

# CodeAlpha Internship – Task 1: Web Scraping

This project involves extracting structured data from a website using Python.

In this task, we use requests and BeautifulSoup libraries to scrape data from a live webpage and display it in a tabular format using pandas.

- ✨ Internship Domain: Data Analytics
- Tools: Python, Requests, BeautifulSoup, Pandas
- 👤 Performed by: Miju Akshaya P

In [18]: *# Install required libraries (run this only once)*

```
!pip install requests
!pip install beautifulsoup4
!pip install pandas
```

Requirement already satisfied: requests in c:\anaconda3\_new\lib\site-packages (2.22.0)

Requirement already satisfied: certifi>=2017.4.17 in c:\anaconda3\_new\lib\site-packages (from requests) (2019.11.28)

Requirement already satisfied: chardet<3.1.0,>=3.0.2 in c:\anaconda3\_new\lib\site-packages (from requests) (3.0.4)

Requirement already satisfied: idna<2.9,>=2.5 in c:\anaconda3\_new\lib\site-packages (from requests) (2.8)

Requirement already satisfied: urllib3!=1.25.0,!1.25.1,<1.26,>=1.21.1 in c:\anaconda3\_new\lib\site-packages (from requests) (1.25.8)

Requirement already satisfied: beautifulsoup4 in c:\anaconda3\_new\lib\site-packages (4.8.2)

Requirement already satisfied: soupsieve>=1.2 in c:\anaconda3\_new\lib\site-packages (from beautifulsoup4) (1.9.5)

Requirement already satisfied: pandas in c:\anaconda3\_new\lib\site-packages (1.0.1)

Requirement already satisfied: numpy>=1.13.3 in c:\anaconda3\_new\lib\site-packages (from pandas) (1.18.1)

Requirement already satisfied: python-dateutil>=2.6.1 in c:\anaconda3\_new\lib\site-packages (from pandas) (2.8.1)

Requirement already satisfied: pytz>=2017.2 in c:\anaconda3\_new\lib\site-packages (from pandas) (2019.3)

Requirement already satisfied: six>=1.5 in c:\anaconda3\_new\lib\site-packages (from python-dateutil>=2.6.1->pandas) (1.14.0)

```
In [8]: import requests
from bs4 import BeautifulSoup
import pandas as pd
url = 'http://books.toscrape.com/'
response = requests.get(url)
soup = BeautifulSoup(response.text, 'html.parser')

# Extract book titles and prices
titles = [book.h3.a['title'] for book in soup.find_all('article', class_='product_pod')]
prices = [book.find('p', class_='price_color').text for book in soup.find_all('article', class_='product_pod')]

# Create DataFrame
df = pd.DataFrame({
    'Book Title': titles,
    'Price': prices
})

df.head() # Display the first 5 results
```

Out[8]:

	Book Title	Price
0	A Light in the Attic	£51.77
1	Tipping the Velvet	£53.74
2	Soumission	£50.10
3	Sharp Objects	£47.82
4	Sapiens: A Brief History of Humankind	£54.23

```
In [21]: df.to_csv("Scrappedbook.csv", index=False)
```

## ✓ Conclusion

This web scraping project successfully extracted book titles and their prices from a practice website using BeautifulSoup and Requests.

The data was stored in a Pandas DataFrame and saved to a CSV file for further analysis or reporting.

Thank you!