Web Scraping

A brief overview by Adam Stapleton

What is Web Scraping?

“Web scraping, web harvesting, or web data extraction is data scraping used for extracting data from websites.”

- Wikipedia

Is web scraping ILLEGAL?

https://en.wikipedia.org/robots.txt
https://www.google.com/robots.txt
https://www.facebook.com/robots.txt
http://www.daft.ie/robots.txt

Tip

Ask Google.

They've pretty much perfected it.

Add "/robots.txt" to the end of any homepage url and you'll see

So, is it illegal?

Well, is it illegal to rearrange the furniture in a restaurant that you're eating at?

Packages

Necessary

- requests
- bs4 (BeautifulSoup)
- Selenium
  - Geckodriver (Firefox)

Useful

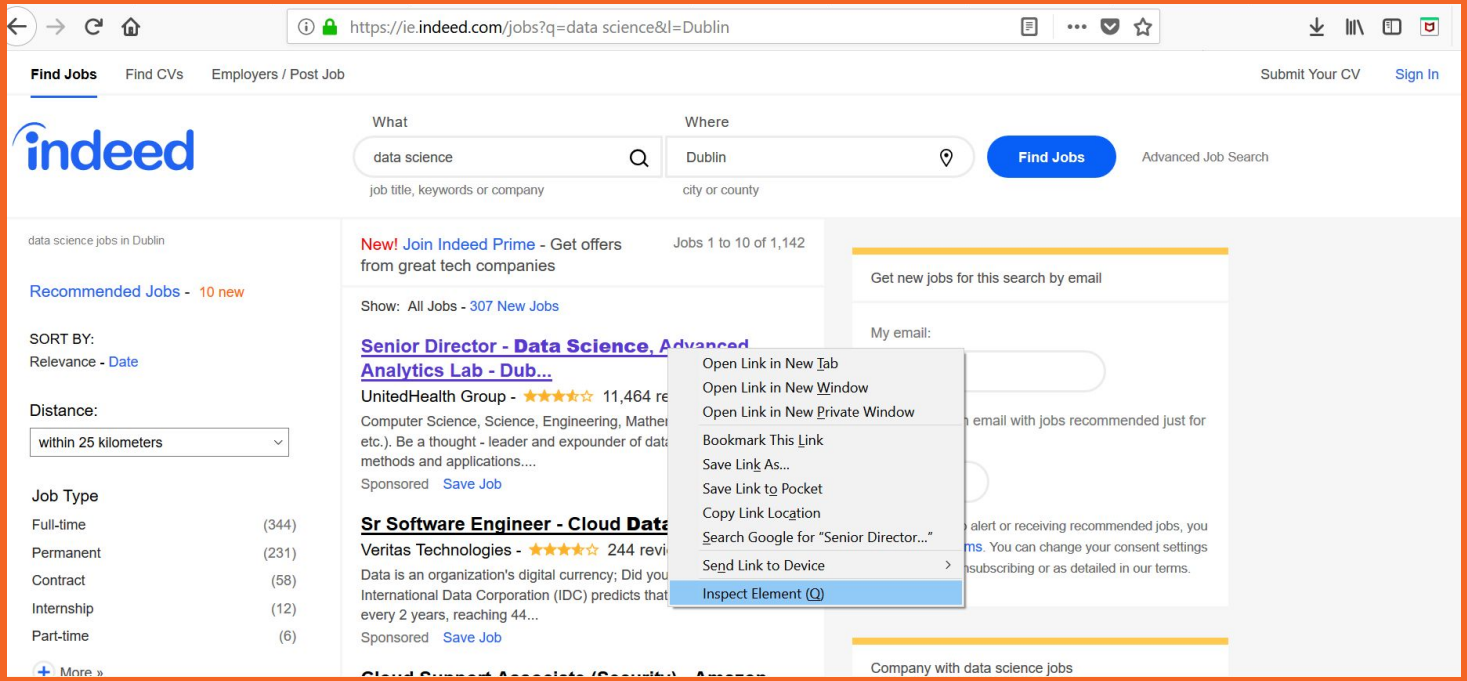
- Pandas
- random

Approach

In general, this is how to go about extracting data from a website.

- **Inspect html**
  Find what container(s) your information is in
- **requests/selenium**
  Extract website body (which will contain your information)
- **BeautifulSoup**
  Parse the body to find the containers you want, and extract the information you need

Example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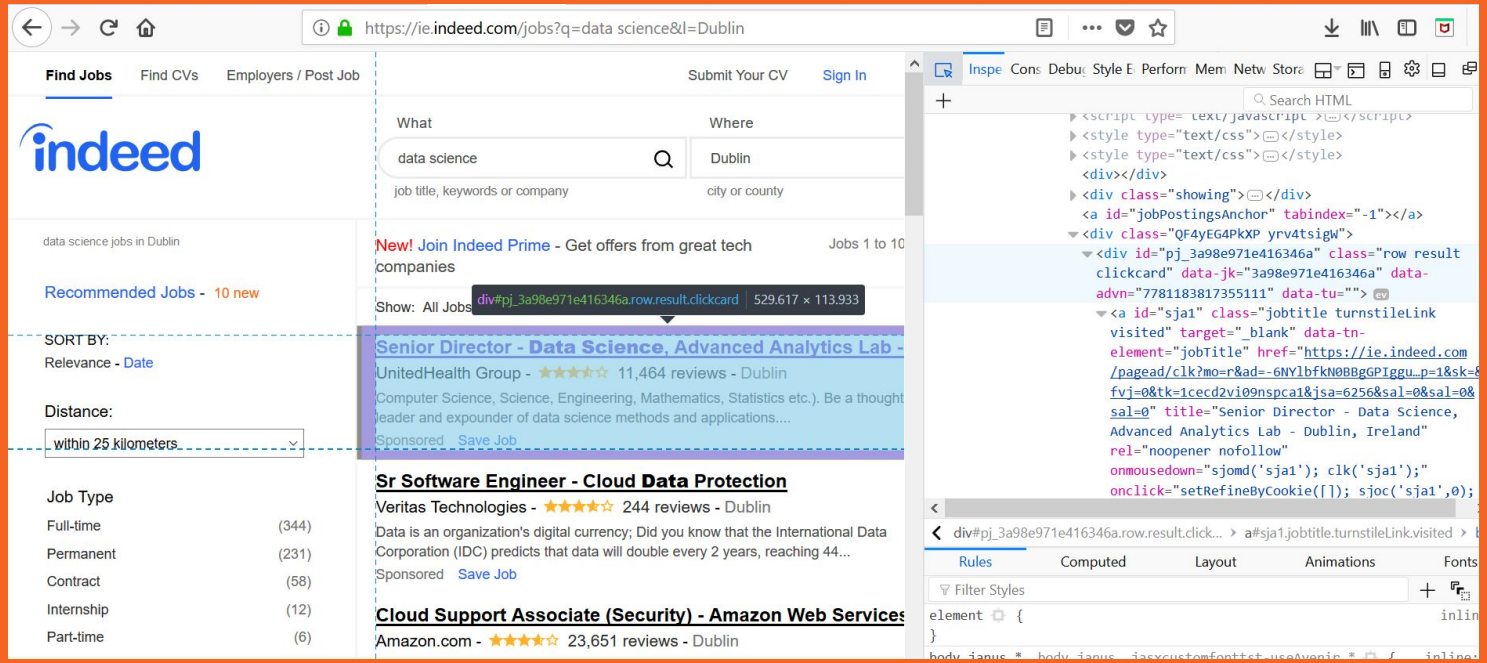
Company with data science jobs

Example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within 25 kilometers
Senior Director - Data Science, Advanced Analytics Lab -
UnitedHealth Group - 11,464 reviews - Dublin
Computer Science, Science, Engineering, Mathematics, Statistics etc.). Be a thought leader and expounder of data science methods and applications....
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Job Type
Full-time (344)
Permanent (231)
Contract (58)
Internship (12)
Part-time (6)
Sr Software Engineer - Cloud Data Protection
Veritas Technologies - 244 reviews - Dublin
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Cloud Support Associate (Security) - Amazon Web Services
Amazon.com - 23,651 reviews - Dublin
Search HTML
<style type="text/css"></style>

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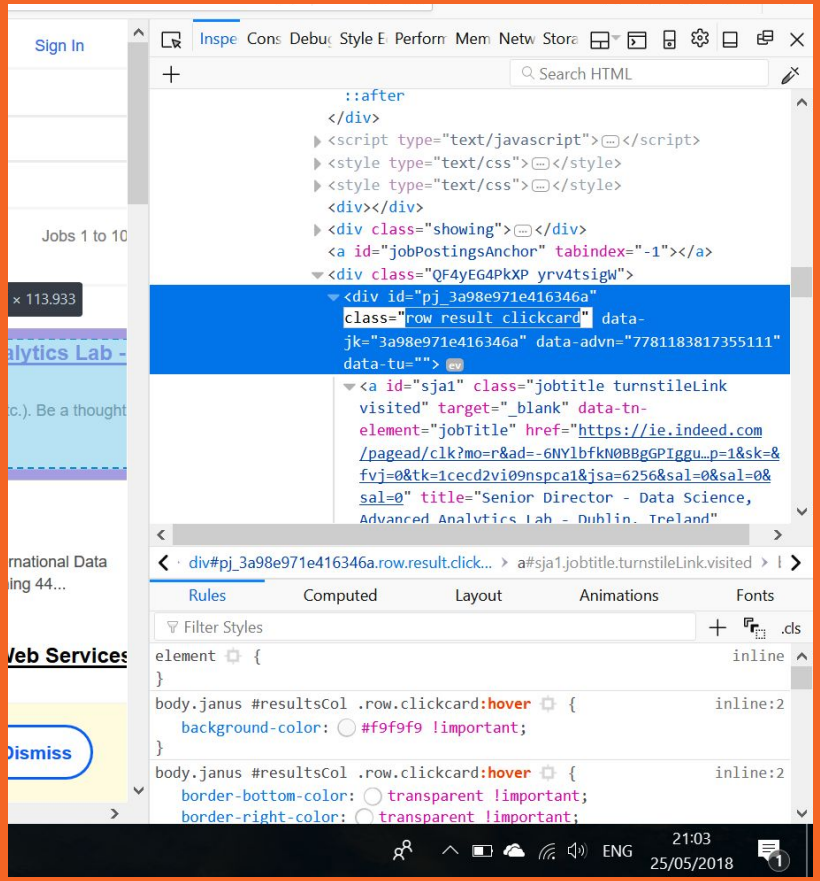
Example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fvj=0&tk=1cecd2vi09nspca1&jsa=6256&sal=0&sal=0&
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border-right-color: transparent !important;
ENG
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25/05/2018

Resources

- https://automatetheboringstuff.com/chapter11/
- https://www.seleniumhq.org/docs/03_webdriver.jsp
- https://towardsdatascience.com/scraping-the-internets-most-popular-websites-a4c6f0be382d
- https://github.com/cs109/content
  - http://nbviewer.jupyter.org/github/cs109/content/blob/master/lec_04_scraping.ipynb