# XPath

<https://www.guru99.com/xpath-selenium.html>

# Python Packages

## free-proxy

<https://pypi.org/project/free-proxy/>

**Get free working proxy** from [https://www.sslproxies.org](https://www.sslproxies.org/), [https://www.us-proxy.org](https://www.us-proxy.org/), <https://free-proxy-list.net/uk-proxy.html> and <https://free-proxy-list.net> (depending on your country) and use it in your script.

* Not tried yet. But free proxies are not good as they’re too slow and insecured.

Ref: <https://www.linkedin.com/pulse/preventing-selenium-from-being-detected-soumil-shah/>

## fake-useragent

<https://pypi.org/project/fake-useragent/>

**Get random useragent** for different web browser from <https://techblog.willshouse.com>.

* Not tried yet. But useragents are not too much, and setting them when requesting a webpage is simple. So doesn’t need a third-party like this one.

Ref: <https://www.linkedin.com/pulse/preventing-selenium-from-being-detected-soumil-shah/>

## undetected-chromedriver

<https://pypi.org/project/undetected-chromedriver/>

Custom Selenium chromedriver that **passes ALL bot detection systems** (like Distil / Imperva/ Datadadome / CloudFlare IUAM)

* Tried. Work perfectly for Shopee website without having to change cdc\_ string in chromedriver.ex.

However, since it a wrapper of the original Selenium chromedriver, I concern about its side-effects in terms of my project’s coding styles and Selenium’s feature limitations.

For examples:

* Code like option = webdriver.ChromeOptions(); option.add\_argument('…'); doesn’t work.

## chrome-profiles

<https://github.com/kaliiiiiiiiii/Selenium-Profiles>

Undetect Selenium using chromedriver and emulation / device profiles.

* Not tried yet. Seem to be a good library. Doesn’t wrap the original Selenium chromedriver like "undectected-chromedriver" lib.

# Zyte API

Zyte API is a web scraping API that avoids bans, enables browser automation, enables automatic extraction, and much more, all cost-efficiently.

<https://docs.zyte.com/zyte-api/get-started.html>

# ZenRows API

ZenRows handles all anti-bot bypass for you, from rotating proxies and headless browsers to CAPTCHAs.

<https://www.zenrows.com/>

# References

## Setup Proxies

<https://proxyway.com/guides/selenium-proxy-setup>

## API Testing

Tools like Postman or Insomnia are primarily designed for testing APIs but can also be used to capture JSON responses. You can send requests to the web application's APIs using these tools and capture the responses, including JSON data, for further analysis.

Another tool: Rest Assured.

<https://sqa.stackexchange.com/a/18109>