarden Archives

Type	Normal						
Abilities	Gluttony Hidden Ability Immunity or Thick Fat						
Gender ratio	87.5% male, 12.5% female						
Catch rate	25 (7.7%)						
Breeding	Egg Group: Monster Hatch time: 40 cycles						
Height	6'11" (Snorlax) 114'10"+ (Gigantamax Snorlax)						
Weight	2.1 m (Snorlax) 35.0+ m (Gigantamax Snorlax) 1014.1 lbs. (Snorlax) ??? lbs. (Gigantamax Snorlax) 460.0 kg (Snorlax) ??? kg (Gigantamax Snorlax)						
Base experience yield	154 (Gen. I-IV) 189 (V+)						
Leveling rate	Slow						
EV yield	Total: 2 <table border="1"><tbody><tr><td>2 (HP)</td><td>0 (Atk)</td><td>0 (Def)</td><td>0 (Sp.Atk)</td><td>0 (Sp.Def)</td><td>0 (Speed)</td></tr></tbody></table>	2 (HP)	0 (Atk)	0 (Def)	0 (Sp.Atk)	0 (Sp.Def)	0 (Speed)
2 (HP)	0 (Atk)	0 (Def)	0 (Sp.Atk)	0 (Sp.Def)	0 (Speed)		
Shape							
Footprint							
Pokédex color	Black						
Base friendship	70						

Structured vs unstructured data

- Easy for **computers** to understand and process
- CSV files + XML, JSON, Excel, etc etc etc
- Easy for **humans** to understand and process
- Websites, books, articles, etc etc etc

APIs

Application Programming Interface

APIS

The image shows a screenshot of the PokeAPI website. At the top, there's a pink header bar with the word "APIS". Below it is a red navigation bar with links for "Home", "About", "API v2", and "GraphQL v1beta". The main content area has a dark background. On the left, a red banner contains the text "Structured data" and a large red curved arrow pointing towards the center. In the center, the PokeAPI logo is displayed with the text "The RESTful Pokémon API" and "Serving over 2.5 billion API calls each month!". To the right, a yellow banner displays the URL "https://pokeapi.co". At the bottom, there's a light green section with the text "All the Pokémon data you'll ever need in one place, easily accessible through a modern free open-source RESTful API." followed by a blue link "Check out the docs!". A large white button at the bottom is labeled "Try it now!". Below this button is a form field containing the URL "https://pokeapi.co/api/v2/pokemon/ditto" and a "Submit" button.

https://pokeapi.co/api/v2/pokemon/ditto

Submit

earthquake.usgs.gov/fdsnws/ x +

earthquake.usgs.gov/fdsnws/event/1/query?format=geojson&starttime=2014-01-01&endtime=2014-01-02

Pretty-print

```
{  
  "type": "FeatureCollection",  
  "metadata": {  
    "generated": 1727127591000,  
    "url": "https://earthquake.usgs.gov/fdsnws/event/1/query?format=geojson&starttime=2014-01-01&endtime=2014-01-02",  
    "title": "USGS Earthquakes",  
    "status": 200,  
    "api": "1.14.1",  
    "count": 325  
  },  
  "features": [  
    {  
      "type": "Feature",  
      "properties": {  
        "mag": 1.29,  
        "place": "10km SSW of Idyllwild, CA",  
        "time": 1388620296020,  
        "updated": 1457728844428,  
        "tz": null,  
        "url": "https://earthquake.usgs.gov/earthquakes/eventpage/ci11408890",  
        "detail": "https://earthquake.usgs.gov/fdsnws/event/1/query?eventid=ci11408890&format=geojson",  
        "felt": null,  
        "cdi": null,  
        "mmi": null,  
        "alert": null,  
        "status": "reviewed",  
        "tsunami": 0,  
        "sig": 26,  
        "net": "ci",  
        "code": "11408890",  
        "ids": ",ci11408890,",  
        "sources": ",ci,",  
        "types": ",cap,focal-mechanism,nearby-cities,origin,phase-data,scitech-link,",  
        "nst": 39,  
        "dmin": 0.06729,  
        "rms": 0.09,  
        "gap": 51,  
        "magType": "ml",  
        "type": "earthquake",  
        "title": "M 1.3 - 10km SSW of Idyllwild, CA"  
      },  
      "geometry": {  
        "type": "Point",  
        "coordinates": [-116.7776667, 33.6633333, 11.008]  
      },  
      "id": "ci11408890"  
    },  
    {  
      "type": "Feature",  
      "properties": {  
        "mag": 1.1,  
        "place": "Central Alaska",  
        "time": 1388620046501,  
        "updated": 1689800179099,  
        "tz": null,  
        "url": "https://earthquake.usgs.gov/earthquakes/eventpage/ak01421ig3u",  
        "detail": "https://earthquake.usgs.gov/fdsnws/event/1/query?eventid=ak01421ig3u&format=geojson"  
      }  
    }  
  ]  
}
```

API Documentation - Earthquake Catalog

earthquake.usgs.gov/fdsnws/event/1/



Earthquake Hazards Program

← Feeds and Notifications

Real-time Notifications

Earthquake Notification Service

Tweet Earthquake Dispatch

Real-time Feeds

ATOM

KML

Spreadsheet

QuakeML

GeoJSON Summary

GeoJSON Detail

For Developers

API Documentation - EQ Catalog

Change Log

Feed Lifecycle Policy

Developer's Corner

API Documentation - Earthquake Catalog

This is an implementation of the [FDSN Event Web Service Specification](#), and allows custom searches for earthquake information using a variety of parameters.

i Please note that automated applications should use [Real-time GeoJSON Feeds](#) for displaying earthquake information whenever possible, as they will have the best performance and availability for that type of information.

URL

<https://earthquake.usgs.gov/fdsnws/event/1/>

request known enumerated parameter values for the interface.

- <https://earthquake.usgs.gov/fdsnws/event/1/application.json>

application.wadl

request WADL for the interface.

- <https://earthquake.usgs.gov/fdsnws/event/1/application.wadl>

catalogs

request available catalogs.

- <https://earthquake.usgs.gov/fdsnws/event/1/catalogs>

contributors

Let's try this out

- Open up the **Earthquakes** notebook.
- First, I'll work on it myself

Your mission

- Find the URL for 2.5+ earthquakes for the past 30 days
- Give the URL to Gemini/Colab and **put them on a map**
- With a circle size by how strong the earthquakes were

Your mission

- Visit weatherapi.com
- Make an account using “Sign up”
- Copy your API key
- (we'll use it in the next step)

Your mission

- Click the “API Explorer” link
- Enter your API key
- Select “Forecast”
- Look for Tokyo, three day forecast
- Use the URL with Colab to graph the high and low hourly temperatures over the next three days

Being sneaky

- “Undocumented APIs”

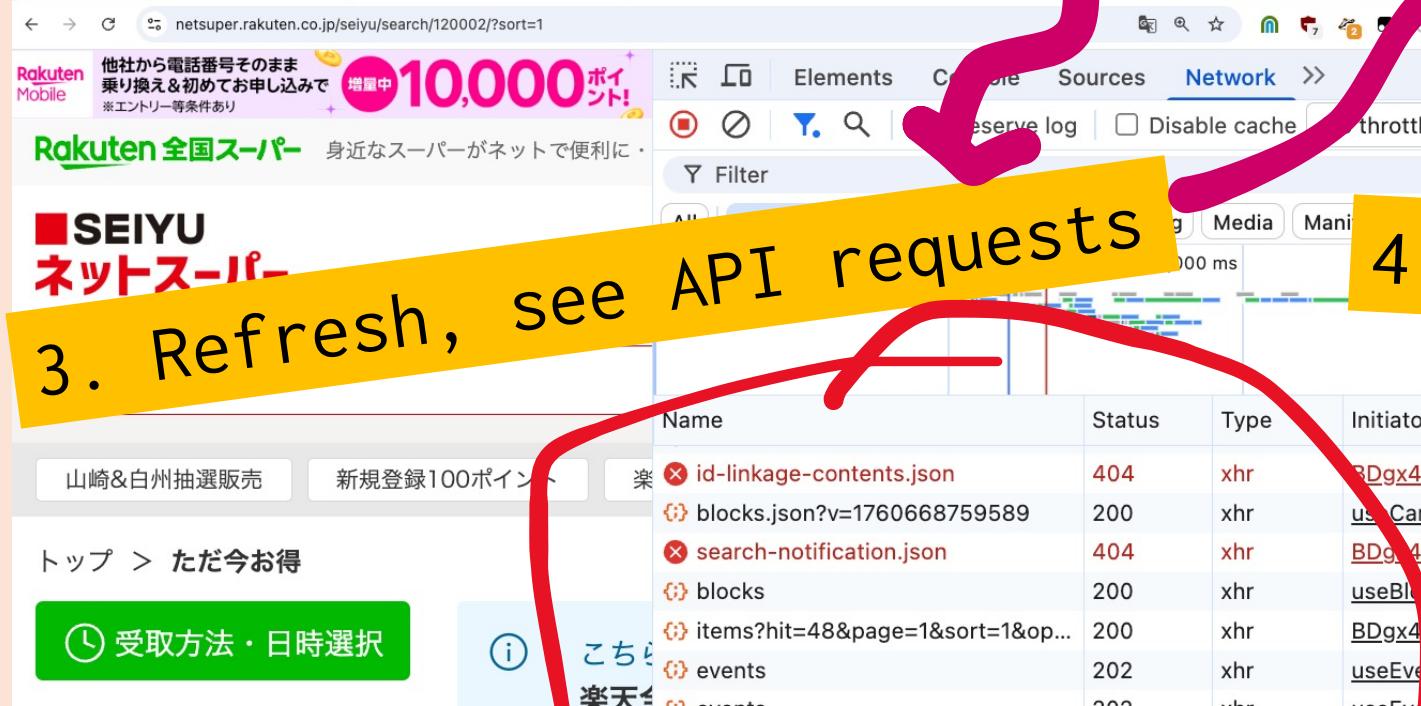
1. Right-click, inspect



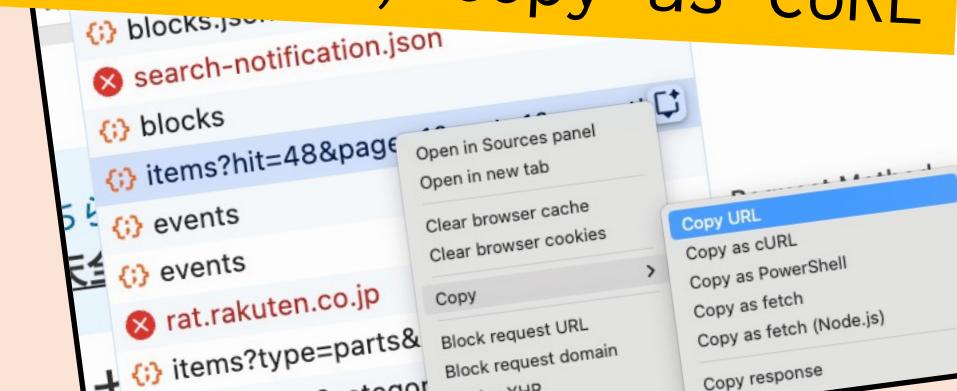
2. Open Network Tab, select Fetch/XHR



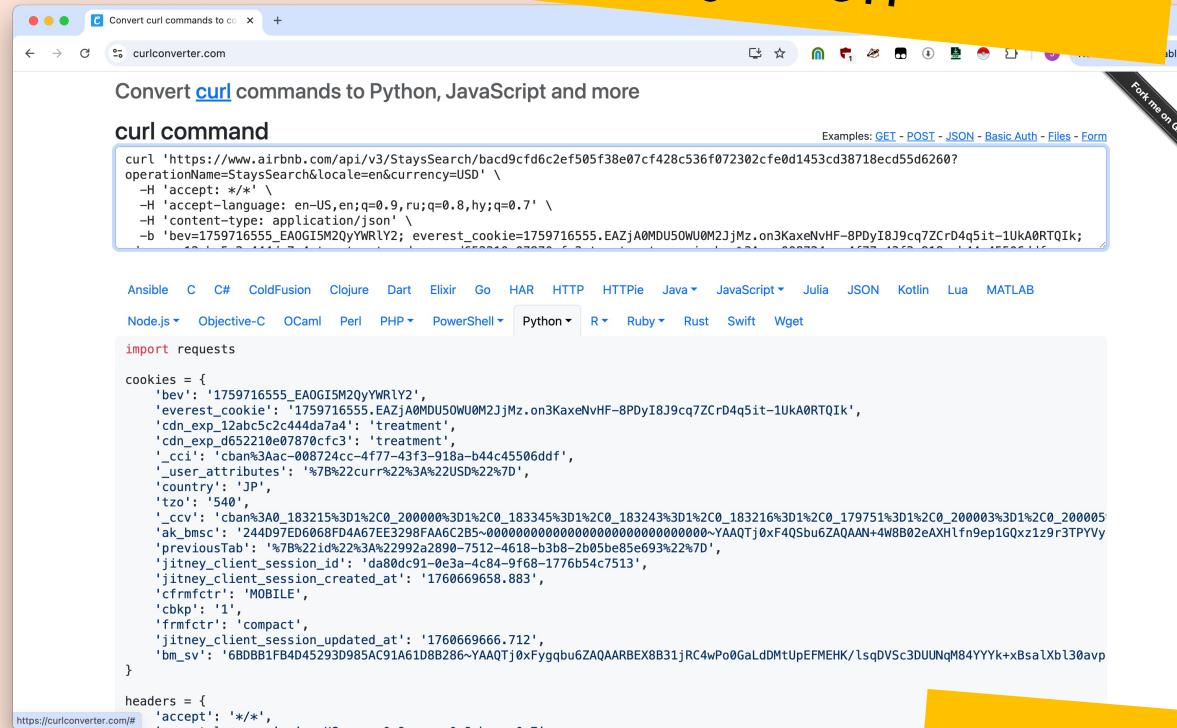
3. Refresh, see API requests



4. Right-click, copy as cURL



5. Visit curlconverter.com, paste, select Python



6. Paste in Colab cell, run it

```
response = requests.post(  
    'https://www.airbnb.com/api/v3/StaysSearch/bacd9cf6c2ef505f38e07cf428c536f072302cfe0c  
    params=params,  
    cookies=cookies,  
    headers=headers,  
    json=json_data,  
)  
  
# Note: json_data will not be serialized by requests  
# exactly as it was in the original request.  
#data = '{"operationName": "StaysSearch", "variables": {"staysSearchRequest": {"cursor": "eyJz  
#response = requests.post(  
#    'https://www.airbnb.com/api/v3/StaysSearch/bacd9cf6c2ef505f38e07cf428c536f072302cfe0c  
#    params=params,  
#    cookies=cookies,  
#    headers=headers,  
#    data=data,  
#})
```

6. Ask Gemini
“turn my data into a pandas dataframe”

Run cell (⌘/Ctrl+Enter)
cell has not been executed in this session

```
import pandas as pd

# Parse the JSON data from the response text
data = json.loads(response.text)

# Extract the list of search results
search_results = data['data']['presentation']['staysSearch']['results']['searchResults']

# Create a pandas DataFrame from the extracted data
df = pd.DataFrame(search_results)

# Display the first few rows of the DataFrame
display(df.head())
```

	__typename	avgRatingAllyLabel	avgRatingLocalized	listingParamOverrides	struct
0	StaySearchResult	4.81 out of 5 average rating, 84 reviews	4.81 (84)	None	'St...
1	StaySearchResult	4.53 out of 5 average rating, 372 reviews	4.53 (372)	{'__typename': 'ExploreListingParamOverrides',...	'St...
2	StaySearchResult	4.8 out of 5 average rating, 55 reviews	4.8 (55)	None	'St...

Visit <https://bit.ly/ds-dojo-2025> for materials

Scraping!

stealing data from the
internet for fun

The New York Times

U.S. INTERNATIONAL CANADA ESPAÑOL 中文

GIVE THE TIMES Account Nasdaq -0.47% ↓

ober 16, 2025

U.S. World Business Arts Lifestyle Opinion Audio Games Cooking Wirecutter The Athletic

LIVE N.Y.C. Mayoral Debate 37m ago Trump Administration 59m ago

John Bolton Is Indicted Over
ing of Classified
ation

John, a Trump aide turned critic, is part
of presidential foes to become
rial targets. But his case gained
um in the Biden administration.

updates >

Indictment

ia-Ukraine War Photos Russian Provocations in Europe Ukraine's Weapons The Changing Business of War

ump Plans to Meet With Putin to
About a Cease-Fire in Ukraine

ident Trump had grown increasingly
strated with President Vladimir Putin for
gg on Russia's three-year war on
aine.

IN READ

Russia Is Arming Drones With North
European Cluster Weapons, Report Says

MIN READ

Standing Up for the Beauty of a Good Bloody Mary

It's scorned for its association with brunch and bartenders often are reluctant to mix one. But a good Bloody Mary is great, our critic writes.

5 MIN READ

What Do You Give Someone Who's Just Gotten Engaged?

He's an N.B.A. Superstar. But Even His Coach Has 'No Clue' How Tall He Is.

FROM THE ATHLETIC

5 MIN READ

Book1 - Excel

File Home Insert Page Layout Formulas Data Review

Clipboard

Font

Alignment

A1

A B C D E F G

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Sheet1

Ready

A large red arrow points from the New York Times website towards the top-left cell of the Excel spreadsheet, indicating a transfer or comparison between the two applications.

Visit <https://bit.ly/ds-dojo-2025> for materials

HTML

the language that all web
sites are built with

```
<h1>This is a headline</h1>
<h2>This is a smaller headline</h2>
<h3>And an even smaller headline</h3>
```

This is a headline

This is a smaller headline

And an even smaller headline

```
<h1>This is a headline</h1>
<h2>This is a smaller headline</h2>
<h3>And an even smaller headline</h3>
<p>This is a paragraph</p>

<p>This is a paragraph with
<a href="google.com">a link</a></p>
<div>This is ANYTHING</div>
<div>Anything! Anything in the world</div>
```

This is a headline

This is a smaller headline

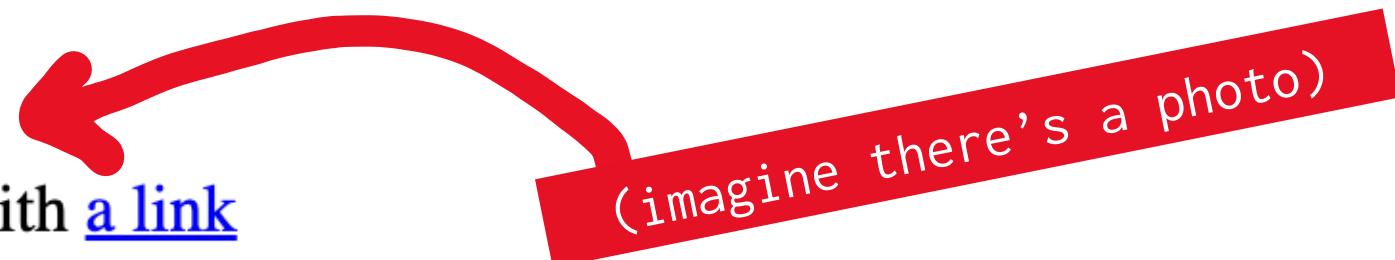
And an even smaller headline

This is a paragraph

This is a paragraph with [a link](#)

This is ANYTHING

Anything! Anything in the world



(imagine there's a photo)

<h1>An incredible story</h1>

<p>By J. Soma</p>

<p>This is the start of the story.</p>

<p>It is an amazing story!</p>

<p>”It’s incredible,” said the source.</p>

<p>An editor agreed: “it’s true!”</p>

<p>Additional reporting by Mulberry the fat
mean cat</p>

<p>Edit: An earlier version said “Jonathan”
Soma</p>

An incredible story

By J. Soma

This is the start of the story.

It is an amazing story!

"It's incredible," said the source.

An editor agreed: "it's true!"

Additional reporting by Mulberry the fat mean cat

Edit: An earlier version said "Jonathan" Soma

<h1>An incredible story</h1>

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<p>Additional reporting by Mulberry the fat
mean cat</p>

<p>Edit: An earlier version said “Jonathan”
Soma</p>

```
<h1>An incredible story</h1>
<p id="byline">By J. Soma</p>
<p>This is the start of the story.</p>
<p>It is an amazing story!</p>
<p>"It's incredible," said the source.</p>
<p>An editor agreed: "it's true!"</p>
<p class="additional">Additional reporting by
Mulberry the fat mean cat</p>
<p class="correction">Edit: An earlier version
said "Jonathan" Soma</p>
```

An incredible story

By J. Soma

This is the start of the story.

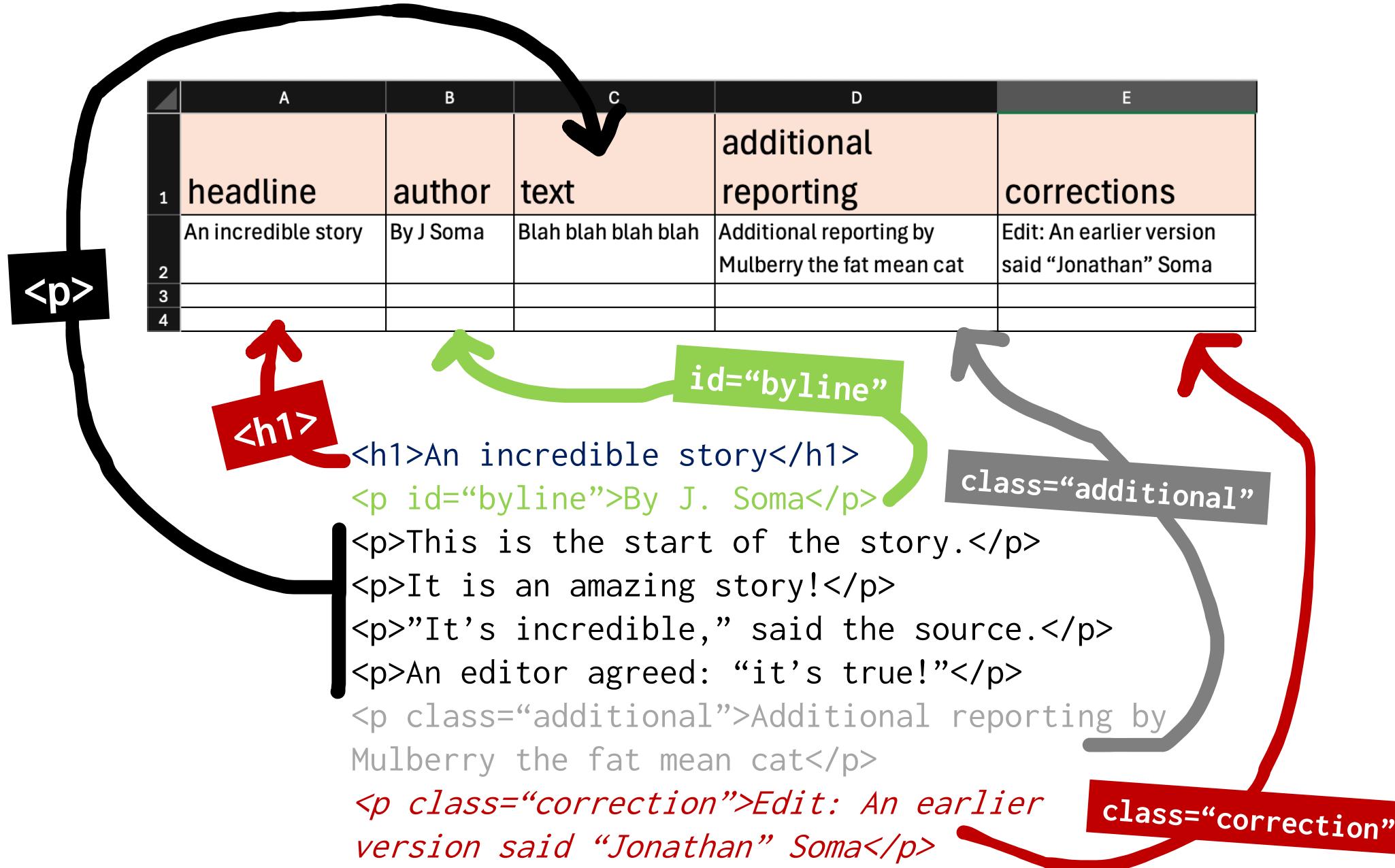
It is an amazing story!

”It’s incredible,” said the source.

An editor agreed: “it’s true!”

Additional reporting by
Mulberry the fat mean cat

*Edit: An earlier version said “Jonathan”
Soma*



Let's see it on
the internet!

BBC Home - Breaking News, +

bbc.com

Home News Sport Business Innovation Culture Travel Earth Video Live

Register Sign In

What will be a row in our spreadsheet?

 **LIVE VP pick Walz to speak as Democrats deploy star guests**

The Minnesota governor will run alongside presidential nominee Kamala Harris for November's US election.

 **Three things the Democrats have avoided so far at the DNC**

What they have tried to avoid says as much about their weaknesses as what they choose to highlight, writes Anthony Zurcher.

2 hrs ago | US & Canada

- Day three of Democratic Convention features party's rising stars
- Obamas mock Trump over 'black jobs' and crowd sizes

 **Divers find five bodies in wreck of Sicily yacht**

 **Gaza nurse says whole family, including quadruplets, killed in air strike**

5 hrs ago | Middle East & Africa

 **Andrew Tate held overnight after police raid homes in Romania**

The internet personality and his brother have been remanded in custody as part of a probe into new allegations.

44 mins ago | Europe

 **Ancient ocean of magma found on Moon south pole**

The findings are from India's historic Chandrayaan-3 mission that landed on the Moon's south pole.

6 hrs ago | Science & Environment

► **German Navy blasts out Darth Vader theme on Thames**

BBC Home - Breaking News, +

bbc.com

Home News Sport Business Innovation Culture Travel Earth Video Live

Register Sign In



LIVE VP pick Walz to speak as Democrats deploy star guests

The Minnesota governor will run alongside presidential nominee Kamala Harris for November's US election.



Three things the Democrats have avoided so far at the DNC

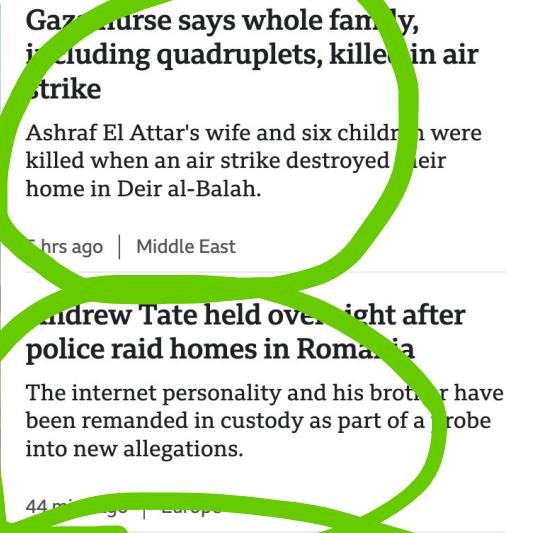
What they have tried to avoid says as much about their weaknesses as what they choose to highlight, writes Anthony Zurcher.

2 hrs ago | US & Canada

- Day three of Democratic Convention features party's rising stars
- Obamas mock Trump over 'black jobs' and crowd sizes



Divers find five bodies in wreck of Saily yacht



Gaza nurse says whole family, including quadruplets, killed in air strike

Ashraf El Attar's wife and six children were killed when an air strike destroyed their home in Deir al-Balah.

5 hrs ago | Middle East



Andrew Tate held overnight after police raid homes in Romania

The internet personality and his brother have been remanded in custody as part of a probe into new allegations.

44 mins ago | Europe



Ancient ocean of magma found on Moon south pole

The findings are from India's historic Chandrayaan-3 mission that landed on the Moon's south pole.

6 hrs ago | Science & Environment

► German Navy blasts out Darth Vader theme on Thames

What will be a column of data?

Andrew Tate held overnight after police raid homes in Romania

The internet personality and his brother have been remanded in custody as part of a probe into new allegations.

44 mins ago

| Europe



[L] **●LIVE** VP pick Walz to speak as Democrats deploy star guests

[R] The Minnesota governor will run alongside presidential nominee Kamala Harris for November's US election.

Data sets - Open data

data.gov.rs/sr/datasets/

Data sets

2435 sets in total

Download data→

What will be a row in our spreadsheet?

Schedule according to... Organizations ...

 **CATALOG OF CONTAMINATED LOCATIONS**

The cadastre of contaminated sites represents a set of data on endangered, polluted and degraded lands and it is an integral part of the Land Information System managed by the Environmental Protection Agency. State bodies, i.e. organizations, bodies of autonomous provinces, local self-government units...

 **Soil condition in urban areas**

The data show the degree of soil endangerment from chemical pollution in urban areas in the period 2005-2023. year. Soil testing was carried out at locations in the immediate vicinity of traffic roads, industrial zones, near landfills, water supply sources, educational institutions, recreation...

 **Realization regular program**

A set of data on the performed services of the Animal Hygiene Program.

resources 6
use 0
supporting 0

<https://data.gov.rs/sr/datasets/stanje-zemljshta-u-urbanim-sredinama/> training providers

resources 1
use 0

Data sets - Open data

data.gov.rs/sr/datasets/

Data sets

2435 sets in total [Examples of use→](#) [Download data→](#)

Data search...

Schedule according to... Organizations Labels Formats ...

 **CATALOG OF CONTAMINATED LOCATIONS**
The cadastre of contaminated sites represents a set of data on endangered, polluted and degraded lands and it is an integral part of the Land Information System managed by the Environmental Protection Agency. State bodies, i.e. organizations, bodies of autonomous provinces, local self-government units...
use 0 supporting 0

 **Soil condition in urban areas**
The data show the degree of soil endangerment from chemical pollution in urban areas in the period 2005-2023. year. Soil testing was carried out at locations in the immediate vicinity of traffic roads, industrial zones, near landfills, water supply sources, educational institutions, recreation...
resources 22 use 0 supporting 0

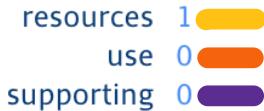
 **Realization regular program**
A set of data on the performed services of the Animal Hygiene Program.
resources 6 use 0 supporting 0

<https://data.gov.rs/sr/datasets/stanje-zemljišta-u-urbanim-sredinama/> training providers
resources 1 use 0



CATALOG OF CONTAMINATED LOCATIONS

The cadastre of contaminated sites represents a set of data on endangered, polluted and degraded lands and it is an integral part of the Land Information System managed by the Environmental Protection Agency. State bodies, i.e. organizations, bodies of autonomous provinces, local self-government units...



What will be a column of data?

Visit <https://bit.ly/birn-data>, click **scraping**

Computers don't see like us
(usually), we need to see

HTML code

Right click (or command+click) and Inspect

Data.gov.rs

Претрага података...

Распоред према... Организације Ознаке Формати ...

ресурса 1
употреба 0
подржавања 0

ресурса 22
употреба 0
подржавања 0

ресурса 6
употреба 0
подржавања 0

ресурса 1
употреба 0
подржавања 0

Look Up "КОНТАМИНИРАНИХ"
Copy
Copy Link to Highlight
Search Google for "КОНТАМИНИРАНИХ"
Print...
Open in Reading Mode
Translate Selection to English
Block element...
Inspect
Speech
Services

Катастар контаминираних ло
земљиштима и он је саставни
животне средине. Државни о
локалне самоуправе...

Стање земљишта у урбани
Подаци показују степен угрож
2005-2023. године. Испитива
саобраћајница, индустријских
установа, рекреац...

Редовни програм Реализација
Скуп података о извршеним услугама Програма делатности зоохигијене.

Евиденција акредитованих спроводилаца обука НАЈУ
Евиденција акредитованих спроводилаца обука НАЈУ За потребе акредитације спроводилаца програма
обуке, Национална академија, по правилу, два пута годишње објављује јавни позив за поједине
области стручног усавршавања. Јавни позив објављује се на интернет страници Националне академије,
министарства и



Find the HTML for our “item”



КАТАСТАР КОНТАМИНИРАНИХ ЛОКАЦИЈА

Катастар контаминираних локација представља скуп података о угроженим, загађеним и деградираним земљиштима и он је саставни део Информационог система земљишта који води Агенција за заштиту животне средине. Државни органи, односно организације, органи аутономних покрајина, јединице локалне самоуправе...

ресурса 1
употреба 0
подржавања 0



Стање земљишта у урбаним срединама

Подаци показују степен угрожености земљишта од хемијског загађења у урбаним срединама у периоду 2005-2023. године. Испитивање земљишта вршено је на локацијама у непосредној близини прометних саобраћајница, индустријских близини депонија, изворишта водоснабдевања, педагошких установа, рекреа

Elements Console Sources Network Performance > 7 5 X

```
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  <ul data-v-2e2e7c class=>
    <li data-v-2e2e7c>
      <a class="unstyled w-10 block" data-v-2e2e7c>
        <article class="dataset-card height-auto dataset-search-result py-xs" badges="object Object">
          created_at="2024-05-29T13:28:17.964000" extras=[object Object]
          frequency_date="2024-05-29T00:00:00" id="66571151a561adbb2191d89e"
          last_modified="2024-06-06T08:22:33.848000" last_update="2024-05-29T00:00:00"
          license="public_domain" page="https://data.gov.rs/sr/datasets/katastar-kontaminiranikh-lokatsija/" slug="katastar-kontaminiranikh-lokatsija" tags uri="https://data.gov.rs/api/1/datasets/katastar-kontaminiranikh-lokatsija/" data-v-c9e660 data-v-2e2e7c>
          <div class="card-logo search-logo-card" data-v-c9e660>...</div> flex
          <div class="card-data search-logo-card" data-v-c9e660>
            <h4 class="card-title" data-v-c9e660>КАТАСТАР КОНТАМИНИРАНИХ ЛОКАЦИЈА</h4>
            <div class="card-description mt-xs" data-v-c9e660>...</div> == $0
          </div>
          <ul class="card-hover-data" data-v-c9e660>...</ul> flex
        </article>
      </a>
    </li>
  </ul>
```

...

t-card.height-auto.dataset-search-result.py-xs div.card-data.search-logo-card div.card-description.mt-xs

Styles Computed Layout Event Listeners DOM Breakpoints Properties Accessibility

:hov .cls + □

METHOD ONE

rhythm.less:66

Find the HTML
for our “item”

КАТАСТАР КОНТАМИНИРАНИХ ЛОКАЦИЈА

Катастар контаминираних локација представља скуп података о угроженим, загађеним и деградираним земљиштима и он је саставни део Информационог система земљишта који води Агенција за заштиту животне средине. Државни органи, односно организације, органи аутономних покрајина, јединице локалне самоуправе...

ресурса
употреба
подржавања



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METHOD TWO

rhythm.less:66



amazon.com
search results

Sales at Lidl

List of amphibians
from Germany's Red
List Center

Headlines from
Nikkei Asia

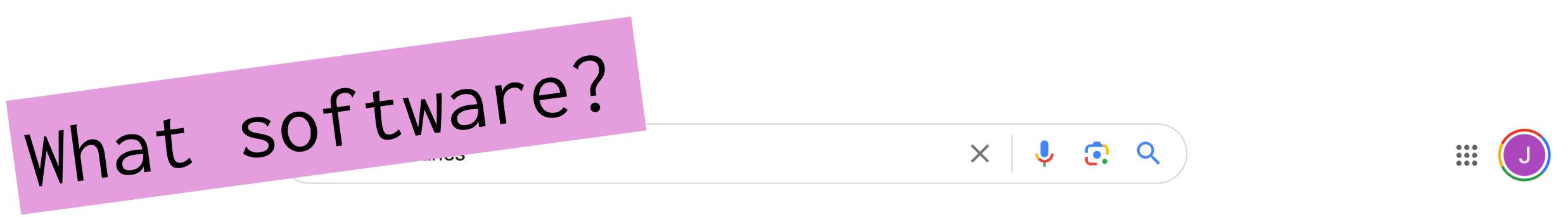
Now try it.
Anywhere!!!!

School Board Minutes
from Grand Island Public
Schools in Nebraska

datasets on
data.gov.ro

Wikipedia's
Fictional Big
Cats

Scraping is just
connecting to websites
But we need some software
to do that for us!
to columns
in your spreadsheet



All Images Videos News Books Web Finance

Tools



Scraping libraries

From sources across the web



Selenium



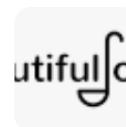
Lxml



Playwright



ZenRows S.L.



Beautiful Soup



Requests



Puppeteer



Cheerio



Scrapy



MechanicalSoup



Urllib3



[–] Swingbiter ← 70 points 2 years ago

Learn the basic html elements that build up a website.

[–] coventous ← 22 points 2 years ago

I recommend checking out

what the developer sees when they load a page.

We can do this with

[–] NerdvanaNC ← 1 point 2 years ago

Look into learning and understanding HTML, then BeautifulSoup and Selenium.

Do this with chrome/etc which made me very happy (I like Docker!)

HTML_data = response.text

[–] luizv4z ← 12 points 2 years ago

From my own research, run away from Selenium.

With this tool, I could scrap Facebook without getting banned.

2 all_links = soup.find_all('a')

Do python on them

BeautifulSoup

[–] riisen ← 3 points 2 years ago

for small projects use built in module requests

for bigger projects go with scrapy, its amazing

permmalink source embed save save-RES report reply

P.S.

Selenium, unless

permmalink source embed save save-RES report reply hide child comments

[–] ned334 ← 5 points 2 years ago

Google "Selenium find_element(By.XPATH, '/XPath/')

All elements have an XPath that you can copy from chrome by Inspect -> right click on code block -> copy full Xpath.

Scraping solved

permmalink source embed save save-RES report reply

Selenium is garbage!

...but BeautifulSoup
can't scrape all sites.

Top discounts for you

Page 1 of 3



Continental Grand Prix
5000 Rennrad Faltreifen //
28-622 (700x28C)

85

400+ viewed in past month

\$66.00

FREE Delivery Friday,
Aug 23



Wink Super X-Large Ultra
Thin Lubricated Latex
Condoms, Premium Latex
for Smooth and Natural...

76

100+ viewed in past month

\$14.99 (\$0.30/Count)

FREE Delivery Friday,
Aug 23



Assortment Rubber Ducks
in Bulk, 50-Pack Assorted
Mini Duckies Toy for
Ducking Cruise Ships, 2"

328

5K+ viewed in past month

\$24.99

Overnight by 8:00
AM



50 Pack Rubber Ducks in
Bulk, Jeep Ducks for
Ducking, Assorted Rubber
Ducks Jeep Ducking, Bab...

569

4K+ viewed in past month

\$21.89

Overnight by 8:00
AM



ArtCreativity Assorted
Rubber Ducks Jeep Ducking
(100Pack) - Rubber Ducki...

982

700+ viewed in past month

20% off **Limited time deal**

\$39.98

List: \$49.99

Today by 10:00 PM



Kicko Assorted Rubber
Ducks with Mesh Bag - 50
Ducklings, 2 Inch – Jeep
Ducks for Kids, Baby Bath...

2,543

2K+ viewed in past month

\$28.99

FREE Delivery
Saturday, Aug 24



Glitter Rubber Ducks in
Bulk - (Pack of 50) Assorted
2-inch Duck Toys for Baby
Shower Rubber Duckies,...

308

1K+ viewed in past month

\$26.79

Today by 10:00 PM



Bulk savings to consider

Page 1 of 7



Chochkees Asso

Ducks Toy Duckies for Kids
and Toddlers, Bath Birthday

Baby Showers Classroom,...

1,155



Rubber Ducks Jeep Ducking
(50 Pack) - Rubber Duckie...

982

100+ viewed in past month



Set, Mini Colorful Rubber
Duckies Bath Toy for
Child,Float & Squeak Tiny...

763



Bulk, Jeep Ducks for
Ducking, Assorted Rubber
Ducks Jeep Ducking, Bab...

569

800+ viewed in past month



Ducks: Fun Unique Military-
Inspired Bath Toys for Jeep
Ducking or Play - 2 inches

569

800+ viewed in past month



Bulk, Jeep Ducks for
Ducking, Assorted Rubber
Ducks for Jeeps, Bath Toy...

569

800+ viewed in past month



Glitter Rubber Duck Toy
Assortment Duckies for
Kids, Bath Birthday Gifts...

1,094

Some sites need interaction





TEXAS DEPARTMENT OF LICENSING & REGULATION

TDLR License Data Search (Active Licenses only)

[Search Help](#) | [Download License files](#) | [Download Other](#) | [Questions/Comments](#)

Inquire by License Type	Inquire by License #
Choose One (Optional)	<input type="text"/> (Numeric only)
Inquire by Expiration Date	
<input type="text"/> (mmddyyyy)	
Inquire by Name (Last, First) or by Business Name	
<input type="text"/>	
Inquire by Location (City)	
Choose One (Optional)	Type the first letter to scroll down.
Inquire by County	
Choose One (Optional)	Type the first letter to scroll down.
Inquire by Zip Code	
<input type="text"/>	
<input type="button" value="Search"/> <input type="button" value="Reset"/>	

If license not found, please contact Customer Service at 800-803-9202

Data last updated: 8/21/2024 06:01

[Bookmark This Page](#)

Some sites need interaction

Fast and reliable end-to-end 🎉

playwright.dev/python/

Playwright for Python Docs API Python ▾ Community

GitHub Discord Slack Search

Playwright enables reliable end-to-end testing for modern web apps.

GET STARTED ⚡ Star 64k+

I love Playwright!



Playwright is perfect!

But! It's new, so

ChatGPT isn't perfect

at it. *But!* We try.

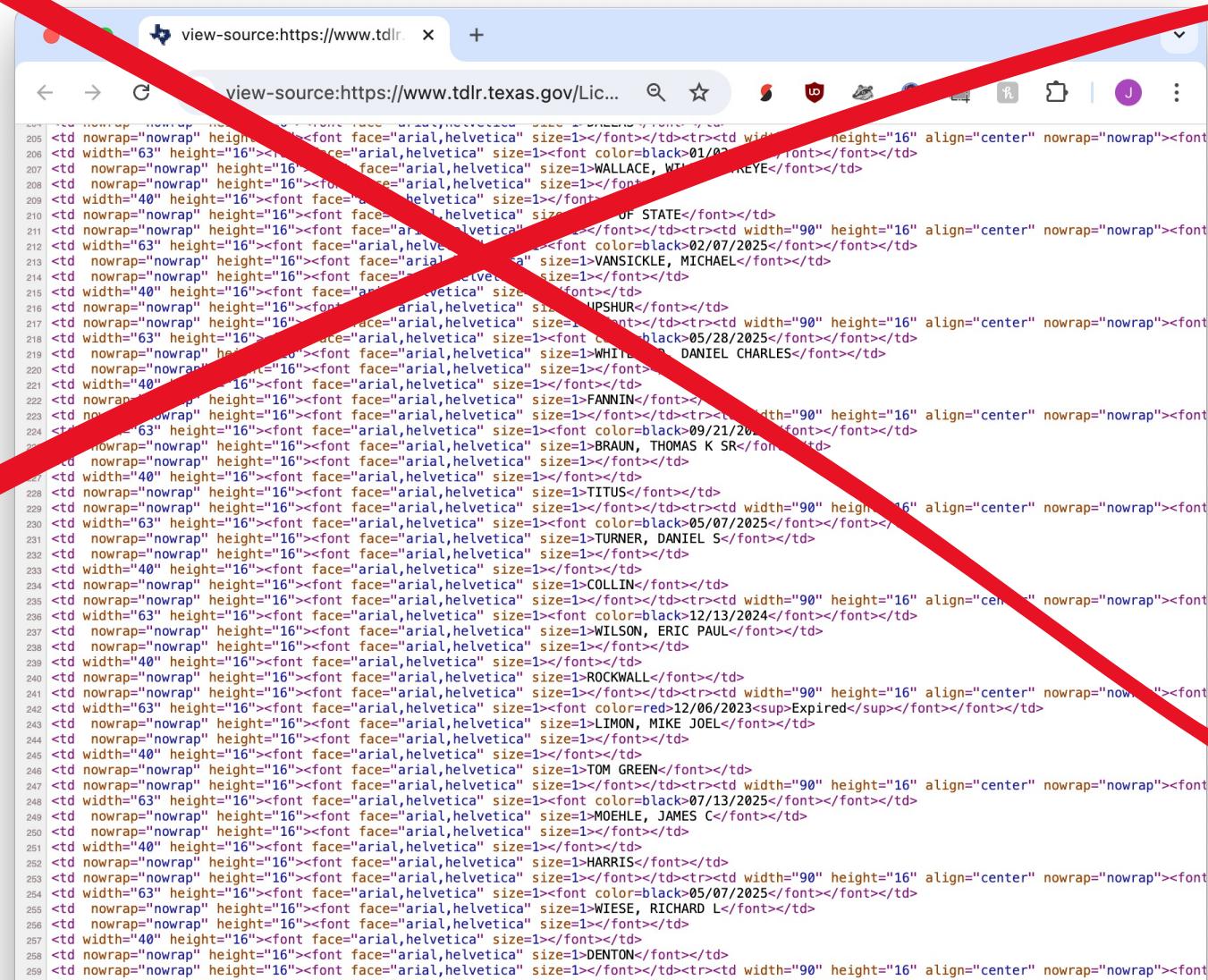
Playwright + ChatGPT +
pasting samples of HTML

=

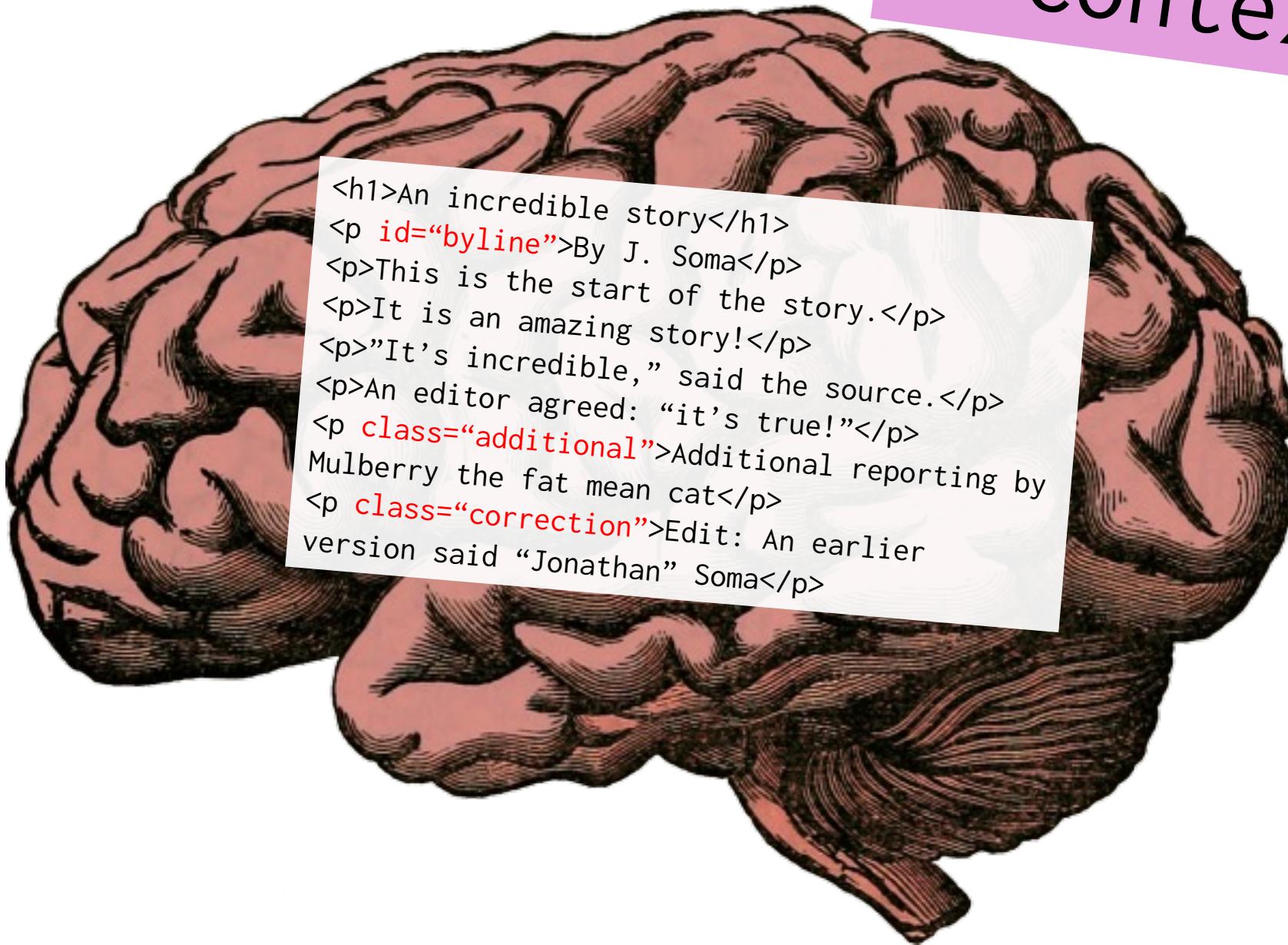
infinite scrapers

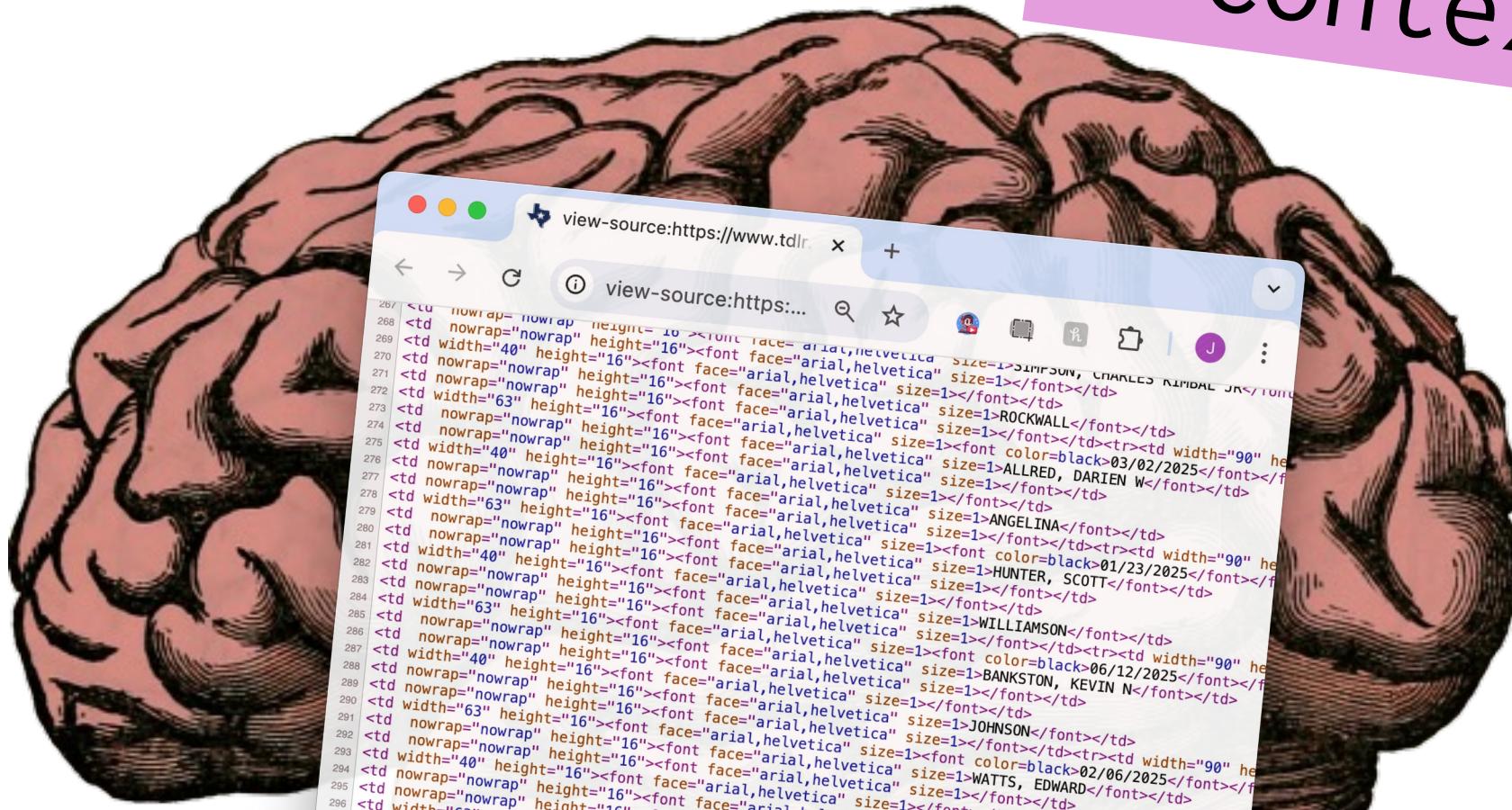


~~“Write a scraper for these search results:”~~



“Context window”





“Context window”

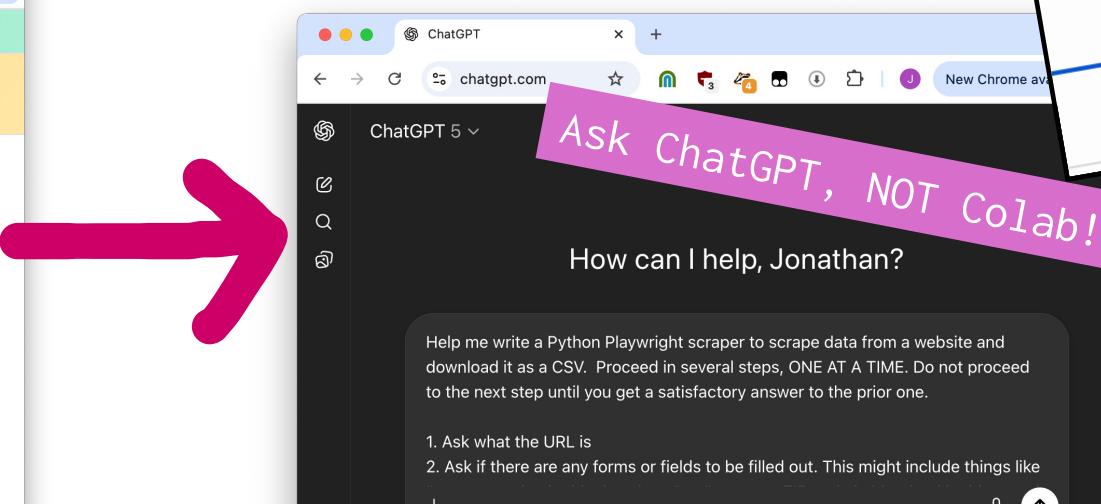
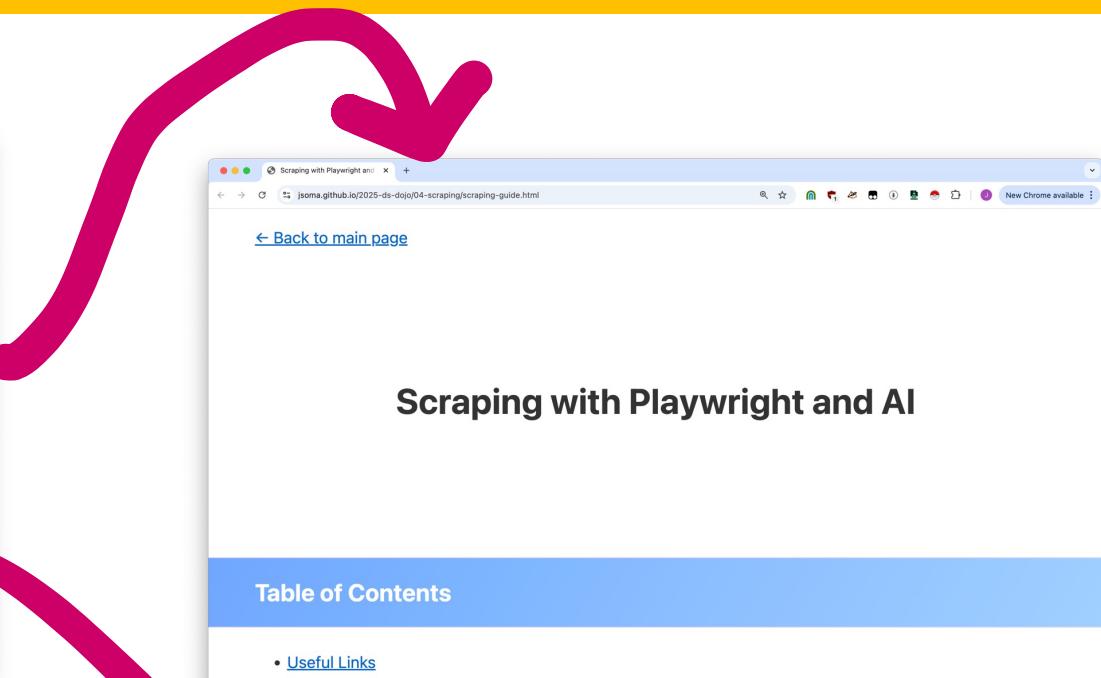
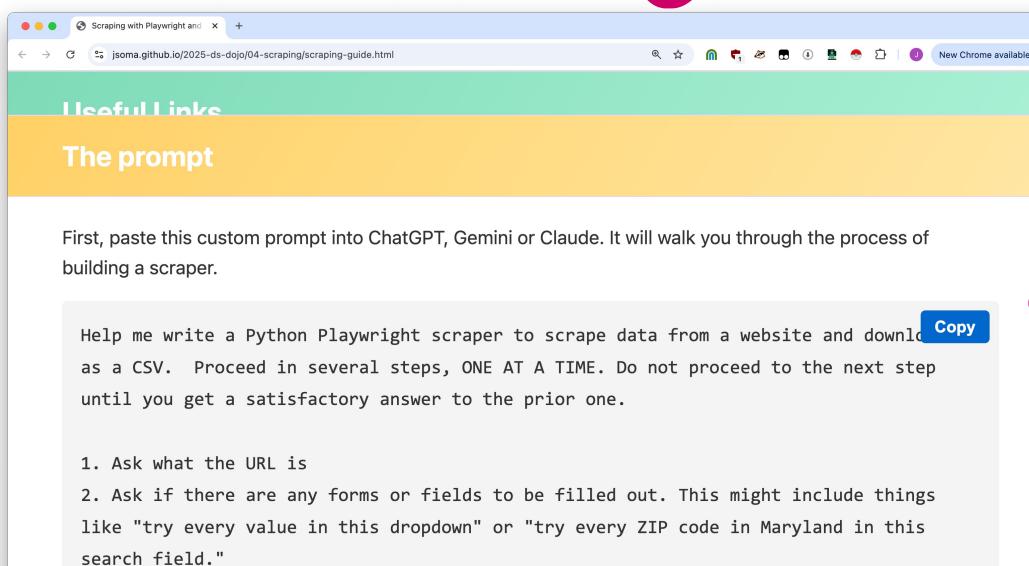
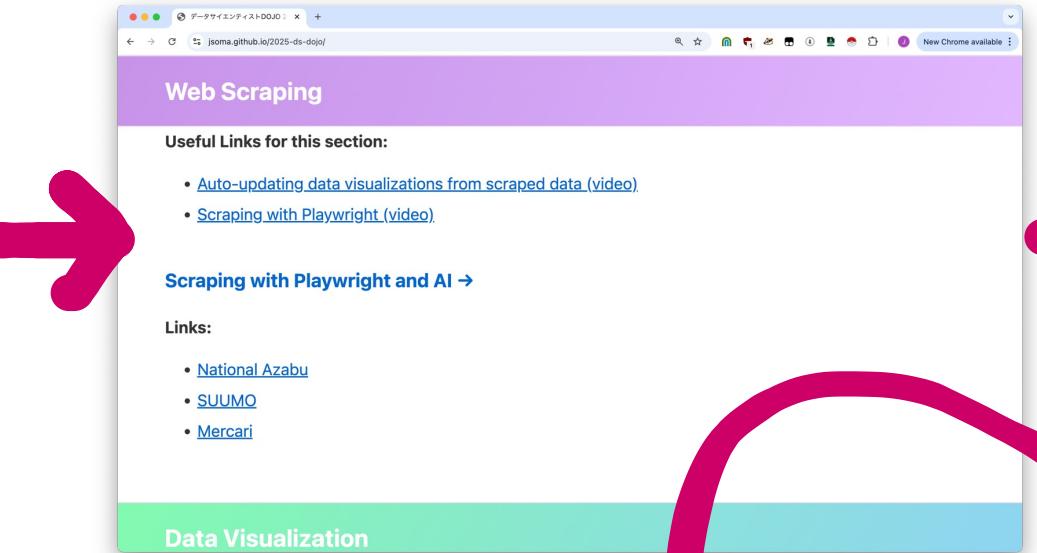
First Name	Last Name	Date of Birth	Address	City	State	Zip Code
CHARLES	KIMBELL JR	03/02/2025	1234 Main Street	JACKSON	MISSISSIPPI	38301
ROCKWALL	WILLIAMSON	01/23/2025	1234 Main Street	ROCKWALL	TX	75087
HUNTER	SCOTT	06/12/2025	1234 Main Street	HUNTER	SCOTT	75087
BANKSTON	KEVIN N	02/07/2025	1234 Main Street	BANKSTON	TEXAS	75087
EDWARD	WATTS	02/06/2025	1234 Main Street	EDWARD	TEXAS	75087
BASTROP		05/07/2025	1234 Main Street	BASTROP	TEXAS	78601
ROBERT WAYNE	SKELTON	05/07/2025	1234 Main Street	SKELTON	TEXAS	78601
BEXAR	HORTON	05/21/2025	1234 Main Street	HORTON	TEXAS	78601
IRVIN E JR	DARLEN W	05/21/2025	1234 Main Street	DARLEN W	TEXAS	78601
MICHAEL JAY	ROBERTSON	05/07/2025	1234 Main Street	ROBERTSON	TEXAS	78601
OUT OF STATE						

Visit <https://bit.ly/dojo-scraping>

What we might need:

- Start URL
- Forms to fill out (*optional*)
- “Rows” of our spreadsheet
- Pagination/“next” pages (*optional*)
- A **magical prompt**

Visit <https://bit.ly/dojo-scraping>



National Azabu / VEGETABLE/野菜

Registration 会員登録 Favorites お気に入り Login ログイン Cart 買い物カゴ

VEGETABLE/野菜 Enter keywords

top | All items | PRODUCE / 野菜・果物 | VEGETABLE/野菜

▶ SALE / お買い得商品

▶ SEASONAL ITEMS / 季節商品

▶ NATIONAL AZABU BRAND / ナショナル麻布オリジナル

▶ INTERNATIONAL FOOD / 各国の食材

▶ BAKERY / ベーカリー

▶ PRODUCE / 野菜・果物

▶ VEGETABLE/野菜

FRUITS/果物

▶ MEAT / 精肉

▶ SEAFOOD / 鮮魚

▶ DAIRY / 乳製品・チーズ・卵

▶ DELI / デリカ

▶ PANTRY / 食品

▶ FROZEN FOOD / 冷凍食品

▶ SNACKS & SWEETS / お菓子類

▶ BEVERAGE / 飲料

▶ ALCOHOL / 酒類

▶ HOUSEHOLD ESSENTIALS / 雑貨

▶ BABY / ベビー用品

PRODUCE / 野菜・果物 | VEGETABLE/野菜

Found 167 items.

Sort Number

Recommended おすすめ順

15

1 2 3 4 5 Next

 HALLOWEEN PUMPKIN (DOMESTIC)
¥3,580 (8%tax)
(Tax ¥265)※
Limited items 限定品

 HALLOWEEN PUMPKIN S SIZE
¥1,480 (8%tax)
(Tax ¥109)※
Limited items 限定品

 MATSUTAKE MUSHROOMS
¥2,980 (8%tax)
(Tax ¥220)※
在庫：残りあと 1

 BOILED CORN
¥698 (8%tax)
(Tax ¥51)※

 CHESTNUTS

 WASABI (JAPANESE HOURSERADISH)

 YUZU CITRON

 BROCCOLI

PERISHABLE 冷蔵

Your missions

- Scrape National Azabu *easy*
- Scrape Mercari *medium*
- Scraping SUUMO *difficult*
- Scrape Tabelog for high-ranking restaurants around 御茶ノ水駅 *medium*

Playwright gets blocked 😞

Camoufox solves it,
but ChatGPT and AI
tools are very very
very very very bad
at it.

The screenshot shows a web browser window displaying the Camoufox documentation at camoufox.com. The title bar says "Introduction | Camoufox". The page content includes:

- Introduction** (highlighted in blue)
- Features List**
- Stealth Performance**
- Python Interface**
 - Installation
 - Usage
 - GeolP & Proxy Support
- Main World Execution**
- Remote Server**
- Virtual Display**
- BrowserForge Integration**
- Passing Config**
- Fingerprint Injection**
- Development**
- Liability Disclaimer**
- Donate**

Introduction

An open source anti-detect browser with robust fingerprint injection. 🦊

GITHUB TRENDING #3 Repository Of The Day

Warning
Camoufox is in active development! Releases are available, but may not be suitable for production use.

Features

- Invisible to all anti-bot systems 🤖**
 - Camoufox performs better than most commercial anti-bot browsers.
- Fingerprint injection & rotation (without JS injection!)**
 - All navigator properties (device, OS, hardware, browser, etc.) ✓
 - Screen size, resolution, window, & viewport properties ✓
 - Geolocation, timezone, locale, & Intl spoofing ✓
 - WebRTC IP spoofing at the protocol level ✓