

## What is APIFY?

**APIFY** is a browser-based tool that automates web scraping. **Web scraping** is the process of extracting data from websites. Often, web scraping is done using an **API**, which is like a code that allows a user to talk to a database.

For example, Yelp has an API, which means a researcher can send Yelp's servers a request and receive some data in return. However, *some* companies put a limit on how much and what kinds of data can be pulled from their company servers. Unfortunately, Yelp is one of those companies. For example, researchers are limited to pulling 3 reviews per business using the Yelp API, and the reviews are only snippets, not full reviews.

Luckily, APIFY can bypass these restrictions, pulling unlimited, full-length reviews, in the case of this Yelp example. APIFY can also pull data from sources like Google Maps, YouTube, Instagram, and many more.

## How can APIFY be useful to this project?

For this DSC project, we can use a combination of the Yelp API and APIFY to get Yelp reviews of every Urgent Care Center and Emergency Rooms in Ohio. We can use this data to investigate what people think makes for a good or bad experience at Urgent Care Centers and Emergency Rooms.

## How much does APIFY cost?

APIFY provides a free version of their service, but the free version is limited in how much data can be pulled. To pull data at a sufficiently large scale for this project, we can use APIFY's "Personal Use" price tier, which is \$49/month.

## What does the data look like?

On the next page is an example of the kind of data we can retrieve using a combination of the Yelp API and APIFY.

## sampleDataYelp

businessTitle	directURL	businessID	city	businessRating	reviewDate	reviewCount	dataSource	reviewText
Hometown Urgent Care	<a href="https://www.yelp.com/biz/hometown-urgent-care-columbus">https://www.yelp.com/biz/hometown-urgent-care-columbus</a>	58C2i88pJKh6rhI	Columbus	2.0	2020-09-12	5	Yelp	I called Hometown Urgent care as advised by my physician.
Worthington Urgent Care	<a href="https://www.yelp.com/biz/worthington-urgent-care-worthington">https://www.yelp.com/biz/worthington-urgent-care-worthington</a>	iWWvhTRlI3pMPk	Worthington	4.0	2020-12-07	5	Yelp	I have been here three times (once for me, once for niece and once for nephew).
Nationwide Children's - Columbus	<a href="https://www.yelp.com/biz/nationwide-childrens-columbus">https://www.yelp.com/biz/nationwide-childrens-columbus</a>	hXmzC1PZkzAlve	Columbus	3.0	2014-10-03	5	Yelp	We go here regularly for my girlfriend's appointments and I have been here for my own.
OhioHealth Urgent Care	<a href="https://www.yelp.com/biz/ohiohealth-urgent-care-columbus">https://www.yelp.com/biz/ohiohealth-urgent-care-columbus</a>	ukQhDrIGudZJG0	Columbus	2.5	2020-12-20	5	Yelp	I had a wonderful experience when I unfortunately had to visit.
Arlington Urgent Care	<a href="https://www.yelp.com/biz/arlington-urgent-care-upper-arlington">https://www.yelp.com/biz/arlington-urgent-care-upper-arlington</a>	851TrH0cmsOWU	Upper Arlington	4.0	2020-12-08	5	Yelp	Really easy to get a rapid Covid test - just had to make a reservation. Everyone was very polite and friendly, whether on the phone or in person.
Scioto Urgent Care	<a href="https://www.yelp.com/biz/scioto-urgent-care-columbus">https://www.yelp.com/biz/scioto-urgent-care-columbus</a>	ZKvu4j_JFGb1yV	Columbus	4.0	2018-11-07	5	Yelp	This is my second visit to Scioto urgent care in a year. I was seen quickly and the doctor was very nice. Dr Rothe was very nice and took the time to talk with me about my health.
The Bartlett Medical Clinic & Wellness Center	<a href="https://www.yelp.com/biz/the-bartlett-medical-clinic-wellness-center-columbus">https://www.yelp.com/biz/the-bartlett-medical-clinic-wellness-center-columbus</a>	iGm1Hh0PYFYhc	Columbus	5.0	2018-01-31	5	Yelp	Dr. Bartlett was so attentive. Such an attention to detail and care. This is how a primary care practice should be! It actually felt like I was in a private practice.