How To Build An Amazon Product Scraper With Bypass Bot Detection

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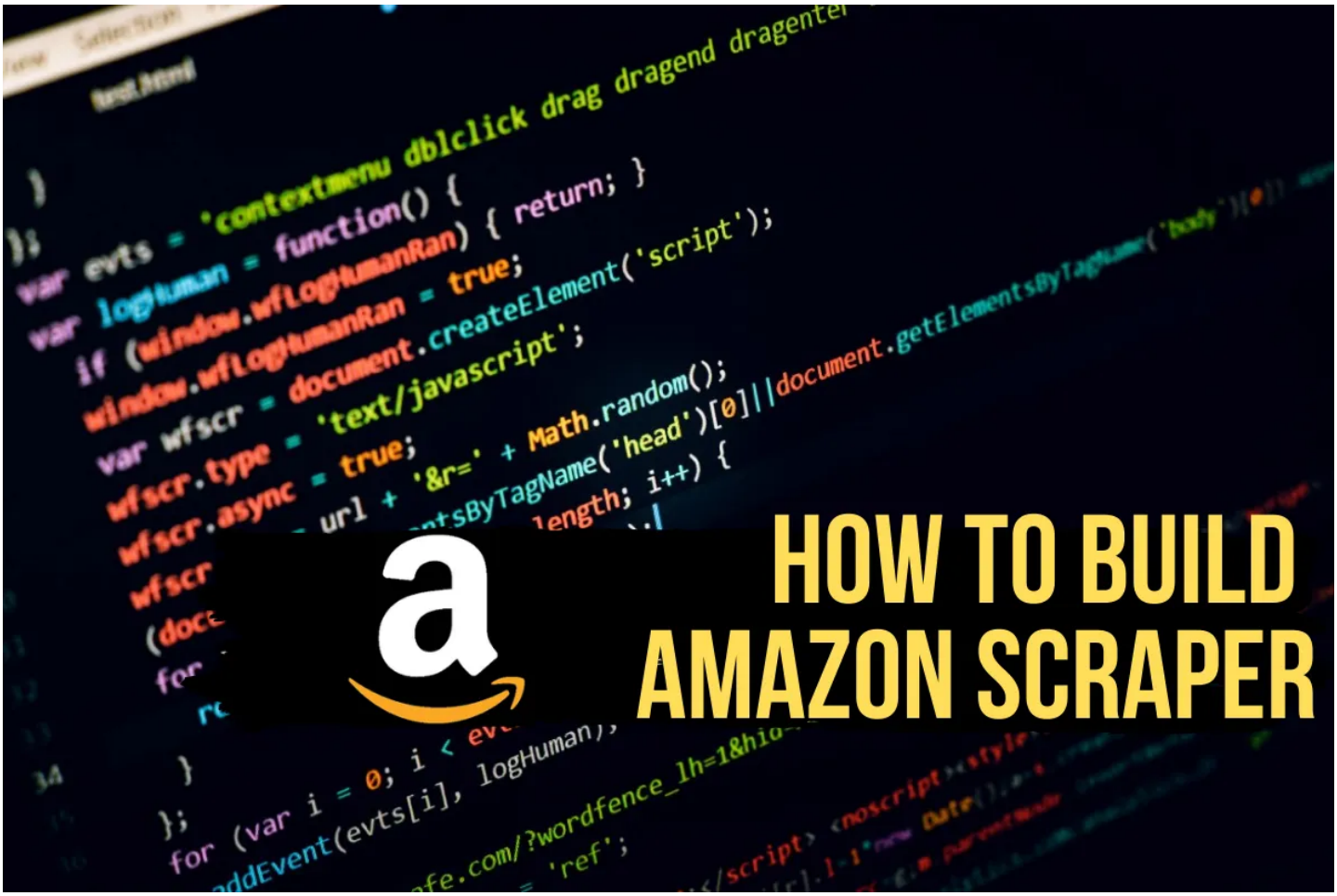

Today I will show you how to build a web scraper for Amazon. This tool will be designed to collect basic information about products from a specific keyword.

> **This is also available on YouTube now. If you learn better with videos, then check it out below.**

Web scraping allows you to extract specific data from the Amazon website and save it in a spreadsheet or JSON file. You could even turn this into an automatic process that updates your data on a daily, weekly, or monthly basis.

· Look for the data we need

So here, we will extract product data information from amazon.com by using 'headphones' as a sample keyword. Then extract the available

information from the search results page, and retrieve the details of each product. The URL for this search and the page we'll be scraping is https://www.amazon.com/s?k=headphones.

data we need

· Required Tools

Let's ensure we have all the following tools installed and configured before continuing to the next step.

· PyCharm -Download from here

· Python 3.9-Download from here

· Getting Started

Create a new project on PyCharm, follow this instruction.

For the code to work, install all the necessary libraries by running pip install on the terminal.

> *pip install requests beautifulsoup4 pandas fake-useragent-ex*

· Explore before Coding

Before we start coding, we have to understand the page's content and structure. For that, the easier way we know is to inspect the target page using a browser. We will be using Chrome's DevTools, but other browsers have similar tools.

result of inspect element

· Scraping Amazon Results Page

After we installed all the dependencies presented above, let's create a new rsult_page.py. and type the following lines of code:

Run the code above, and you will get some product results from page 1.

Now, you might want to scrape several pages worth of data for this project. By adding pagination, add this code to the previous code.

```
last_page = soup.find('li', {'class': 'a-disabled a-last'})
if not last_page:
    pass
else:
    break
```

This is used to check until the last page is found on the search page.

With a few changes, the above code will be combined into a function.

And see when you run this, we have got the results of all the pages.

Output will be like this :

- **Scraping Amazon Product Page**

After getting the results from the search page, then get detailed information from each product.

Type the code below:

Run the code, and see the output :

we will retrieve detailed information such as:

> *Title Product, Price, Rating, Stock, features.*

In short, how to get? see the inspect element of any information we want. I have summarized it will explain a bit, for more details see the whole code at the end.

- **This variable is to get Title Product**

```
title = soup.find('span', attrs={'id': 'productTitle'}).text.strip()
```

- Get the price

```
current_price = soup.find('span', attrs={'class': 'a-price a-text-
price a-size-medium apexPriceToPay'}).find('span', attrs={'class':
'a-offscreen'}).text.strip()
```

- Get review count

```
review_count = soup.find('span', attrs={'id':
'acrCustomerReviewText'}).text.strip()
```

- Get Stock

```
available_stock = soup.find('div', attrs={'id':
'availability'}).find('span').text.strip()
```

- Features

```
feature_bullet = soup.find('div', attrs={'id': 'feature-
bullets'}).find('ul', attrs={'class': 'a-unordered-list a-vertical
a-spacing-mini'}).find_all('li')
```

And our scaper is almost done, from the search results it has been successful, also taking the details of each product. now it's time to combine the above functions into one complete script.

After running the above codes sometimes amazon will block your IP and detect it as a robot — because there are too many requests in a short time. but don't worry, I'll give you the tips.

Add the following function code.

Yes, right by using a random user agent, you can bypass detection as a robot. The process takes a random user agent, then checks it, if it is detected as a robot it will repeat looking for a new user agent until it can be passed.

The complete code above, I made one below and also please check on my github.

Run main.py

======= Update ========

Hi all, maybe when you read this story now, and try it you will get some error. Like “fake_useragent.errors.FakeUserAgentError: No browsers version found for Chrome”

This is due to a problem with the package. I’ve been updated the code. and its work like a charm.

update code scraper.py

==========

The result should look something like this:

> *The post is for learning purposes only in order to demonstrate different techniques of developing web scrapers. The Author does not take responsibility for how the code snippets are used.*

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Written by Jevri Malku

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