BoAt-Lifestyle Web Scraping Project on Airdopes using Python

Presented to:

I.T.VEDANT
Decode your dreams

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Web Scraping of Boat Airdopes Using Python & BeautifulSoup

Introduction:

Web scrapping project involves extracting data from websites to be used for various purposes, such as data analysis, research, reporting, or populating databases with the use of tools and libraries like Python, Requests, BeautifulSoup.

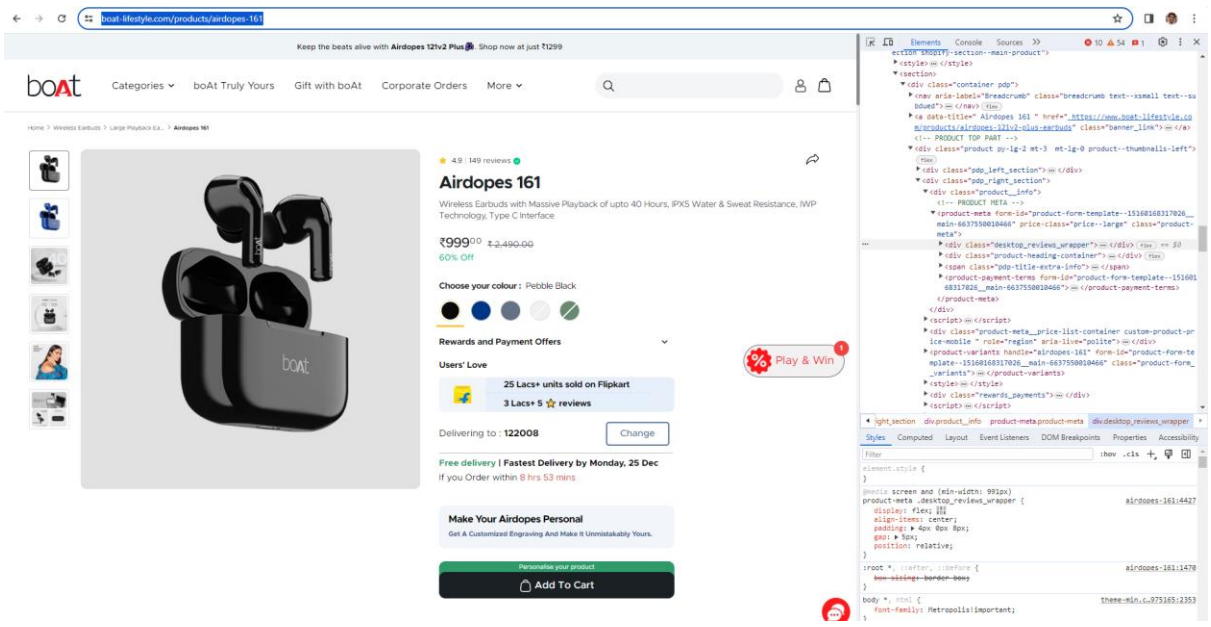
Here we are going to get the information about:

- Product Name,
- Product Price,
- Customer Name,
- Reviews,
- Ratings.

There are various benefits and risks of web scraping like:

- ❖ Access to valuable data for analysis or research.
- ❖ Automation of data collection, saving time and effort.
- ❖ Legal issues related to web scraping.

The first thing we is to pick the website for scraping the data. And go to inspect data: https://www.boat-lifestyle.com/products/airdopes-161 To access link (Ctrl+Click)



Next step is to Install the important libraries: Python has several libraries, we will use the following libraries:

- ❖ **Requests** – to make HTTP requests to website,
- ❖ **BeautifulSoup** – parsing the HTML code,
- ❖ **Pandas** – for storing the scraped data in data frame.

```
In [1]: import requests
        from bs4 import BeautifulSoup
        import pandas as pd
        url='https://www.boat-lifestyle.com/products/airdopes-161'
```

We'll now write the main python code. The code will perform the following steps:

- Using requests to send an HTTP GET requests,
- Using BeautifulSoup to parse the HTML code,
- Extracting the required data from the HTML code.

```
In [2]: r=requests.get(url)
        htmlcontent=r.content
        htmlcontent
```

```
Out[2]: b'<!doctype html><html\n  class="no-js"\n  lang="en"\n  dir="ltr"\n  draggable="false">\n  <head>\n    <meta charset="utf-8">
        \n    <meta name="viewport" content="width=device-width, initial-scale=1.0, height=device-height, minimum-scale=1.0, maximum-
        scale=6.0">\n    <meta name="theme-color" content="#ffffff">\n    <meta name="facebook-domain-verification" content="qad1e3gl
        dwmxjf6luncdygpvcpduub">\n    <link rel="canonical" href="https://www.boat-lifestyle.com/products/airdopes-161"><link\n
        rel="shortcut icon"\n        href="//www.boat-lifestyle.com/cdn/shop/files/32x32_256x256.png_32x32_2d0995d9-ec86-4c14-b928-71
        101777194c_96x96.png?v=1647426716"\n        type="image/png"><title>\n      boAt Airdopes 161 | Wireless Earbuds with Massive
        Playback of upto 40 \n    </title><meta name="description" content="boAt Airdopes 161 - Wireless Earbuds Your partner for eve
        ry vibe, Airdopes 161 earbuds pumps uninterrupted music with its massive playback of upto 40 Hours. And when you run out of b
        attery, you can enjoy 180 Minutes of music with just 10 Minutes of charge. Grooving has never been so hasslefree with Bluetoo
        th v5.1 that seamlessly plays your music. Gone are the days when you had to check if your device is connected or not. Our. co
        nnects with your paired devices as soon as you open the lid of the case. Indulge in our immersive sound with its 10mm driver
        and enjoy music for every vibe. AIRDOPES 161 Charge for 10 Minutes, ENJOY 180 Minutes IPX5 WATER &amp;amp; SWEAT RESISTANCE Ace y
        our sport. You don\xe2\x80\x99t have to worry about your Airdopes as you groove to your favourite workout tracks. boAt Immers
        ive Sound Get captivated by boAt immersive sound powered by 10mm drivers no matter what you are playing. The bass is tuned fo
        r a thumping listening experience that transports you to another world. Type C Interface Type C interface promises \xe2\x80\x
        94 speed, ease of use, versatility. Say goodbye to your charging struggles. Quick Response Touch Controls Control your music
        with ease. Play/pause, attend calls and activate voice assistants via just a touch. FAQs Q. How can we pause and play tracks?
        Airdopes 161 comes with a host of intuitive features that allow one to seamlessly control music. Please refer to the instruct
        ion manual to learn about the different ways one can take advantage of its features. Q. Can we accept calls on boAt Airdopes
```

```
In [3]: soup=BeautifulSoup(htmlcontent,'html.parser')
        print(soup)
        soup.prettify()
```

```
<!DOCTYPE html>
<html class="no-js" dir="ltr" draggable="false" lang="en">
<head>
<meta charset="utf-8"/>
<meta content="width=device-width, initial-scale=1.0, height=device-height, minimum-scale=1.0, maximum-scale=6.0" name="viewp
ort"/>
<meta content="#ffffff" name="theme-color"/>
<meta content="qad1e3gldwmxjf6luncdygpvcpduub" name="facebook-domain-verification"/>
<link href="https://www.boat-lifestyle.com/products/airdopes-161" rel="canonical"/><link href="//www.boat-lifestyle.com/cdn/s
hop/files/32x32_256x256.png_32x32_2d0995d9-ec86-4c14-b928-71101777194c_96x96.png?v=1647426716" rel="shortcut icon" type="imag
e/png"/><title>
      boAt Airdopes 161 | Wireless Earbuds with Massive Playback of upto 40
    </title><meta content="boAt Airdopes 161 - Wireless Earbuds Your partner for every vibe, Airdopes 161 earbuds pumps unint
errupted music with its massive playback of upto 40 Hours. And when you run out of battery, you can enjoy 180 Minutes of musi
c with just 10 Minutes of charge. Grooving has never been so hasslefree with Bluetooth v5.1 that seamlessly plays your music.
Gone are the days when you had to check if your device is connected or not. Our. connects with your paired devices as soon as
you open the lid of the case. Indulge in our immersive sound with its 10mm driver and enjoy music for every vibe. AIRDOPES 16
1 Charge for 10 Minutes, ENJOY 180 Minutes IPX5 WATER &amp;amp; SWEAT RESISTANCE Ace your sport. You don't have to worry about yo
ur Airdopes as you groove to your favourite workout tracks. boAt Immersive Sound Get captivated by boAt immersive sound power
```

- Access Product Name using this source code:

```
In [4]: title=soup.title
        title.text.strip()
```

```
Out[4]: 'boAt Airdopes 161 | Wireless Earbuds with Massive Playback of upto 40'
```

```
In [20]: desc=soup.find(class_="product-meta__title heading h3").text
         desc.strip()
```

```
Out[20]: 'Airdopes 161'
```

- Access Product Price using this source code:

```
In [7]: price=soup.find(class_="price price--highlight price--large").text
        price

Out[7]: '\nSale price₹999'

In [8]: price=soup.find(class_="price price--highlight price--large").text
        price.replace('\nSale price','')

Out[8]: '₹999'
```

- Access Customer names who gives ratings & reviews:

```
In [21]: Cust_name=soup.find_all(class_='jdgm-rev__author')
         Cust_name

Out[21]: [<span class="jdgm-rev__author">Saish kumar nelaturi</span>,
          <span class="jdgm-rev__author">Jayan .</span>,
          <span class="jdgm-rev__author">Kanishk Verma</span>,
          <span class="jdgm-rev__author">Alin rakesh pandagale</span>,
          <span class="jdgm-rev__author">ARUNDAS K</span>,
          <span class="jdgm-rev__author">Shiva Teja</span>]

In [22]: Custname_=[]
         for i in range(0,len(Cust_name)):
             Custname_.append(Cust_name[i].get_text())
         Custname_

Out[22]: ['Saish kumar nelaturi',
          'Jayan .',
          'Kanishk Verma',
          'Alin rakesh pandagale',
          'ARUNDAS K',
          'Shiva Teja']
```

- Color Options for Cuatomers:

```
In [59]: color=soup.find(class_='color-swatch-list').text
         color.strip().replace('\n\n\n\n\n\n',' , ')

Out[59]: 'Pebble Black , Thunder Blue , Pearl White , Olive Green , Cool Sapphire , engrav_Pebble Black , engrav_Cool Sapphire , engrav_
         Pearl White , engrav_Olive Green , engrav_Thunder Blue'
```

- Access Customer Ratings and Reviews:

```
In [30]: Ratings=soup.find('span',class_='jdgm-rev__rating')['data-score']
         Ratings

Out[30]: '5'

In [35]: Ratings_=[span['aria-label'] for span in soup.find_all('span',class_='jdgm-rev__rating')]
         Ratings_

Out[35]: ['5 star review',
          '5 star review',
          '5 star review',
          '5 star review',
          '5 star review',
          '4 star review']
```

```
In [38]: Reviews=soup.find_all(class_="jdgm-rev__body")
         Reviews
```

```
Out[38]: [<div class="jdgm-rev__body"><p>Very nice</p></div>,
          <div class="jdgm-rev__body"><p>Super</p></div>,
          <div class="jdgm-rev__body"><p>Highly Satisfied</p></div>,
          <div class="jdgm-rev__body"><p>Excellent👍💯</p></div>,
          <div class="jdgm-rev__body"><p>Affordable price</p></div>,
          <div class="jdgm-rev__body"><p>Product is good</p></div>]
```

```
In [39]: Reviews_=[]
         for i in range(0,len(Reviews)):
             Reviews_.append(Reviews[i].get_text())
         Reviews_
```

```
Out[39]: ['Very nice',
          'Super',
          'Highly Satisfied',
          'Excellent👍💯',
          'Affordable price',
          'Product is good']
```

- Arrange all data using pandas library:

```
In [60]: import pandas as pd
         df=pd.DataFrame({'Cust_name':Custname_, 'Reviews':Reviews_,'Ratings':Ratings_})
         df
```

Out[60]:

	Cust_name	Reviews	Ratings
0	Saish kumar nelaturi	Very nice	5 star review
1	Jayan .	Super	5 star review
2	Kanishk Verma	Highly Satisfied	5 star review
3	Alin rakesh pandagale	Excellent👍💯	5 star review
4	ARUNDAS K	Affordable price	5 star review
5	Shiva Teja	Product is good	4 star review

- Export data to CSV file:

```
In [28]: import os
         os.getcwd()
```

```
Out[28]: 'C:\\Users\\MOHIT TARADE\\Downloads'
```

```
In [61]: df.to_csv('boAt-Airdopes',index='false')
```

- Read the CSV file with data frame:

In [62]:
```
df1=pd.read_csv(r'boAt-Airdopes')
df1
```

Out[62]:

	Unnamed: 0	Cust_name	Reviews	Ratings
0	0	Saish kumar nelaturi	Very nice	5 star review
1	1	Jayan .	Super	5 star review
2	2	Kanishk Verma	Highly Satisfied	5 star review
3	3	Alin rakesh pandagale	Excellent👍💯	5 star review
4	4	ARUNDAS K	Affordable price	5 star review
5	5	Shiva Teja	Product is good	4 star review

Conclusion:

In conclusion, the web scraping project focused on extracting customer sentiments, product popularity, and pricing trends using customer reviews, ratings, product names, and prices from the website that has been executed successfully using Python. Throughout the project, we navigated the complexities of web scraping, adhering to ethical considerations and respecting the website's terms of service.