DATA607_Week9_Assignment

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2024-10-26

Web APIs

The New York Times web site provides a rich set of APIs, as described here: https://developer.nytimes.com/apis You'll need to start by signing up for an API key. Your task is to choose one of the New York Times APIs, construct an interface in R to read in the JSON data, and transform it into an R DataFrame.

```
# install.packages("httr2")
library(httr2)
library(rjson)
library(readr)
library(tibble)
library(dplyr)
##
## Attaching package: 'dplyr'
## The following objects are masked from 'package:stats':
##
##
       filter, lag
## The following objects are masked from 'package:base':
##
       intersect, setdiff, setequal, union
##
```

Prepping Creds and oter setup

```
api_path <- "~/OneDrive/Desktop/CUNY_SPS_Materials/DATA607 - DATA ACQ/Week9/nyt_api_creds.json"
api_file <- read_file(path.expand(api_path))
json_data <- fromJSON(api_file)

### Gettign the most viewed article in the last 30 days.
day_period <- "7"

url_call <- sprintf("https://api.nytimes.com/svc/mostpopular/v2/viewed/%s.json", day_period)

response <- request(url_call) %>%
    req_url_query("api-key" = json_data$public_key) %>% # Add the API key as a query parameter req_perform()
```

```
# Parse the response content
data <- response %>% resp_body_json()
df_list <- list()</pre>
for (i in seq_along(data$results)) {
  article <- data$results[[i]]</pre>
  ## Taking Article informstion
  new_row <- data.frame(</pre>
    uri = article$uri,
    url = article$url,
    id = article$id,
    asset id = article$asset id,
    source = article$source,
    published_date = article$published_date,
    updated = article$updated,
    section = article$section,
    subsection = article$subsection,
    ## THis value can be null in my results and im accomodating
    nytsection = ifelse(!is.null(article$nytsection), article$nytsection, NA),
    adx_keywords = article$adx_keywords,
    byline = article$byline,
    type = article$type,
    title = article$title,
    abstract = article$abstract,
    stringsAsFactors = FALSE
  #Append the new row to the list
  df_list[[i]] <- new_row</pre>
}
df <- bind_rows(df_list)</pre>
##
## 1
          nyt://article/a68be4e5-8037-5573-a0c1-5190126401d1
## 2
          nyt://article/d50425ad-cd6c-5ea0-abc7-5ea3bba315cc
## 3
          nyt://article/4a3cb252-7a98-5bda-bfe9-67c6b43b908c
## 4
          nyt://article/0308cf62-98f9-50e5-a73f-85eedf29a891
## 5
          nyt://article/6474331a-b8f7-54c2-9f82-b4f2f7c80514
## 6
          nyt://article/9617ede4-6260-5fac-942b-f4ac2d6c4319
## 7
          nyt://article/80bec120-effd-5299-b027-52c123d6d46e
## 8
          nyt://article/609de58d-c42f-517d-a9d6-77c0d95d7bf8
## 9
          nyt://article/4c38b8fd-9083-55fa-b12f-3fa45bbbdc6a
## 10
          nyt://article/95046d03-c59e-5059-bec6-145bc40e07c7
## 11
          nyt://article/b9278856-cd9a-5c61-8efb-41198fb9713d
## 12
          nyt://article/96add070-fdb6-5b67-9059-41a2c9833764
## 13 nyt://interactive/9b8c9f8e-9136-5cec-bf6d-5313409de7c9
## 14
          nyt://article/6f26b5e4-6b81-53d5-9edc-0d697e532d84
## 15 nyt://interactive/3b52a322-b40a-563f-839f-a4b9d4fad83a
## 16
          nyt://article/70b7b6bd-d669-550d-a33c-800048f481c3
```

```
## 17
          nyt://article/7b101786-7201-5864-b483-610952e552be
## 18
          nyt://article/71f40ee4-ca71-5844-b574-e9cce4136acf
## 19
          nyt://article/81607f45-21a1-5f33-b5af-196e029d8d21
## 20
          nyt://article/dddbac78-8605-56a9-9bf0-4ac25d0a6a3b
##
                     https://www.nytimes.com/2024/10/17/arts/music/liam-payne-death-what-we-know.html
## 1
## 2
                  https://www.nytimes.com/2024/10/23/technology/characterai-lawsuit-teen-suicide.html
                        https://www.nytimes.com/2024/10/22/opinion/trump-kamala-harris-democrats.html
## 3
##
      https://www.nytimes.com/2024/10/25/business/media/washington-post-presidential-endorsement.html
## 5
               https://www.nytimes.com/2024/10/22/us/politics/giuliani-defamation-forfeit-assets.html
## 6
           https://www.nytimes.com/2024/10/23/arts/music/lana-del-rey-jeremy-dunfre-dolly-parton.html
## 7
                          https://www.nytimes.com/2024/10/25/us/politics/trump-joe-rogan-podcast.html
## 8
                  https://www.nytimes.com/2024/10/23/opinion/election-polls-results-trump-harris.html
## 9
               https://www.nytimes.com/2024/10/19/us/politics/trump-vulgarity-pennsylvania-rally.html
## 10
                      https://www.nytimes.com/2024/10/22/opinion/donald-trump-ezra-klein-podcast.html
## 11
                https://www.nytimes.com/2024/10/24/nyregion/trump-barber-15k-utility-bill-con-ed.html
## 12
                                    https://www.nytimes.com/2024/10/20/us/politics/trump-scandals.html
## 13
                           https://www.nytimes.com/interactive/2024/us/elections/polls-president.html
## 14
                                     https://www.nytimes.com/2024/10/25/arts/music/phil-lesh-dead.html
##
  15
        https://www.nytimes.com/interactive/2024/us/elections/presidential-election-swing-states.html
## 16
                                 https://www.nytimes.com/2024/10/25/us/politics/trump-vance-hack.html
## 17
                          https://www.nytimes.com/2024/10/24/us/politics/donald-trump-tax-policy.html
               https://www.nytimes.com/2024/10/21/us/elections/donald-trump-mcdonalds-protesters.html
## 18
                       https://www.nytimes.com/2024/10/19/opinion/trump-catholic-al-smith-dinner.html
## 19
## 20
                      https://www.nytimes.com/2024/10/23/business/american-airlines-line-cutters.html
         id asset id
                              source published date
                                                                 updated
                                                                            section
## 1
      1e+14
               1e+14 New York Times
                                         2024-10-17 2024-10-23 11:33:12
                                                                               Arts
  2
##
      1e+14
               1e+14 New York Times
                                         2024-10-23 2024-10-24 13:48:40 Technology
##
  3
      1e+14
               1e+14 New York Times
                                         2024-10-22 2024-10-25 09:30:35
                                                                            Opinion
## 4
      1e+14
               1e+14 New York Times
                                         2024-10-25 2024-10-26 15:15:21
                                                                           Business
## 5
      1e+14
               1e+14 New York Times
                                         2024-10-22 2024-10-23 10:45:26
                                                                               U.S.
##
  6
      1e+14
               1e+14 New York Times
                                         2024-10-23 2024-10-25 09:22:13
                                                                               Arts
## 7
      1e+14
               1e+14 New York Times
                                         2024-10-26 2024-10-26 08:31:48
                                                                               U.S.
      1e+14
               1e+14 New York Times
## 8
                                         2024-10-23 2024-10-24 22:40:00
                                                                            Opinion
## 9
      1e+14
               1e+14 New York Times
                                         2024-10-19 2024-10-20 23:13:37
                                                                               U.S.
## 10 1e+14
               1e+14 New York Times
                                         2024-10-22 2024-10-26 17:11:18
                                                                            Opinion
## 11 1e+14
               1e+14 New York Times
                                         2024-10-24 2024-10-25 14:27:57
                                                                           New York
## 12 1e+14
               1e+14 New York Times
                                         2024-10-20 2024-10-22 23:15:06
                                                                               U.S.
## 13 1e+14
               1e+14 New York Times
                                         2024-06-24 2024-10-26 19:18:20
                                                                               U.S.
## 14 1e+14
               1e+14 New York Times
                                         2024-10-25 2024-10-26 09:27:59
                                                                               Arts
## 15 1e+14
               1e+14 New York Times
                                         2024-08-14 2024-10-25 10:05:31
                                                                               U.S.
## 16 1e+14
               1e+14 New York Times
                                         2024-10-25 2024-10-26 11:00:36
                                                                               U.S.
               1e+14 New York Times
                                         2024-10-24 2024-10-25 16:29:48
## 17 1e+14
                                                                               U.S.
## 18 1e+14
               1e+14 New York Times
                                         2024-10-21 2024-10-22 14:42:08
                                                                               U.S.
## 19 1e+14
               1e+14 New York Times
                                         2024-10-19 2024-10-21 12:12:38
                                                                            Opinion
               1e+14 New York Times
                                         2024-10-23 2024-10-24 17:28:36
## 20 1e+14
                                                                           Business
##
          subsection nytsection
## 1
               Music
## 2
                             NA
## 3
                             NA
## 4
               Media
                             NΑ
## 5
            Politics
                             NA
## 6
               Music
                             NΑ
```

7

Politics

NA

```
## 8
                              NA
## 9
                              NA
            Politics
## 10
                              NA
## 11
                              NA
## 12
            Politics
                              NA
## 13 2024 Elections
                              NA
               Music
                              NA
## 15 2024 Elections
                              NA
## 16
            Politics
                              NA
## 17
            Politics
                              NA
## 18 2024 Elections
                              NA
## 19
                              NA
## 20
                              NA
##
## 1
## 2
## 3
## 4
## 5
## 6
## 7
## 8
## 9
## 10
## 11
## 12
      Content Type: Personal Profile; United States Politics and Government; Presidents and Presidency (U
## 13
## 14
## 15
## 16
## 17
## 18
## 19
## 20
##
                                                                byline
                                                                               type
## 1
                      By Lucía Cholakian Herrera and Emmanuel Morgan
                                                                            Article
## 2
                                                        By Kevin Roose
                                                                            Article
## 3
                                                     By Bret Stephens
                                                                            Article
## 4
                              By Benjamin Mullin and Katie Robertson
                                                                            Article
## 5
                                                   By Eileen Sullivan
                                                                            Article
## 6
                                                By Alexandra E. Petri
                                                                            Article
## 7
                       By Michael Gold, Tim Balk and Simon J. Levien
                                                                            Article
## 8
                                                        By Nate Silver
                                                                            Article
## 9
                                                       By Michael Gold
                                                                            Article
## 10
                                                         By Ezra Klein
                                                                            Article
## 11
                                                   By Ashley Southall
                                                                            Article
## 12
                                                        By Peter Baker
                                                                            Article
## 13
                                                                        Interactive
## 14
                                                         By Jim Farber
                                                                            Article
## 15
      By Lily Boyce, Lazaro Gamio, Eli Murray and Alicia Parlapiano Interactive
## 16
               By Devlin Barrett, Jonathan Swan and Maggie Haberman
                                                                            Article
## 17
                                                    By Andrew Duehren
                                                                            Article
                                                                            Article
## 18
                                                    By Shawn McCreesh
## 19
                                                       By Maureen Dowd
                                                                            Article
```

##	20	By Kate Christobek Article
##		title
##	1	What We Know About Liam Payne's Death and the Drugs Found in His System
##	2	Can A.I. Be Blamed for a Teen's Suicide?
##	3	There's One Main Culprit if Donald Trump Wins
##	4	Washington Post Says It Will Stop Endorsing Presidential Candidates
##	5	Judge Orders Giuliani to Forfeit Millions in Assets to Election Workers He Defamed
##	6	Lana Del Rey Married a Normie. Other Celebrities Have Too.
##	7	6 Takeaways From Donald Trump's 3-Hour Podcast With Joe Rogan
##	8	Nate Silver: Here's What My Gut Says About the Election, but Don't Trust Anyone's Gut, Even Mine
##	9	At a Pennsylvania Rally, Trump Descends to New Levels of Vulgarity
##	10	What's Wrong With Donald Trump?
##	11	What Happened When a Barber Told Trump About His \$15,000 Electric Bill
	12	For Trump, a Lifetime of Scandals Heads Toward a Moment of Judgment
	13	Election 2024 Polls: Harris vs. Trump
	14	Phil Lesh, Bassist Who Anchored the Grateful Dead, Dies at 84
	15	Tracking the Swing States for Harris and Trump
	16	Chinese Hackers Are Said to Have Targeted Phones Used by Trump and Vance
	17	Trump Flirts With the Ultimate Tax Cut: No Income Taxes at All
	18	As Trump Served Up McDonald's Fries, Vitriol Boiled Outside
	19	Trump's Charity Toward None
	20	Attention, Passengers: Someone Is Skipping the Line at Your Gate
##		notonolon, labbongolb, bomoono ib bhipping ono bino at lour date
##	1	Payne, the former One Direction
##		Taylo, the former one birder.
##		
##		The decision was made by Jeff Bezos, the paper's owner, according to a person with knowledge of the
##		The onetime personal attorney to form
##		The pop singer and songwriter marr:
##		The former president repeated l
##		Ind Tolmol problems topousous
##		
	10	
	11	
	12	
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	14	One of the fi
	15	one of the fi
	16	The targeting of the Republica
	17	The targeting of the kepublication of the kepublica
	18	In Pennsylvania, a critical swing sta
	19	in remisyrvania, a critical swing so
	20	American Airlines is
##	20	American Airlines is

Note that the \mbox{echo} = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.