

Data607NYTimes

MG

10/24/2020

NYTimes API's

The assignment this week is to choose an API from the NY Times and construct an interface in R to read in the JSON data and transform it into a R DataFrame.

The first step was to get an API key from the NYT.

Once we had the key, the first API I used was search to find stories on the election. The process is to pull the data from the NY Times website using JSON. I then transformed it into a dataframe.

```
search <- fromJSON("http://api.nytimes.com/svc/search/v2/articlesearch.json?q=election&api-key=mcDcpEet")
data.frame()

head(search)
```

```
##      status                                     copyright
## 1      OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 2      OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 3      OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 4      OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 5      OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 6      OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
##
## 1                                     The hacking group, Energetic Bear, is among Russia's stealth
## 2                                     Russia's hacker
## 3                                     Iran is behind threatening, spoofed emails sent
## 4                                     The Steele dossier's main source explained where its most
## 5 The secretary of state said he would make Hillary Clinton's emails public, handing the president a
## 6                                     Prosecutors said the suspects hacked election
##                                     response.docs.web_url
## 1      https://www.nytimes.com/2020/10/23/us/politics/energetic-bear-russian-hackers.html
## 2      https://www.nytimes.com/2020/10/22/us/politics/russia-election-interference-hacks.html
## 3      https://www.nytimes.com/2020/10/21/us/politics/iran-russia-election-interference.html
## 4      https://www.nytimes.com/2020/10/21/us/politics/igor-danchenko-steele-dossier.html
## 5 https://www.nytimes.com/2020/10/09/us/politics/trump-clinton-emails-state-department.html
## 6      https://www.nytimes.com/2020/10/19/us/politics/russian-intelligence-cyberattacks.html
##
## 1                                     The hacking group, Energetic Bear, is among Russia's stealth
## 2                                     Russia's hacker
## 3                                     Iran is behind threatening, spoofed emails sent
## 4                                     The Steele dossier's main source explained where its most
## 5 The secretary of state said he would make Hillary Clinton's emails public, handing the president a
```

[illegible]

```

## 4 nyt://article/f3f62545-e6de-5da0-81c7-59c1bd56cb1d 1383
## 5 nyt://article/19342e1f-71d6-50bb-8bf8-c924fde9c7bb 1766
## 6 nyt://article/fcc9991e-c651-5395-a0d3-9232d04416cb 1450
## response.docs.uri
## 1 nyt://article/dfc764bb-5551-5a3f-963c-695956392852
## 2 nyt://article/2adbe1c9-ba9f-5c56-86c7-ad90b68dccc6
## 3 nyt://article/cf1bfef5-ef35-5153-a012-c246f41724cc
## 4 nyt://article/f3f62545-e6de-5da0-81c7-59c1bd56cb1d
## 5 nyt://article/19342e1f-71d6-50bb-8bf8-c924fde9c7bb
## 6 nyt://article/fcc9991e-c651-5395-a0d3-9232d04416cb
## response.docs.headline.main
## 1 Russians Who Pose Election Threat Have Hacked Nuclear Plants and Power Grid
## 2 Russia Poses Greater Election Threat Than Iran, Many U.S. Officials Say
## 3 Iran and Russia Seek to Influence Election in Final Days, U.S. Officials Warn
## 4 Analyst Who Reported the Infamous Trump Tape Rumor Wants to Clear His Name
## 5 Election Less Than a Month Away, Trump Leans on Barr and Pompeo for a Lift
## 6 U.S. Charges Russian Intelligence Officers in Major Cyberattacks
## response.docs.headline.kicker response.docs.headline.content_kicker
## 1 NA NA
## 2 NA NA
## 3 NA NA
## 4 NA NA
## 5 NA NA
## 6 NA NA
## response.docs.headline.print_headline
## 1 Airport Hackings by Russian Group Raise Election Alarm
## 2 Breaches by Russians Pointing To Election Threat, Officials Say
## 3 U.S. Cites Proof Iran and Russia Aim to Tilt Race
## 4 Steele Dossier Source Wants to Clear His Name
## 5 President Pressuring Pompeo And Barr for a Campaign Jolt
## 6 Six Russians Tied to Hacks Around Globe
## response.docs.headline.name response.docs.headline.seo
## 1 NA NA
## 2 NA NA
## 3 NA NA
## 4 NA NA
## 5 NA NA
## 6 NA NA
## response.docs.headline.sub
## 1 NA
## 2 NA
## 3 NA
## 4 NA
## 5 NA
## 6 NA
## response.docs.byline.original
## 1 By Nicole Perlroth
## 2 By Julian E. Barnes, Nicole Perlroth and David E. Sanger
## 3 By Julian E. Barnes and David E. Sanger
## 4 By Charlie Savage, Adam Goldman and Jonah M. Kessel
## 5 By Peter Baker, Maggie Haberman, Katie Benner, Lara Jakes and Michael S. Schmidt
## 6 By Michael S. Schmidt and Nicole Perlroth
##
## 1

```

```
## 2 Julian, Nicole,
## 3
## 4 Charlie,
## 5 Peter, Maggie, Katie, Lara, Michael, NA, NA, NA, NA, S., Baker, Haberman, Benner, Jakes, Schmidt,
## 6
## response.docs.byline.organization response.meta.hits response.meta.offset
## 1 NA 906424 0
## 2 NA 906424 0
## 3 NA 906424 0
## 4 NA 906424 0
## 5 NA 906424 0
## 6 NA 906424 0
## response.meta.time
## 1 133
## 2 133
## 3 133
## 4 133
## 5 133
## 6 133
```

The next API was to look at the top US stories in the NY Times.

```
top_stories <- fromJSON("https://api.nytimes.com/svc/topstories/v2/us.json?api-key=Scz8UJ7pKtRfGDpP7Gvg")
data.frame()

head(top_stories)
```

```
## status copyright
## 1 OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 2 OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 3 OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 4 OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 5 OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 6 OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## section last_updated num_results results.section
## 1 U.S. News 2020-10-24T08:43:24-04:00 24 us
## 2 U.S. News 2020-10-24T08:43:24-04:00 24 us
## 3 U.S. News 2020-10-24T08:43:24-04:00 24 us
## 4 U.S. News 2020-10-24T08:43:24-04:00 24 us
## 5 U.S. News 2020-10-24T08:43:24-04:00 24 us
## 6 U.S. News 2020-10-24T08:43:24-04:00 24 us
## results.subsection
## 1
## 2
## 3
## 4
## 5 politics
## 6 politics
## results.title
## 1 Inside the Refugee Camp on America's Doorstep
## 2 U.S. Sets Coronavirus Case Record Amid New Surge
## 3 In Colorado, It Feels Like a Fire Season Without End
```

```

## 4 A Common Retort After Insensitive Remarks by Elected Leaders: Resign
## 5 Murkowski, in a Turnabout, Says She Will Vote to Confirm Barrett
## 6 Virus Surge Shadows Trump and Biden Campaign Events After Final Debate
##
## 1 A squalid tent camp on the border is the result of President Trump's unprecedented limits on asylum
## 2 More than 85,000 new cases of the virus were reported across the
## 3 After
## 4 Officials have long atoned for their racist and inappropriate comm
## 5 The iconoclastic Alaska Republican said she remained opposed to
## 6 Candidates made th
##
## results.url
## 1 https://www.nytimes.com/2020/10/23/us/mexico-migrant-camp-asylum.html
## 2 https://www.nytimes.com/2020/10/23/us/covid-worst-day.html
## 3 https://www.nytimes.com/2020/10/23/us/colorado-wildfires.html
## 4 https://www.nytimes.com/2020/10/23/us/mayor-resigns-race-criticism.html
## 5 https://www.nytimes.com/2020/10/24/us/politics/murkowski-barrett.html
## 6 https://www.nytimes.com/2020/10/24/us/politics/biden-trump-rallies-covid.html
##
## results.uri
## 1 nyt://article/76227ae5-732e-5fcb-b674-5d444f81b0a5
## 2 nyt://article/589911df-f202-5789-a53d-3842d08401d4
## 3 nyt://article/3fe41cc9-672e-58ce-909f-33885c659b00
## 4 nyt://article/34307483-0735-5ba6-aaf4-e7ea3d9bb89d
## 5 nyt://article/3d4f6e13-0edc-5a66-a2c2-0ad63e685e56
## 6 nyt://article/f26a8dc1-3d3b-5cc6-a7e1-5bef2e900cf2
##
## results.byline
## 1 By Caitlin Dickerson
## 2 By Campbell Robertson, Edgar Sandoval, Lucy Tompkins and Simon Romero
## 3 By Charlie Brennan and Jack Healy
## 4 By Audra D. S. Burch
## 5 By Nicholas Fandos
## 6 By Shane Goldmacher, Thomas Kaplan and Annie Karni
## results.item_type results.updated_date results.created_date
## 1 Article 2020-10-24T14:56:23-04:00 2020-10-23T15:14:21-04:00
## 2 Article 2020-10-24T09:00:54-04:00 2020-10-23T14:56:48-04:00
## 3 Article 2020-10-24T17:06:55-04:00 2020-10-23T14:00:14-04:00
## 4 Article 2020-10-23T18:05:02-04:00 2020-10-23T03:00:11-04:00
## 5 Article 2020-10-24T18:10:49-04:00 2020-10-24T18:10:49-04:00
## 6 Article 2020-10-24T20:20:07-04:00 2020-10-24T15:31:46-04:00
## results.published_date results.material_type_facet results.kicker
## 1 2020-10-23T15:14:21-04:00
## 2 2020-10-23T14:56:48-04:00
## 3 2020-10-23T14:00:14-04:00
## 4 2020-10-23T03:00:11-04:00
## 5 2020-10-24T18:10:49-04:00
## 6 2020-10-24T15:31:46-04:00
##
## 1
## 2
## 3
## 4 Local Government, Discrimination, Apologies, Race and Ethnicity, Black People, Black Lives Matter
## 5
## 6
##
## results.org_facet
## 1

```

```
## 2
## 3
## 4
## 5 Supreme Court (US), Republican Party, Senate
## 6
##           results.per_facet
## 1           Trump, Donald J
## 2
## 3
## 4 Floyd, George (d 2020), Henry, Brian (1967- ), Luray (Va)
## 5           Barrett, Amy Coney, Murkowski, Lisa
## 6
##
## 1
## 2
## 3
## 4 Pawleys Island (SC), Harper Woods (Mich), Carbon Hill (Ala), Healdsburg (Calif), Petal (Miss), Bla
## 5
## 6
##
## 1
## 2
## 3
## 4
## 5 https://static01.nyt.com/images/2020/10/24/us/politics/24dc-barrett/merlin_178813473_e5bbc2c2-ad69
## 6
##           results.short_url
## 1 https://nyti.ms/37AWYNe
## 2 https://nyti.ms/31CA3gD
## 3 https://nyti.ms/3kvtPGY
## 4 https://nyti.ms/3dSaeyc
## 5 https://nyti.ms/2HvoBw4
## 6 https://nyti.ms/2TlhGbk
```

Next I wanted to look at the most popular viewed stories in the NY Times.

```
most_popular_viewed <- fromJSON("https://api.nytimes.com/svc/mostpopular/v2/viewed/1.json?api-key=GS27Z
data.frame()

head(most_popular_viewed)
```

```
##      status                                     copyright
## 1      OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 2      OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 3      OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 4      OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 5      OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 6      OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
##      num_results                               results.uri
## 1             20 nyt://article/690ea48b-e570-50f2-a724-c6acf4e645db
## 2             20 nyt://article/2c7bc6bb-c381-59a7-b378-734557c108c2
## 3             20 nyt://article/23cb4067-3b9f-526f-86e3-5c117871c8e8
## 4             20 nyt://article/5af64213-9c62-5c5f-b191-0b13b17bcba5
```

```

## 5      20 nyt://article/78ef7cbf-6ca2-5930-91e2-7cf61decdea2
## 6      20 nyt://article/b1a102d6-f378-5cc4-be3e-412b6217c81a
##                                     results.url
## 1      https://www.nytimes.com/2020/10/23/opinion/debate-trump-biden-who-won.html
## 2      https://www.nytimes.com/2020/10/22/us/politics/debate-presidential-recap.html
## 3      https://www.nytimes.com/2020/10/23/us/politics/who-won-debate.html
## 4      https://www.nytimes.com/2020/10/24/us/politics/ivanka-trump.html
## 5      https://www.nytimes.com/2020/10/23/health/covid-vaccine-safety.html
## 6      https://www.nytimes.com/2020/10/23/us/trump-taxes-philanthropy.html
##  results.id results.asset_id results.source results.published_date
## 1      1e+14      1e+14 New York Times      2020-10-23
## 2      1e+14      1e+14 New York Times      2020-10-22
## 3      1e+14      1e+14 New York Times      2020-10-23
## 4      1e+14      1e+14 New York Times      2020-10-24
## 5      1e+14      1e+14 New York Times      2020-10-23
## 6      1e+14      1e+14 New York Times      2020-10-23
##  results.updated results.section results.subsection results.nytdsection
## 1 2020-10-23 23:48:52      Opinion      opinion
## 2 2020-10-23 12:13:09      U.S.      Politics      u.s.
## 3 2020-10-23 18:36:12      U.S.      Politics      u.s.
## 4 2020-10-24 20:10:01      U.S.      Politics      u.s.
## 5 2020-10-24 11:02:07      Health      health
## 6 2020-10-24 17:57:05      U.S.      u.s.
##
## 1                                     Presidential Election of 2020;Fam
## 2
## 3
## 4
## 5 Coronavirus (2019-nCoV);Coronavirus Risks and Safety Concerns;Vaccination and Immunization;Clinical
## 6                                     Philanthropy;Trump T
##  results.column      results.byline results.type
## 1      NA      By New York Times Opinion      Article
## 2      NA      By Alexander Burns and Jonathan Martin      Article
## 3      NA      By Jeremy W. Peters and Isabella Grullón Paz      Article
## 4      NA      By Mark Leibovich      Article
## 5      NA      By Carl Zimmer      Article
## 6      NA By Susanne Craig, Russ Buettner and Mike McIntire      Article
##                                     results.title
## 1      Biden and Trump's Final Debate: Who Won?
## 2      In Calmer Debate, Biden and Trump Offer Sharply Different Visions for Nation
## 3      Who Won the Debate? Political Observers Weigh In
## 4      While Her Father Rails Against 'Idiot' Scientists, Ivanka Trump Talks Ice Cream
## 5 The Trump Administration Shut a Vaccine Safety Office Last Year. What's the Plan Now?
## 6      Trump's Philanthropy: Big Tax Write-Offs and Claims That Don't Always Add Up
##
## 1
## 2 In a more restrained appearance, President Trump depicted Joseph R. Biden Jr. as an ineffectual War
## 3                                     Grading on a curve, political experts said
## 4
## 5                                     The office was dedicated
## 6                                     Hidden financial records
##
## 1                                     Presidential Election of 2020, Family Sep
## 2

```

```

## 3
## 4
## 5          Coronavirus (2019-nCoV), Coronavirus Risks and Safety Concerns, Vaccination and Immun
## 6 Philanthropy, Trump Tax Returns, Tax Credits, Deductions and Exemptions, Income Tax, Federal Taxes
##                                     resul
## 1                                     Democratic Party, Republican P
## 2
## 3
## 4
## 5 Centers for Disease Control and Prevention, Food and Drug Administration, Health and Human Services
## 6                                     Trump (
##                                     results.per_facet
## 1 Biden, Joseph R Jr, Trump, Donald J, Biden, Hunter, Obama, Barack
## 2     Biden, Joseph R Jr, Trump, Donald J, Welker, Kristen (1976- )
## 3         Biden, Joseph R Jr, Trump, Donald J
## 4             Trump, Ivanka
## 5                 Trump, Donald J
## 6                 Trump, Donald J
##  results.geo_facet
## 1
## 2
## 3
## 4     Wisconsin
## 5
## 6
##
## 1
## 2
## 3                                     image, photo, A watch party in Haddonfie
## 4 image, photo, Ivanka Trump's campaign persona offers a stark departure from the daily tornado of g
## 5                                     image, photo, President Trump and the Health and Hum
## 6                                     image, photo, Donald J. Trump in
##  results.eta_id
## 1         0
## 2         0
## 3         0
## 4         0
## 5         0
## 6         0

```

Finally I wanted to see the most popular emailed stores in the NY Times.

```

most_popular_emailed <- fromJSON("https://api.nytimes.com/svc/mostpopular/v2/emailed/7.json?api-key=GS2
  data.frame()

head(most_popular_emailed)

```

```

##  status                                     copyright
## 1    OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 2    OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 3    OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 4    OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.
## 5    OK Copyright (c) 2020 The New York Times Company. All Rights Reserved.

```



```

## 6      OK Copyright (c) 2020 The New York Times Company.  All Rights Reserved.
##      num_results                      results.uri
## 1          20 nyt://article/7efdc73-f3a4-501f-a372-1b89a948a817
## 2          20 nyt://article/e6c02e68-876a-50bb-bcd0-3bc4bcf5c250
## 3          20 nyt://article/d7a69612-ac70-536b-a5f8-a6a6d123c2ef
## 4          20 nyt://article/a053cc3d-7389-5ce3-ab30-f7f99ec600b0
## 5          20 nyt://article/8970b13c-c4d7-5d25-a17f-a57279f737a7
## 6          20 nyt://article/c9a18d3a-d8fb-5770-abea-372d9ef8749a
##
##                                     results.url
## 1 https://www.nytimes.com/2020/10/16/dining/perfect-chocolate-chip-cookies-ravneet-gill.html
## 2 https://www.nytimes.com/2020/10/20/opinion/covid-education-work.html
## 3 https://www.nytimes.com/2020/10/21/arts/music/keith-jarrett-piano.html
## 4 https://www.nytimes.com/2020/10/17/style/sacha-baron-cohen-maureen-dowd-interview.html
## 5 https://www.nytimes.com/2020/10/17/opinion/covid-19-winter.html
## 6 https://www.nytimes.com/2020/10/15/parenting/kids-tantrums-advice.html
##      results.id results.asset_id results.source results.published_date
## 1          1e+14          1e+14 New York Times          2020-10-16
## 2          1e+14          1e+14 New York Times          2020-10-20
## 3          1e+14          1e+14 New York Times          2020-10-21
## 4          1e+14          1e+14 New York Times          2020-10-17
## 5          1e+14          1e+14 New York Times          2020-10-17
## 6          1e+14          1e+14 New York Times          2020-10-15
##      results.updated results.section results.subsection results.nytdsection
## 1 2020-10-21 00:39:07          Food          food
## 2 2020-10-22 20:56:30          Opinion          opinion
## 3 2020-10-22 13:04:17          Arts          Music          arts
## 4 2020-10-23 13:40:55          Style          style
## 5 2020-10-18 19:56:24          Opinion          opinion
## 6 2020-10-24 18:53:38          Parenting          parenting
##
## 1
## 2 Labor and Jobs;Education;Innovation;E-Learning;Coronavirus (2019-nCoV);Kumar, Ravi (Technology Exe
## 3 Jazz;Classical Music;Content Type: Perso
## 4 Actors and Actresses;Comedy and Hum
## 5 Autumn (Season);Seasons and Months;Coronavirus (2019-nCoV);Quarantine (Life and
## 6 Tantrums in Children;Children and Childhood;Anxiety and Stress;Br
##      results.column          results.byline results.type
## 1          NA By Charlotte Druckman          Article
## 2          NA By Thomas L. Friedman          Article
## 3          NA          By Nate Chinen          Article
## 4          NA          By Maureen Dowd          Article
## 5          NA By Christopher Solomon          Article
## 6          NA          By Ashley Abramson          Article
##
##                                     results.title
## 1 A 'Perfect' Chocolate Chip Cookie, and the Chef Who Created It
## 2 After the Pandemic, a Revolution in Education and Work Awaits
## 3 Keith Jarrett Confronts a Future Without the Piano
## 4 Sacha Baron Cohen: This Time He's Serious
## 5 In My Mountain Town, We're Preparing for Dark Times
## 6 The Science Behind Your Child's Tantrums
##
## 1
## 2 The British pastry chef Ravnee
## 2 Providing more Americans with portable health care, portable pensions and opportuni
## 3 The pathbreaking musician reveals the

```

```

## 4 Reviving his Borat character and playing the political activist Abbie Hoffman, the actor feels he
## 5 As the contagion s
## 6
##
## 1 Cookies, Cooking s
## 2 Labor and Jobs, Education, Innovation, E
## 3 Jazz, Classical Music, Content Type
## 4 Actors and Actresses, Comedy and Humor, Movi
## 5 Autumn (Season), Seasons and Months, Coronavirus (2019-nC
## 6 Tantrums in Children, Children and Childhood, Anxiety and Stress, Brain, Emotions, Parenting, Rese
##      results.org_facet      results.per_facet
## 1 Gill, Ravneet
## 2 Infosys Technologies Ltd Kumar, Ravi (Technology Executive)
## 3 ECM (Record Label) Jarrett, Keith
## 4 Cohen, Sacha Baron
## 5
## 6
##      results.geo_facet
## 1
## 2 New York City, United States
## 3
## 4
## 5 Washington (State), Twisp (Wash), Cascade Mountains
## 6
##
## 1 image, photo, The dough is rolled into balls right away, as opposed to chilling it first, giving t
## 2
## 3 image, pho
## 4 image, photo, Leading mar
## 5
## 6
##      results.eta_id
## 1 0
## 2 0
## 3 0
## 4 0
## 5 0
## 6 0

```

This project was a new way to look at all the news that's fit to print in R.