

Amazon WebScraping Project

```
#Import Libraries
from bs4 import BeautifulSoup
import requests
import time
import datetime
import smtplib

# Connect to Website and pull in data

URL =
'https://www.amazon.com/Funny-Data-Systems-Business-Analyst/dp/B07FNW9
FGJ/ref=sr_1_3?dchild=1&keywords=data%2Banalyst
%2Btshirt&qid=1626655184&sr=8-3&customId=B0752XJYNL&th=1'

headers = {"User-Agent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64)
AppleWebKit/537.36 (KHTML, like Gecko) Chrome/131.0.0.0
Safari/537.36", "Accept-Encoding": "gzip, deflate",
"Accept": "text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8", "DNT": "1", "Connection": "close", "Upgrade-Insecure-
Requests": "1"}
#we will get from website
page = requests.get(URL, headers=headers)#getting data

soup1 = BeautifulSoup(page.content, "html.parser")
soup2 = BeautifulSoup(soup1.prettify(), "html.parser")
#remember id which u want to pull
title=soup2.find(id='productTitle').get_text()
#pulling price
price_symbol = soup2.find(class_='a-price-
symbol').get_text(strip=True)
price_whole = soup2.find(class_='a-price-whole').get_text(strip=True)
price_fraction = soup2.find(class_='a-price-
fraction').get_text(strip=True)
price = f'{price_symbol}{price_whole}{price_fraction}'

print(title)
print(price)
```

Got Data Funny Business Data Analyst T-Shirt

\$19.99

```
title=title.strip()
price=price.strip()[1:]
```

```

print(title)
print(price)

Got Data Funny Business Data Analyst T-Shirt
19.99

import datetime

today=datetime.date.today()
print(today)

2024-12-07

# If uou want to try sending yourself an email (just for fun) when a
price hits below a certain level you can try it
# out with this script

def send_mail():
    server = smtplib.SMTP_SSL('smtp.gmail.com',465)
    server.ehlo()
    #server.starttls()
    server.ehlo()
    server.login('AlexTheAnalyst95@gmail.com','xxxxxxxxxxxxxx')

    subject = "The Shirt you want is below $15! Now is your chance to
buy!"
    body = "Alex, This is the moment we have been waiting for. Now is
your chance to pick up the shirt of your dreams. Don't mess it up!
Link here: https://www.amazon.com/Funny-Data-Systems-Business-
Analyst/dp/B07FNW9FGJ/ref=sr\_1\_3?
dchild=1&keywords=data+analyst+tshirt&qid=1626655184&sr=8-3"

    msg = f"Subject: {subject}\n\n{body}"

    server.sendmail(
        'AlexTheAnalyst95@gmail.com',
        msg

    )

import csv

header=['Title','Price','Date']
data=[title,price,today]
type(data) #list type

with
open('AmazonWebScraperDataset.csv','w',newline='',encoding='UTF8') as
f:
    writer=csv.writer(f)
    writer.writerow(header)

```

```
writer.writerow(data)
```

```
#file will come to C:\Users\User
```

```
import pandas as pd
df=pd.read_csv(r"C:\Users\User\AmazonWebScraperDataset.csv")
print(df)
```

		Title	Price	Date
0	Got Data Funny Business Data Analyst T-Shirt	19.99	2024-12-07	
1	Got Data Funny Business Data Analyst T-Shirt	19.99	2024-12-07	
2	Got Data Funny Business Data Analyst T-Shirt	19.99	2024-12-07	

```
#we are appeding the data
```

```
with
open('AmazonWebScraperDataset.csv','a+',newline='',encoding='UTF8') as
f:
    writer=csv.writer(f)
    #writer.writerow(header)
    writer.writerow(data)
```

```
def check_price():
    URL = 'https://www.amazon.com/Funny-Data-Systems-Business-
Analyst/dp/B07FNW9FGJ/ref=sr_1_3?dchild=1&keywords=data%2Banalyst
%2Btshirt&qid=1626655184&sr=8-3&customId=B0752XJYNL&th=1'

    headers = {"User-Agent": "Mozilla/5.0 (Windows NT 10.0; Win64;
x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/131.0.0.0
Safari/537.36", "Accept-Encoding":"gzip, deflate",
"Accept":"text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8", "DNT":"1","Connection":"close", "Upgrade-Insecure-
Requests":"1"}
    #we will get from website
    page = requests.get(URL, headers=headers)#getting data

    soup1 = BeautifulSoup(page.content, "html.parser")
    soup2 = BeautifulSoup(soup1.prettify(),"html.parser")
    #remember id which u want to pull
    title=soup2.find(id='productTitle').get_text()
    #pulling price
    price_symbol = soup2.find(class_='a-price-
symbol').get_text(strip=True)
    price_whole = soup2.find(class_='a-price-
whole').get_text(strip=True)
    price_fraction = soup2.find(class_='a-price-
fraction').get_text(strip=True)
    price = f'{price_symbol}{price_whole}{price_fraction}'
    title=title.strip()
```

```

        price=price.strip()[1:]

        import datetime
        today=datetime.date.today()

        import csv

        header=['Title','Price','Date']
        data=[title,price,today]

        with
open('AmazonWebScraperDataset.csv','a+',newline='',encoding='UTF8') as
f:
            writer=csv.writer(f)
            #writer.writerow(header)
            writer.writerow(data)

        if(price<14):
            send_mail()

while(True):
    check_price()
    time.sleep(5)

```

```

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KeyboardInterrupt                                Traceback (most recent call
last)

```

```

Cell In[109], line 3
      1 while(True):
      2     check_price()
----> 3     time.sleep(5)

```

KeyboardInterrupt:

```

import pandas as pd
df=pd.read_csv(r"C:\Users\User\AmazonWebScraperDataset.csv")
print(df)

```

							Title	Price	Date
0	Got	Data	Funny	Business	Data	Analyst	T-Shirt	19.99	2024-12-07
1	Got	Data	Funny	Business	Data	Analyst	T-Shirt	19.99	2024-12-07
2	Got	Data	Funny	Business	Data	Analyst	T-Shirt	19.99	2024-12-07
3	Got	Data	Funny	Business	Data	Analyst	T-Shirt	14.97	2024-12-07
4	Got	Data	Funny	Business	Data	Analyst	T-Shirt	14.97	2024-12-07
5	Got	Data	Funny	Business	Data	Analyst	T-Shirt	14.97	2024-12-07
6	Got	Data	Funny	Business	Data	Analyst	T-Shirt	14.97	2024-12-07
7	Got	Data	Funny	Business	Data	Analyst	T-Shirt	14.97	2024-12-07

8	Got Data Funny Business Data Analyst T-Shirt	14.97	2024-12-07
9	Got Data Funny Business Data Analyst T-Shirt	14.97	2024-12-07