

```
In [2]: ▶ from selenium import webdriver
from selenium.webdriver.common.by import By
from selenium.webdriver.common.keys import Keys
from selenium.webdriver.support.ui import WebDriverWait
from selenium.webdriver.support import expected_conditions as EC
from selenium.webdriver.common.action_chains import ActionChains
import time
from bs4 import BeautifulSoup
import pandas as pd
from selenium.webdriver.chrome.service import Service
import matplotlib.pyplot as plt
from sklearn.preprocessing import StandardScaler
from sklearn.cluster import KMeans
```



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In [3]: ▶ # Initialize the WebDriver
driver = webdriver.Chrome()

# Open Yahoo Finance
driver.get('https://finance.yahoo.com/screener/predefined/sec-ind_sec-t

# Define a function to fetch data from the current page
def fetch_data():
    try:
        # Get the page source
        page_source = driver.page_source

        # Parse the HTML using BeautifulSoup
        soup = BeautifulSoup(page_source, 'html.parser')

        # Find the table element
        table = soup.find('table')

        # Check if the table exists
        if table:
            # Find the table body
            tbody = table.find('tbody')

            # Check if the table body exists
            if tbody:
                # Extract the table data into a list of lists
                data = []
                # Find all rows in the table body
                for row in tbody.find_all('tr'):
                    # Extract text from all cells in the row
                    row_data = [cell.get_text(strip=True) for cell in row.find_all('td')]
                    # Append row data to the main data list
                    data.append(row_data)

                # Convert the data into a DataFrame
                df = pd.DataFrame(data, columns=["Symbol", "Name", "Pri

            return df
        else:
            print("Table body not found.")
            return None
    else:
        print("Table not found.")
        return None
    except Exception as e:
        print("Error occurred while fetching data:", e)
        return None

# Fetch data from the current page
df_list = [fetch_data()]

# Define the number of times to click the "Next" button
num_clicks = 19

# Click the "Next" button and fetch data from subsequent pages
for _ in range(num_clicks):
    try:
        # Find the "Next" button
        next_button = WebDriverWait(driver, 20).until(
            EC.visibility_of_element_located((By.XPATH, '//*[@id="scr-r
        )

```

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# Scroll the page to bring the button into view
driver.execute_script("arguments[0].scrollIntoView();", next_bu

# Click the "Next" button using JavaScript
driver.execute_script("arguments[0].click();", next_button)

# Wait for the page to load
time.sleep(3) # Adjust the sleep time if needed

# Fetch data from the current page and add it to the list
df = fetch_data()
if df is not None:
    df_list.append(df)
except Exception as e:
    print("Error occurred while clicking Next button:", e)

# Concatenate all the DataFrames into a single DataFrame
final_df = pd.concat(df_list, ignore_index=True)

# Close the browser
driver.quit()

# Print the final DataFrame
final_df

```

Table not found.

Error occurred while clicking Next button: Message:

Stacktrace:

```

GetHandleVerifier [0x00007FF704EA1502+60802]
(No symbol) [0x00007FF704E1AC02]
(No symbol) [0x00007FF704CD7CE4]
(No symbol) [0x00007FF704D26D4D]
(No symbol) [0x00007FF704D26E1C]
(No symbol) [0x00007FF704D6CE37]
(No symbol) [0x00007FF704D4ABBF]
(No symbol) [0x00007FF704D6A224]
(No symbol) [0x00007FF704D4A923]
(No symbol) [0x00007FF704D18FEC]
(No symbol) [0x00007FF704D19C21]
GetHandleVerifier [0x00007FF7051A411D+3217821]
GetHandleVerifier [0x00007FF7051E60B7+3488055]
GetHandleVerifier [0x00007FF7051DF03F+3459263]
GetHandleVerifier [0x00007FF704F5B846+823494]
(No symbol) [0x00007FF704E25F9F]
(No symbol) [0x00007FF704E20EC4]
(No symbol) [0x00007FF704E21052]
(No symbol) [0x00007FF704E118A4]
BaseThreadInitThunk [0x00007FFF975A257D+29]
RtlUserThreadStart [0x00007FFF97FEAA48+40]

```

Out[3]:

	Symbol	Name	Price (Intraday)	Change	% Change	Volume	Avg Vol (3 month)	Market Cap
0	BFAFX	American Funds Bond Fund of Amer F1	-0.05	-0.45%	11.01	11.17	11.14	-0.84%
1	ABNFX	American Funds Bond Fund of Amer F2	-0.05	-0.45%	11.01	11.17	11.14	-0.76%
2	CFAEX	American Funds Bond Fund of Amer 529E	-0.05	-0.45%	11.01	11.17	11.14	-0.88%
3	CFAFX	American Funds Bond Fund of Amer 529F	-0.05	-0.45%	11.01	11.17	11.14	-0.79%
4	RBFEX	American Funds Bond Fund of Amer R4	-0.05	-0.45%	11.01	11.17	11.14	-0.82%
...
445	0P0001M384	Polar Capital Fut Healthcare A acc USD	+0.83	+0.85%	96.93	100.68	93.09	9.32%
446	0P0001LUQZ	Invesco Funds - Invesco China Health Care Equi...	-0.0100	-0.23%	4.2800	4.22	4.52	-11.42%
447	0P00000BON	Candriam Equities L Biotechnology	+5.16	+0.71%	728.37	765.35	718.69	2.78%
448	0P0001HJ7Z	Bellevue (Lux) Bellevue Dgtl Hthl AI2USD	+1.53	+1.18%	129.78	135.55	133.36	1.49%
449	0P0001BM5E	Sector Healthcare Value B USD	+1.47	+0.91%	162.39	167.81	165.17	3.27%

450 rows × 10 columns

In [4]: `final_df.to_csv('healthcare_finance.csv')`

In [5]:

pd.read_csv("healthcare_finance.csv")

Out[5]:

	Unnamed: 0	Symbol	Name	Price (Intraday)	Change	% Change	Volume	Adj. Volume
0	0	BFAFX	American Funds Bond Fund of Amer F1	-0.05	-0.45%	11.01	11.17	11.17
1	1	ABNFX	American Funds Bond Fund of Amer F2	-0.05	-0.45%	11.01	11.17	11.17
2	2	CFAEX	American Funds Bond Fund of Amer 529E	-0.05	-0.45%	11.01	11.17	11.17
3	3	CFAFX	American Funds Bond Fund of Amer 529F	-0.05	-0.45%	11.01	11.17	11.17
4	4	RBFEX	American Funds Bond Fund of Amer R4	-0.05	-0.45%	11.01	11.17	11.17
...
445	445	0P0001M384	Polar Capital Fut Healthcare A acc USD	0.83	+0.85%	96.93	100.68	93.0
446	446	0P0001LUQZ	Invesco Funds - Invesco China Health Care Equi...	-0.01	-0.23%	4.2800	4.22	4.1
447	447	0P00000BON	Candriam Equities L Biotechnology	5.16	+0.71%	728.37	765.35	718.6
448	448	0P0001HJ7Z	Bellevue (Lux) Bellevue Dgtl Hthl AI2USD	1.53	+1.18%	129.78	135.55	133.1
449	449	0P0001BM5E	Sector Healthcare Value B USD	1.47	+0.91%	162.39	167.81	165.1

450 rows × 11 columns



In []: