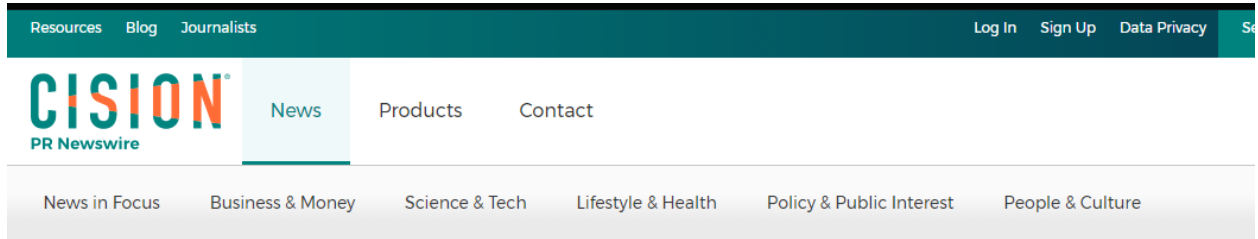


## FINAL REPORT

My project takes two news site – PRN News and Yahoo finance

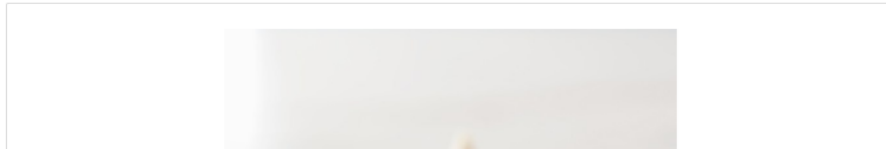
PRN news



## Browse News Releases

Current news releases distributed by PR Newswire, including multimedia press releases, investor relations and disclosure company news.

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**Business** ET Now • 36 minutes ago
 

### Yono & HDFCB digital platforms glitch, RBI halts customer addition & new digital initiatives


Digital platforms of two of the country's largest lenders have been experiencing bandwidth related issues that caused customer transactions to freeze. It seems that banks are not bei...



**Business** News18 • 37 minutes ago
 

### Nikkei Pulls Back After Hitting 29-1/2-year High

Japan's benchmark Nikkei share average pulled back from a more than 291/2year high on Monday, as investors chose to pocket profits amid some concerns of overheating after five...



**Ad** ProctorsGallagher
 

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The parser gave the following output when I printed the class news-release

```
[<a class="news-release" href="/news-releases/hershey-inspires-holiday-baking-with-new-sugar-cookie-blossoms-recipe-301186439.html" title="Hershey Inspires Holiday Baking with New Sugar Cookie Blossoms Recipe">Hershey Inspires Holiday Baking with Ne
w Sugar Cookie Blossoms Recipe</a>,
  <a class="news-release" href="/news-releases/trump-tenants-file-class-action-against-trump-family-claiming-fradulent-assessm
ent-of-rents-since-1992-in-trump-buildings-301186428.html" title="Trump Tenants File Class Action Against Trump Family Claimi
ng Fradulent Assessment Of Rents Since 1992 In Trump Buildings">Trump Tenants File Class Action Against Trump Family Claiming
Fradulent Assessment Of Rents Since 1992 In Trump Buildings</a>,
  <a class="news-release" href="/news-releases/pseg-to-acquire-25-ownership-interest-in-ocean-wind-new-jerseys-first-offshore-
wind-farm-301186487.html" title="PSEG to Acquire 25% Ownership Interest in Ocean Wind, New Jersey's First Offshore Wind Far
m">PSEG to Acquire 25% Ownership Interest in Ocean Wind, New Jersey's First Offshore Wind Farm</a>,
  <a class="news-release" href="/news-releases/esteban-burier-s-new-book-the-wrong-house-is-a-riveting-novel-about-the-author-
s-journey-through-the-harrows-of-prison-that-transformed-him-810284801.html" title="Esteban Burier's new book &quot;The Wrong
House&quot; is a riveting novel about the author's journey through the harrows of prison that transformed him">Esteban Burie
r's new book "The Wrong House" is a riveting novel about the author's journey through the harrows of prison that transformed
him</a>]
```

I had to then get the stock symbols that appeared in the news

```
[ 'PEG', 'IGT', 'SIRI', 'PTON' ]
```

For the respective elements of the list, I went ahead to yahoo finance asking for the data for the respective stock. The following data was retrieved:

- Low
- Volume
- Stock splits
- Open

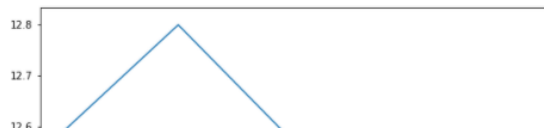
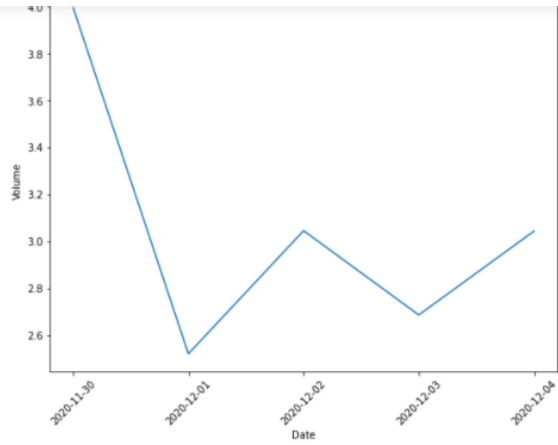
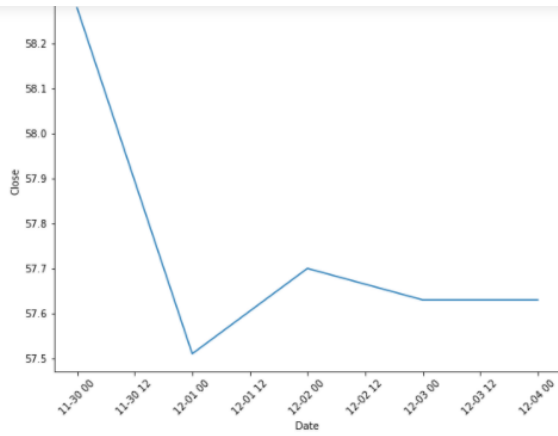
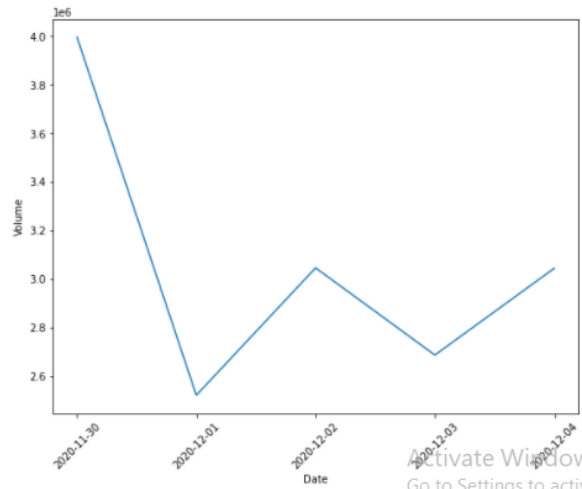
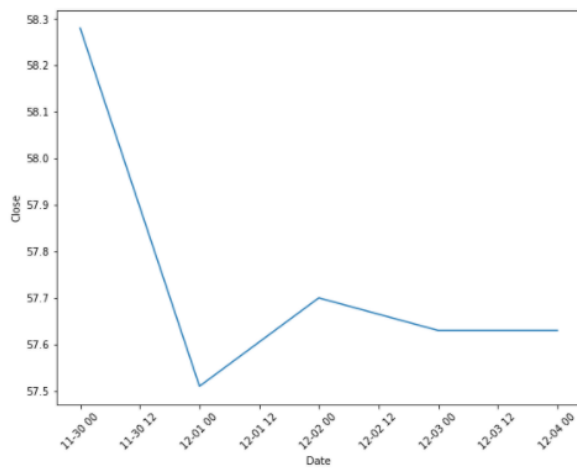
- Close
- Volume
- Dividend
- High

I went ahead and created a Dataframe of the lists shown below:

Date	Open	High	Low	Close	Volume	Dividends	Stock Splits	stocksymbol
2020-11-30	59.080002	59.080002	58.180000	58.279999	3996400	0	0	PEG
2020-12-01	58.889999	59.259998	57.340000	57.509998	2522600	0	0	PEG
2020-12-02	57.340000	58.040001	57.009998	57.700001	3046900	0	0	PEG
2020-12-03	57.400002	57.889999	56.849998	57.630001	2688100	0	0	PEG
2020-12-04	57.580002	57.939999	57.290001	57.630001	3045000	0	0	PEG
2020-11-30	13.110000	13.200000	12.390000	12.590000	2319200	0	0	IGT
2020-12-01	12.900000	13.060000	12.730000	12.800000	1713100	0	0	IGT
2020-12-02	12.720000	12.840000	12.410000	12.570000	2665600	0	0	IGT
2020-12-03	12.670000	12.840000	12.010000	12.120000	3761400	0	0	IGT
2020-12-04	12.280000	12.530000	11.870000	12.530000	2615600	0	0	IGT
2020-11-30	6.530000	6.540000	6.400000	6.490000	24360800	0	0	SIRI
2020-12-01	6.510000	6.600000	6.480000	6.520000	25416000	0	0	SIRI
2020-12-02	6.510000	6.520000	6.420000	6.430000	17445600	0	0	SIRI
2020-12-03	6.420000	6.480000	6.380000	6.430000	21770500	0	0	SIRI
2020-12-04	6.420000	6.490000	6.330000	6.340000	19218500	0	0	SIRI
2020-11-30	110.029999	116.519997	105.690002	116.349998	13468600	0	0	PTON

The next step was to visualize the data

```
sns.lineplot(data = i, x = 'Date', y = 'Volume')
plt.xticks(i.index, rotation=45)
plt.show()
```



After finishing this part, I decided to create a GUI for respective stock which would make the user to visualize the stocks in an easier way

I have used SPYDER AND STREAMLIT further to make an application

```
soup = BeautifulSoup(page.content, 'html.parser')
Result = soup.find_all('a', class_ = "news-release")
url1 = "https://www.prnewswire.com/{"
def html_page_str(url):
    headers = {
        "User-Agent": 'Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/80.0.4012.101 Safari/537.36'
    }
    response = requests.get(url, headers=headers)
    response_str = ''
    if response.status_code == 200:
        response_str = response.content.decode()
    return response_str
#function ends here
list1 = []
for i in Result:
    url2= i['href']
    mainurl = url1.format(url2)
    news_page_str = html_page_str(mainurl)
    bs1 = BeautifulSoup(news_page_str)
    tag = bs1.find("a", class_ = 'ticket-symbol')
    if tag != None:
        list1.append(tag.text)
print(list1)
list2 = []
list3 = []
final_df = pd.DataFrame()
for i in list1:
    list2.append(yf.Ticker(i))
    for j in list2:
        df = pd.DataFrame(j.history(period = '5d'))
        df['stocksymbol'] = i
        final_df = final_df.append(df)
print(final_df)
def plot(x):
    i = final_df[final_df['stocksymbol'] == x]
    fig1 = plt.figure(figsize=(20,7))
    ax1=fig1.add_subplot(121)
    sns.linenplot(data = i, x = 'Date', y = 'Close')
```

```

print(list1)
list2 = []
list3 = []
final_df = pd.DataFrame()
for i in list1:
    list2.append(yf.Ticker(i))
    for j in list2:
        df = pd.DataFrame(j.history(period = '5d'))
        df['stocksymbol'] = i
        final_df = final_df.append(df)
print(final_df)
def plot(x):
    i = final_df[final_df['stocksymbol'] == x]
    fig1 = plt.figure(figsize=(20,7))
    ax1=fig1.add_subplot(121)
    sns.lineplot(data = i, x = 'Date', y = 'Close')
    plt.xticks(rotation=45)
    ax1=fig1.add_subplot(122)
    sns.lineplot(data = i, x = 'Date', y = 'Volume')
    plt.xticks(i.index, rotation=45)
    st.pyplot(fig1)

x = st.sidebar.selectbox('Here are the matched symbols from Yahoo-PRNewswire. Select a symbol to view the visualization',
if st.sidebar.button('Click here to view the visualization'):
    plot(x)

```

I used streamlit to create the GUI

Here are the matched symbols from Yahoo-PRNewswire. Select a symbol to view the visualization

PEG

PEG  
 IGT  
 SIRI  
 PTON

This part of the app matches the symbols from yahoo and news wire

You can select any symbol that you want to visualize

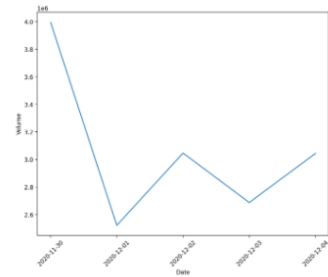
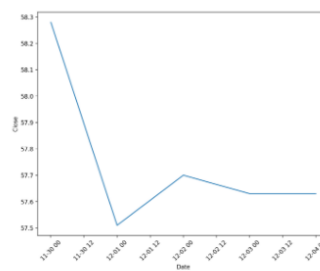
Here are the matched symbols from Yahoo-PRNewswire. Select a symbol to view the visualization

PEG

Click here to view the visualization

## Yahoo-PRNewswire stocks

Time series of Stock symbols



The visualization for the selected symbol will appear in the window to the right.