Web Scraping Cryptocurrency Data from [CoinMarketCap](https://coinmarketcap.com/) using Python

Overview:

[CoinMarketCap](https://coinmarketcap.com/) is the world's most-referenced price-tracking website for cryptoassets in the rapidly growing cryptocurrency space. Its mission is to make crypto discoverable and efficient globally by empowering retail users with unbiased, high quality and accurate information for drawing their own informed conclusions ([1](#Reference1)).

Objective:

My objective is to scrape [CoinMarketCap](https://coinmarketcap.com/) website for the top 300 cryptocurrencies and their data using Python libraries like Selenium and BeautifulSoup.

Procedure:

I started this project by installing the required bindings in Python using ‘pip install’ in the command prompt: ‘pip install selenium’, and ‘pip install bs4’ (for BeautifulSoup).

Since [CoinMarketCap](https://coinmarketcap.com/) is a dynamic website, I am using selenium along with BeautifulSoup.

Selenium requires a web driver to interface with the chosen browser. I used Chrome browser and therefore installed a Chrome driver for Windows computer from <https://chromedriver.storage.googleapis.com/index.html?path=113.0.5672.63/>.

For the complete code and explanation, refer to the Jupyter Notebook file attached with this report ([file 1](#File1)).

Results:

From the [CoinMarketCap](https://coinmarketcap.com/) website, I scraped the ‘Cryptocurrencies’ table containing the columns: ‘Rank based on Market Cap’, ‘Name’, ‘Symbol’, ‘Price’, ‘Market\_Capital’, and ‘Website.’ This data was scraped on 13JUN2023 and written to an excel file for future analysis ([file 2](#File2)).

Conclusion:

[CoinMarketCap](https://coinmarketcap.com/) is a dynamic website, meaning, data keeps changing constantly. The above scraping tool can be used to scrape data anytime (hourly, daily, 30 days, etc.) to perform price/market analysis of the top 300 cryptocurrencies.

Software:

* MS Excel (version 2304)
* IDE: Jupyter Notebook (language: Python 3.6.5)
* Python libraries: webdriver from selenium, BeautifulSoup from bs4, pandas

Files attached:

1. Cryptocurrency\_Webscraping.ipynb
2. Top300Cryptocurrencies\_13JUN2023.xlsx

References:

1. <https://coinmarketcap.com/about/>