**Assessment project**

Develop a crawler and an API to represent data to clients

**Description**: Develop a crawler to fetch companies’ ESG score from [www.refinitiv.com](http://www.refinitiv.com/), and an API to represent fetched ESG scores to clients. You have choice to develop API either using Django or Flask as it suits your skills. Git push your project to Github.

*Crawler:* <https://www.refinitiv.com/en/sustainable-finance/esg-scores> is the URL where to start working from scratch. You can search for Apple as an instance to analyze web app behavior. Fields you need to crawl are indicated by green boxes below:



* Fetch **all** companies Refinitiv is listing at first hand. *(2nd Hint at the end)*
* Iterate through *all****\**** companies and fetch their ESG scores. **Multithreading implementation is a must. *\*****(consider 100 companies as upper bound and skip the rest of them in case of lack of resources, high ping, blockage and etc.)*
* Store data as a csv file (Using pandas)

*API:* Having data ready in CSV format, you can start working on API now. API is super simple, two public endpoints is needed, first to represent the list of companies and second one to return ESG scores of a specific company.

Endpoint Schema:

<https://yourawesomewebsite.test/api/corps>:

return list of companies you have data available for

[https://yourawesomewebsite.test/api/esgscore/ HYPERLINK "https://yourawesomewebsite.test/api/esgscore/%3cCOMPANY\_TICKER%3e"< HYPERLINK "https://yourawesomewebsite.test/api/esgscore/%3cCOMPANY\_TICKER%3e"COMPANY\_TICKER HYPERLINK "https://yourawesomewebsite.test/api/esgscore/%3cCOMPANY\_TICKER%3e">](https://yourawesomewebsite.test/api/esgscore/%3cCOMPANY_TICKER%3e):

return ESG scores of COMPANY\_TICKER (Company ticker is an abbreviated format of Company name. E.g. Apple Inc ticker is AAPL.O)

* Load CSV dataset into a variable
* You can design helper functions to provide you ESG scores of corresponding company
* Connect them to API endpoint
* Return data in JSON format.

And lastly Git push your app to Github and send us the link.

***Would be a plus if you:***

* Dockerize the project
* Use a database instead of CSV file
* Implement API authentication

**Hints:**

* Discover their backend service which frontend interacts with
* **Inspect search suggestion workflow.**
* You *won’t* need an HTML parser package (beatifulsoup etc.).

*Good luck.*

[https://datacolab.co.uk](https://datacolab.co.uk/)